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## Brooklyn College Bulletin Undergraduate Programs 2021-2022

## Disclaimer

The 2021-2022 Undergraduate Bulletin represents the academic policies, services, and course and program offerings of Brooklyn College that are in effect through the 2021-2022 academic year. The most current information regarding academic programs and course descriptions, academic policies and services available to students can be found on the Brooklyn College website.

For matters of academic policy (e.g., applicable degree requirements), students are also advised to consult the Center for Academic Advisement and Student Success, the Office of the Associate Provost for Academic Programs, their major department adviser and/or the registrar for additional information.

For policies and procedures related to administrative and financial matters (e.g., tuition and fees), students are advised to consult with the Enrollment Services Center.

The City University of New York reserves the right, because of changing conditions, to make modifications of any nature in the academic programs and requirements of the university and its constituent colleges without advance notice. Tuition and fees set forth in this publication are similarly subject to change by the Board of Trustees of The City University of New York. The City University regrets any inconvenience this may cause. Students are advised to consult regularly with college and department counselors concerning their programs of study.

2021-2022 Undergraduate Bulletin

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2021-2022 Undergraduate Bulletin

## About Brooklyn College

Brooklyn College is an innovative liberal arts institution with a history of 90 years of academic excellence. Approximately 17,000 students are enrolled in 174 undergraduate and graduate degree programs in the humanities; social, behavioral and natural sciences; education; business; and the arts. The college is renowned for its rigorous academics, study abroad programs, diverse student body, award-winning faculty, and highly affordable tuition. Located on a beautifully landscaped 35-acre campus, Brooklyn College offers a rich student life within an urban environment.

Each academic program at Brooklyn College is administered by one of five schools. The deans have primary responsibility for administrative and academic oversight of undergraduate and graduate programs. The departments within each school are listed below. Details of degree programs, including majors, minors and interdisciplinary programs, are listed under their respective departments in the Programs of Courses and Instruction portion of this Bulletin.


## Accreditation

Brooklyn College is accredited by the Middle States Commission on Higher Education (3624 Market Street, Philadelphia, PA 19104; 267.284.5000; info@msche.org), the Council on Education for Public Health, and the Academy of Nutrition and Dietetics. The Murray Koppelman School of Business is accredited by the Association to Advance Collegiate Schools of Business (AACSB). The master's program in school counseling is accredited by the Council for Accreditation of Counseling and Related Educational Programs, the master's program in speechlanguage pathology is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association, and the Au.D. program in audiology at the CUNY Graduate Center is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association. The B.S. program in chemistry is certified by the American Chemical Society. Brooklyn College's academic programs are registered by the New York State Department of Education.

Murray Koppelman School of Business, Quing Hu, Dean

- Accounting
- Business Management
- Economics
- Finance

School of Education, April Whatley Bedford, Dean

- Early Childhood Education/Art Education
- Childhood, Bilingual and Special Education
- Secondary Education
- School Psychology, Counseling and Leadership

School of Humanities and Social Sciences,
Kenneth A. Gould, Dean

- Africana Studies
- Classics
- Communication Arts, Sciences, and Disorders
- English
- History
- Judaic Studies
- Modern Languages and Literatures
- Philosophy
- Political Science
- Puerto Rican and Latino Studies
- Sociology
- Interdisciplinary Programs: American Studies, Caribbean Studies, Children and Youth Studies, Communication, Linguistics, Studies in Religion, Urban Sustainability, Women's and Gender Studies


## School of Natural and Behavioral Sciences,

Peter Tolias, Dean

- Anthropology
- Biology
- Chemistry
- Computer and Information Science
- Earth and Environmental Sciences
- Health and Nutrition Sciences
- Mathematics
- Physics
- Psychology

School of Visual, Media and Performing Arts,
Maria Ann Conelli, Dean

- Art
- Film
- Music
- Television, Radio and Emerging Media
- Theater

Note that the Percy Ellis Sutton SEEK Program is now under the direction of the Office of the Provost.

## Undergraduate Admission

As one of the senior colleges of the City University of New York (CUNY), Brooklyn College participates in centralized application procedures for general freshman, Macaulay Honors, SEEK, and transfer applicants. Access to the CUNY online application and deadlines for filing applications are available on the Admissions webpage.

The Brooklyn College Office of Admissions processes nondegree student applications. The application is available on and can be downloaded from the Admissions webpage.

## Office of Admissions

222 West Quad Center
2900 Bedford Avenue
Brooklyn, NY 11201
P: 718.951.5001
E: adminqry@brooklyn.cuny.edu

## Student Enrollment Status

Undergraduate students may be enrolled as matriculated, nondegree, visiting or CUNY e-permit.

## Matriculated students

A matriculated student is one who is accepted and recognized by the college as working toward a degree. Matriculated students may attend Brooklyn College on a full- or part-time basis. Two types of students may apply for admission as matriculated students: first-year (freshman) and transfer students (including students who hold a bachelor's degree and want another degree).

## First-year students

First-year students are students who have not attended a college or university since graduating from high school or receiving a High School Equivalency Diploma.

All recent graduates from domestic high schools who apply to Brooklyn College baccalaureate programs are required to submit SAT or ACT scores.

## Academic preparation

Preparation for baccalaureate study should include the following high school academic units:

- English: four units.
- Social studies: four units.
- Foreign language: three units of one foreign language.
- Mathematics: three units of college preparatory mathematics. It is recommended that students intending to major in a math- or science-related area have four units each of science and math.
- Science: three units consisting of one unit of any of the following: general biology, advanced biology, botany, chemistry, general science, physics, physiography or earth science, or zoology. It is recommended that students intending to major in a math- or sciencerelated area have four units each of science and math.


## General Freshman Admissions Criteria

First-year applicants will be considered for admission based on their high school academic course work and scores on the Scholastic Aptitude Test (SAT) or the American College Testing (ACT) exams. Strong candidates have a high school average of 81 percent or better. Students with a High School Equivalency Diploma will be considered based on their test scores on the GED or TASC exams. A high school certificate or an IEP diploma is not acceptable for admission.

Admissions criteria are subject to change.

## City University of New York Assessment Program requirements

In addition to meeting the college's admission criteria, each student must demonstrate college readiness in the areas of mathematics, reading, and writing as established by the college and CUNY prior to admission to a senior college. Students can demonstrate that they meet the college readiness requirements for admission based on their SAT, ACT, or New York State Regents test scores. For more information about how college readiness requirements affect admission to Brooklyn College, visit the CUNY website.

Specific Academic Foundations proficiency requirements and exemptions may be found in the chapter "Academic Regulations and Procedures."

## Transfer students

Students who have attended or graduated from an accredited college or university are considered for admission with advanced standing as transfer students.

Applicants who have completed fewer than 24 college credits at the time of application must also submit their high school transcripts along with official transcripts from all postsecondary institutions attended.

## Transfer admissions criteria

Transfer students with fewer than 12 credits completed must meet the freshman criteria and have a 2.22 or better cumulative GPA on credits completed. Transfer students with at least 12 credits completed are considered for admission with a 2.22 or better cumulative GPA. Students transferring with an A.A. or A.S. degree from a CUNY community college will be considered for admission with a 2.00 or better GPA. Students who have a prior bachelor's degree will be considered for admission with a cumulative GPA of 2.00 or better.

## City University of New York

## Assessment Program requirements

In addition to meeting the college's admission criteria, transfer students must meet the college readiness requirements in the areas of mathematics, reading, and writing as established by the college and CUNY prior to admission to a senior college. Students can demonstrate that they meet the college readiness requirements for admission based on their SAT, ACT, or New York State Regents test scores. In addition, transfer students may meet the college readiness requirements through course work taken at their prior accredited college or university. For more information about how CUNY's college readiness requirements affect admission to Brooklyn College, visit the CUNY website.

Admissions criteria are subject to change.

## Advanced placement

Students who have completed college-level courses in high school may be considered for exemption, with or without credit, from equivalent college courses. Such exemption is granted on the basis of Advanced Placement Program tests given by the College Entrance Examination Board or the International Baccalaureate upper-level subject area exams.

Students who have taken the Advanced Placement Program tests, College-Level Examination Program tests, and/or the International Baccalaureate exams must request the administering agency to forward their official score reports to the Transfer Student Services Center, 306 West Quad Center, Brooklyn College, Brooklyn, NY 11210, or the college code (2046). In some cases (e.g., physics), test booklets must be provided as well.

## Evaluation of transfer credit

The Transfer Evaluation Office is responsible for processing all transfer credits for courses taken prior to attending Brooklyn College for new undergraduate students, both freshmen and transfers.

All courses taken for credit at an undergraduate CUNY college with a passing grade of $D$ - or higher will be accepted for credit at Brooklyn College, regardless of whether a specific equivalency exists. For courses that do not have an equivalent, elective credits will be granted.

Credits are also given for courses taken within the United States at a non-CUNY institution that is accredited by one of the regional accrediting commissions or by the New York State Board of Regents. From any U.S. non-CUNY institution, all credits will be granted for credit-bearing courses that have met the grade requirement of C - or higher in disciplines that are offered at Brooklyn College at the time of admittance. For courses that do not have an equivalent, elective credit may be granted. Exclusions may apply for students who use Brooklyn College courses toward an associate degree.

Evaluation of academic courses for second-degree students and/or students from non-CUNY colleges may be limited to disciplines that Brooklyn College offers. If the college does not offer the specific discipline of the original incoming course, an academic department can authorize the Transfer Evaluation Office to add the course to the student's academic record provided the student submits such approval of the course with a correlating Brooklyn College discipline. Without the academic department's approval, the course will not appear on the student's transcript and will not count toward the student's degree requirements.

Credit cannot be earned twice for the same originating course. If two courses come in and are equivalent to the same Brooklyn College course, one course will be converted to elective credit.

Brooklyn College grants academic credits for any student earning a score of 3 or higher on any Advanced Placement (AP) examination.

Brooklyn College will also grant credit for College Level Examinations Program (CLEP) with a score of 50.0 or higher as well as higher-level courses in the International Baccalaureate (IB) Organization Diploma Program with scores of 5 or higher. Other external standardized examinations are
similarly accepted based on scores/grades. For a list, please visit the Transfer Evaluation webpage. The college also offers student the ability to earn credits for prior learning; students must consult with the academic departments for this option.

The college in consultation with faculty in the discipline corresponding can evaluate an AP course to be the equivalent of a specific course, as fulfilling a general education category or as elective credits. Faculty or the appropriate academic department shall award credit differently based upon the score earned on the exam. Specific determination of how credits are awarded are entirely within the department's purview.

## SEEK students

The SEEK application procedure and the CUNY admissions application procedure are the same. Applicants should complete the special SEEK section of the CUNY admissions application. Prospective SEEK students must demonstrate both financial and educational eligibility as well as New York State residency.

Access to the CUNY online application and deadlines for filing applications are available on the Admissions webpage.

For information on the Percy Ellis Sutton SEEK Program, see the section "Special Programs" in this chapter.

## Nondegree students

A nondegree student is one who registers for credit-bearing courses but is not pursuing a degree program. Nondegree students are admitted based on their prior high school, college, or university course work. Students may obtain the application, requirements, and materials by consulting the Admissions webpage, or by contacting the Office of Undergraduate Admissions.

Nondegree students may attend class during day or evening sessions and may apply to become degree students. The Change of Status Form can be accessed online. Requirements for matriculation are listed in the "Status change requirements" section of the "Academic Regulations and Procedures" chapter in this Bulletin.

## Visiting students

Students in attendance at colleges other than a CUNY college who wish to take courses at Brooklyn College may enroll as visiting students. They must submit to the Enrollment Services Center an official letter certifying that they are in good academic standing at their home college or an unofficial transcript from their home college, file a Brooklyn College visiting student application, pay the specified application fee, and satisfy the New York State immunization requirements specified by the Brooklyn College Health Programs/Immunization Requirements Office. There are no immunization requirements for the summer sessions. Visiting-student status is valid for only one semester.

## CUNY e-permit students

Students in attendance at CUNY colleges who wish to take courses at Brooklyn College may file an e-permit. The home college will have instructions and procedures on how to file an e-permit. Once the e-permit is approved, students need to register through their CUNYfirst Self Service. Students receive registration instructions via e-mail. If they fail to receive such instructions, they should contact the e-permit unit of the Office of the Registrar, 306 West Quad Center.

## International Students

Prospective students who are interested in attending Brooklyn College and studying as F-1 or J-1 international students must complete the general CUNY application online, as specified on the Brooklyn College Admissions webpage. Although the deadline for the application does not change for international students, it is recommended that prospective international students complete the application and submit all documents at least one month prior to the deadline in order to have their application evaluated in a timely fashion.

Freshman applicants must submit copies of their secondary school marks in the original language with certified English translations, if applicable. Transfer applicants must submit copies of their secondary school marks in the original language with certified English translations, if applicable, and official transcripts from their postsecondary institutions in a sealed envelope with the school seal. Postsecondary documents not in English must be accompanied with a certified English translation. Applicants from non-English speaking countries must submit English proficiency test scores in order for their applications to be evaluated.

Brooklyn College accepts a score of 61 (iBT) from the Test of English as a Foreign Language (TOEFL) and a score of 6 from International English Language Testing System (IELTS) or a score of 50-57 PTE.

Once an applicant is accepted to Brooklyn College, the Office of International Student and Scholar Services will contact the student to walk him or her through the Certificate of Eligibility process. Students needing an I-20/DS-2019 must prove to Brooklyn College, the Department of State, and the Department of Homeland Security that they are able to support themselves financially for their entire program of study in order to qualify for an F-1/J-1 visa.

## International Student and Scholar Services, 235 West Quad Center, 718.951.4477

The Office of International Student and Scholar Services assists international students and scholars with visa and immigration processes and compliance, provides referrals to both on- and off-campus resources, and serves as an advocate for international students. In addition to assisting students, the office provides support to academic departments desiring to sponsor visiting faculty and researchers. The office aspires to provide high-quality service and support that will help the international student achieve academic and personal success and to promote a global classroom with the visiting scholars. From welcoming the student on campus to congratulating the student at the commencement ceremony, staff members help support the international student experience at Brooklyn College. Students are encouraged to visit the office in person, on the website, or on the office's Facebook page.

## Readmission

Information on readmission after two or more terms of absence is in the chapter "Academic Regulations and Procedures."

## Student Immunization Requirement

New York State Law requires students registering for six or more credits and born on or after January 1, 1957, to submit documentation proving immunity to measles, mumps and rubella. The following constitutes proof of immunity: two doses of measles vaccine and one dose each of mumps and rubella, or blood test results showing immunity to each disease.

Students may obtain immunization information and forms online or in the Health Programs/Immunization Requirements Office, 0710 James Hall, 718.951.4505. While certain students may be exempt because of age, medical reasons, or religious belief, they must still submit documentation of exemption before registering. Students who are not exempt must submit proof that they have received one dose each of measles, mumps, and rubella vaccine before registering; they have 30 days to submit proof of the second dose of the measles vaccine.

After 30 days, students who have not submitted complete documentation will be prohibited from attending classes and will receive a grade of WA (withdrew for failure to satisfy immunization requirements; no academic penalty) in all courses for the semester. Tuition will not be refunded, and there may be consequences with regard to financial assistance and loan repayment schedules.

New York Public Health Law 2167 requires all students registering for six or more credits to submit a Meningococcal Meningitis Vaccination Response Form signed by the student or student's parent or guardian to the Health Programs/ Immunization Requirements Office. Students who fail to return this form within 30 days from the beginning of the semester may not attend classes. The form acknowledges the receipt of mandatory meningococcal disease and vaccination information. Vaccination is not required.

## Special Programs

Several Brooklyn College programs require special admissions applications: the Honors Academy, the Percy Ellis Sutton SEEK Program, the ESL program and certificate programs.

## Honors Academy

The Brooklyn College Honors Academy comprises six programs, described in detail in the chapter "Special Programs and Opportunities" in this Bulletin: the William E. Macaulay Honors College, the Scholars Program, the Coordinated B.A.-M.D. Program, the Coordinated Engineering Honors Program, the Mellon Mays Undergraduate Fellowship and the Maximizing Access to Research Careers (MARC) Program.

## William E. Macaulay Honors College

The William E. Macaulay Honors College accepts applications only for freshman admissions in the fall semester. Students may apply online to the Macaulay Honors College at Brooklyn College. This application serves as both the general freshman
admission application to Brooklyn College and the Macaulay Honors College and for Brooklyn College scholarships. Admission to the Macaulay Honors College will depend on high school academic average, SAT/ACT scores, an essay, and recommendations and, in some cases, an interview. For more information, contact the Undergraduate Admissions Office, 718.951.5001.

## Scholars Program

The Scholars Program is the oldest honors program in the City University of New York. High school applicants to Brooklyn College may apply for a seat in the Scholars Program by completing an online application in addition to filing a CUNY application. The application asks for an essay, a high school transcript, SAT/ACT scores and two formal letters of recommendation. Letters may be from teachers of any subject who are familiar with students' academic writing and should mention courses that students have attended, evaluate the quality of their work and illustrate that quality with a significant example. Applicants to the William E. Macaulay Honors College or the Coordinated B.A.-M.D. Program will automatically be considered for admission to the Scholars Program.

Matriculated Brooklyn College students may also apply to the Scholars Program during their first three semesters at the college, up to the completion of 48 credits. Both day and evening students are eligible to apply.

Transfer students may apply to the program when they apply for transfer to or after they begin study at Brooklyn College.

Matriculated and transfer applicants should complete the application form available from the Honors Academy. The application asks for a short autobiographical essay, a paper written for a college course, an up-to-date college transcript and letters of recommendation from two college teachers.

For further information and a complete description of the Scholars Program, contact the Honors Academy, 2231 Boylan Hall.

## Coordinated B.A.-M.D. Program

The Coordinated B.A.-M.D. Program leads to a baccalaureate degree awarded by Brooklyn College and to an M.D. degree granted by SUNY Health Sciences University College of Medicine of the State University of New York (SUNY) Health Science Center at Brooklyn.

The program is limited each year to 15 highly qualified students who are admitted only in the fall term following their graduation from high school. Applicants generally have a combined SAT math and verbal score of at least 1400 and a college admission average of at least 95 . Subsequent admission to SUNY Downstate Health Sciences University College of Medicine is contingent on maintaining a minimum grade point average of 3.50 overall and 3.50 in the required science courses; completing the courses outlined in the program; achieving a minimum score of nine on each of the biomedical sciences, physical sciences and verbal reasoning sections of the Medical College Admission Test (MCAT); completing other program requirements; and having the approval of the program director. The entire program takes eight years to complete.

Additional information may be obtained online, and from the Brooklyn College Admissions Office, 222 West Quad Center, 718.951.5001, and the B.A.-M.D. office, 2231 Boylan Hall, 718.951.4706.

## Coordinated Engineering Honors Program

Brooklyn College has three coordinated four-year engineering programs-with the City College School of Engineering, the College of Staten Island Engineering Science Program and Polytechnic Institute of New York University.

In these programs, the student attends Brooklyn College for the first two years of the four-year engineering curriculum. Upon completion of the Brooklyn College component, the student is guaranteed transfer to these institutions. Students interested in any of these programs must meet the eligibility criteria for admission to Brooklyn College and should use code 0524, the Brooklyn College engineering code, on their City University admission application form. High school applicants may apply for membership in the Engineering Honors Program by completing an online application form, in addition to the CUNY application. The application asks for a short essay about what led to the applicant's interest in engineering as a career, a high school transcript, SAT/ACT scores and two formal letters of recommendation. Letters may be from teachers of any subject who are familiar with the applicant's work and should mention courses that the applicant has taken, evaluate the quality of the applicant's work, and illustrate that quality with a significant example.

To join the Engineering Honors Program, applicants should also file a CUNY universal honors application. Matriculated Brooklyn College students may also apply to the Engineering Honors Program during their first three semesters at the college. Transfer students may apply when they apply for admission to Brooklyn College or after they begin their studies at the college.

For more information, see the chapter "Special Programs and Opportunities" in this Bulletin; contact the Brooklyn College Department of Physics, 718.951.5418; or visit the Coordinated Engineering Honors Program website.

## Percy Ellis Sutton SEEK Program

The Percy Ellis Sutton Search for Education, Elevation and Knowledge (SEEK) program of the City University of New York offers economically and educationally disadvantaged students opportunities for higher education. The program at Brooklyn College provides support through financial aid, academic support, and instruction, tutorial services and specialized counseling.

The SEEK application procedure and the CUNY admissions application procedure are the same. Applicants should complete the special SEEK section of the CUNY admissions application. Prospective SEEK students must demonstrate both financial and educational eligibility as well as New York State residency. Contact the program for additional program requirements to the Brooklyn College SEEK Program.

## SEEK Program Office, 2208 Boylan Hall, 718.951.5738

Information about the program and its services may be found on the SEEK website.

Students enrolled in the SEEK program have access to the following program services and facilities:

## SEEK Counseling, 2207 and 2212 Boylan Hall, 718.951.5738

SEEK counselors provide students with orientation, registration and financial aid information; academic planning assistance; and information about graduate education and career opportunities. Counselors assess and encourage each student's progress. Students meet individually and in groups to discuss their concerns.

## SEEK Learning and Study Center, 2438 Ingersoll Hall, 718.951.5135

The SEEK Learning and Study Center (SLSC) offers SEEK students tutoring and supplemental instruction in basic skills, general education courses, and introductory and advanced courses in all majors. It assists students in adapting to the college curriculum. The SLSC is staffed primarily by professional supplemental instructors and by peer tutors who have demonstrated success in their own academic programs. The center provides services and a computer lab for SEEK students. SEEK students may visit the center to schedule individual or small-group sessions. The SLSC is used by compensatory classes as well as individual students.

## ESL program

The recommendation that applicants present four units of high school English and the requirement that students both meet the basic skills proficiency standards in reading and writing and hold a high school average of at least 80 percent does not apply to ESL students who 1) have spent at least one year outside the United States receiving their secondary education in a language other than English, 2) present at least three units of high school mathematics, and 3) meet the basic skills proficiency requirements in mathematics. Such students are eligible for admission to Brooklyn College, where they will be assigned appropriate programs of study, including ESL course work, as determined by the Office of the Associate Provost for Academic Programs and the ESL program. The ESL application procedure is the same as the freshman application procedure.

## Certificate programs

Credit-bearing certificate programs are offered in accounting, film and nonprofit fiscal management. Undergraduate students who wish to enroll in these programs must have received a high school diploma or the equivalent and must successfully complete the University Skills Assessment Tests as described in the chapter "Academic Regulations and Procedures." Students with baccalaureate degrees are eligible to enroll in the certificate programs. For more information, contact the appropriate academic department or the Office of Undergraduate Admissions.

## Special Programs and Opportunities

## First College Year

The First College Year program includes first-year initiatives such as Learning Communities, the First-Year Seminar and the Freshman Common Reading Project, which facilitate the transition to college and integrate students into the college community as engaged learners and participants in campus life. This coherent curricular and co-curricular program strengthens the academic, personal and civic skills that will set students on a successful path to graduation.

First College Year is designed primarily around First-Year Learning Communities. A learning community is a cluster of two linked general education courses and an optional First-Year Seminar elective course (Foundations for College Success and Lifelong Learning, INDS 1011). The learning community experience helps first-year students connect with faculty, make new friends, sharpen critical thinking skills, and discover real-life connections between courses and career aspirations. Learning communities also include collaborative efforts with peer mentors, career advisers, library faculty and the college's Learning Center, where students are offered one-on-one and small-group tutoring and computer-assisted instruction.

The Freshman Common Reading Project provides a shared intellectual experience around a text that students read during the summer. Early in the first semester, the author visits campus to discuss the book and the process of writing it. Students use the text as a springboard for their first college writing course, and it is often the basis of the first paper in that course.

Academic advisers from the Center for Academic Advisement and Student Success (Office of Academic Standing) work regularly with first-year students to develop a four-year plan focused on general education courses, declaration of major and degree requirements.

For information, contact the Office of the Associate Provost for Academic Programs, 3208 Boylan Hall, 718.951.5771.

## Honors Academy

The Brooklyn College Honors Academy, 2231 Boylan Hall, serves exceptionally well-qualified, eager, imaginative students who are flexible in their interests and open to new discoveries and experiences. Its purpose is to stimulate students to develop their potential and to assume responsibility for educating themselves and, by learning collaboratively, for educating one another. The academy shares a suite of rooms with the Ethyle R. Wolfe Institute for the Humanities. The Honors Academy brings together in one location distinctive, separately directed honors programs: the William E. Macaulay Honors College, the City University of New York intercollege honors program; the Scholars Program, a four-year program in interdisciplinary honors studies; the Coordinated B.A.-M.D. Program, a 4+4 combined undergraduate/ medical degree program in conjunction with SUNY Health Sciences University College of Medicine; the Coordinated Engineering Honors Program, a two-year engineering curriculum leading to transfer to engineering studies as juniors elsewhere; the Mellon Mays Undergraduate Fellowship, a two-year upperdivision program for students from underrepresented groups considering scholarly study in the humanities and other fields; and the Maximizing Access to Research Careers (MARC) program in the sciences for minority students.

The academy provides a coherent curriculum relevant to the needs of more than 600 students. It offers access to faculty members through smaller classes, closely monitored apprenticeships and working relationships with successful local professionals; a student commons room; a collaborative community of students similarly interested, ambitious and talented; computer facilities and room to work and study together; access to the scholarly and cultural resources of New York City; tutoring experience; and programmatic guidance ensuring that students follow academic paths appropriate to their interests and talents.

The Honors Academy curriculum that is open to all members of the Honors Academy includes honors sections of English 1010 and 1012 and of Classics 1110, Philosophy 2101, History 1101, Health and Nutrition Sciences 3314, and Anthropology 3135; an interdisciplinary sophomore seminar (priority registration is given to members of the Scholars Program); Honors Academy Research Colloquium seminars; and the senior colloquium for senior thesis support (priority registration is given to members of the Scholars Program). Additionally, a seminar, Healthcare in the Inner City, is mandatory for seniors in the Coordinated B.A.-M.D. program; and four interdisciplinary seminars are offered for students in the William E. Macaulay

## Honors College

Application forms may be obtained in the Honors Academy office and in the Admissions Information Center. Admission criteria for the four-year programs may be found in the "Special Programs" section of the "Admission" chapter in this Bulletin. For information on scholarships, see the chapter "Scholarships, Awards and Prizes."

## William E. Macaulay Honors College

The mission of the William E. Macaulay Honors College is to meet the needs of an exceptional group of the most able and highly achieving students in the City University of New York. Membership in the Honors College earns a student the designation University Scholar. Brooklyn College provides University Scholars with a specially created common suite of interdisciplinary courses designed to stimulate interest in and deepen understanding of the institutions and people of New York City. They pursue majors in a variety of fields and are provided with funded opportunities for internship and research. In addition, the Honors College arranges events at artistic, cultural and scientific venues of New York City. Distinguished faculty visit with students at both formal and informal events.

University Scholars receive substantial financial and academic support during their four years as undergraduates. All tuition is paid by grants. A generous study grant funds opportunities for study abroad and internships. Students are given a Cultural Passport that provides them with free or sharply discounted tickets to more than 100 artistic and cultural institutions in New York City. They are also provided with state-of-the-art laptop computers to facilitate research and communication.

As first-year students and sophomores in the Honors College, University Scholars take an Honors College seminar each semester and the balance of their course load in Pathways courses and major requirements.

Macaulay Honors College seminars are taught at Brooklyn College by outstanding faculty. In addition to the seminars, students in the Honors College complete a minimum of four eligible honors courses for a minimum total of 12 credits, with the approval of their Macaulay adviser. Exceptions may be approved by Macaulay advisers. In addition, Macaulay Honors College students take honors in their major when offered and complete a senior thesis. They are also required to complete an internship or study abroad, and 30 hours of community service.

Over the course of their four years at Brooklyn College, they will participate in a number of activities and events on other CUNY campuses and around the city. University Scholars must achieve an overall grade point average (GPA) of 3.30 or higher by the end of their first year and a GPA of 3.50 or higher by the end of their sophomore year. The 3.50 GPA must be maintained until graduation.

## Scholars Program

A four-year interdisciplinary liberal arts program, the Scholars Program is designed for a select community of well-prepared, academically ambitious students who are eager to extend themselves beyond normal course requirements. Its honors classes are small. Its curriculum encourages students to develop and pursue new interests by exploring relationships among different areas of knowledge. Students learn how to formulate, discuss and write clearly about significant issues and to evaluate their work independently and realistically.

Scholars Program students carry the same course load as other students but each semester do honors-level work in one or two of their courses. As first-year students, they take an honors section of Freshman Composition that prepares them to work independently on interdisciplinary honors projects during their sophomore, junior and senior years. They also take honors sections of selected Pathways courses, a sophomore seminar and a senior colloquium. The program encourages students in their junior year to broaden their experience with study at other colleges, study abroad or involvement in work-internship programs in the New York City area.

Scholars Program students entering as freshmen receive a Presidential Scholarship for eight semesters and a laptop computer. They also have access to study abroad scholarships and internship and research awards.

Courses that Scholars Program students take for honors credit and pass with a grade of A or B are indicated on their transcripts with an H. Scholars students must achieve a cumulative grade point average (GPA) of 3.30 or higher by the end of their freshman year and a GPA of 3.50 or higher by the end of their sophomore year. The 3.50 GPA must be maintained until they graduate. Graduation from the program is marked with special recognition at Commencement, by a transcript notation and by a note on the diploma, "Honors Academy Graduate."

## Coordinated B.A.-M.D. Program

The Coordinated B.A.-M.D. Program leads to a baccalaureate degree awarded by Brooklyn College and to an M.D. degree granted by the State University of New York Health Sciences University College of Medicine. It offers an integrated course of study that is designed to provide future physicians with the necessary foundation in the sciences while also giving them a broad background in the humanities and social sciences. Students are encouraged to pursue diverse studies that suit their skills, interests and aspirations; enrich their college experience; and benefit from the intellectual and personal fulfillment often missing from narrowly focused premed programs. Through this broad-based educational approach, the program aims to train future physicians who are concerned not just with curing but also with caring for patients.

Fifteen high school seniors are admitted to the program only in the fall term. Further information, including special application forms and detailed requirements of the program, may be obtained from the Admissions Office and from the B.A.-M.D. office. Additional information is in the "Admission" chapter in this Bulletin.

Fifteen high school seniors are admitted to the program only in the fall term. Further information, including special application forms and detailed requirements of the program, may be obtained from the Admissions Office and from the B.A.-M.D. office. Additional information is in the "Admission" chapter in this Bulletin.

## Coordinated Engineering Honors Program

The Brooklyn College Coordinated Engineering Honors Program prepares students for careers in diverse fields of engineering. Areas of specialization are chemical and biomolecular, civil, computer, electrical, and mechanical engineering.

During their two years in the Engineering Honors Program, students follow a course of study of approximately 64 credits in engineering and the liberal arts that provides a solid foundation for transferring as juniors to major engineering schools. Course work includes biology, chemistry, computer science, mathematics, and physics as well as liberal arts courses in Brooklyn College's Pathways program. Students also take courses in such subjects as engineering mechanics, electrical circuit analysis, modern programming techniques, and data structures. These courses are equivalent to
courses required during the first two years of study at most engineering schools. Further details are described in the "Studies in engineering" section of this chapter.

Upon completion of the program, students are guaranteed enrollment as juniors at the College of Staten Island Engineering Science Program or the New York University Tandon School of Engineering. They may also apply for admission to any other engineering school. These are usually Stony Brook University, the Grove School of Engineering at City College, University of Buffalo, and Binghamton University.

For members of Engineering Honors who decide not to pursue engineering, the program's Pathways requirements enable students to continue in one of the more than 125 undergraduate programs available at Brooklyn College.

## Brooklyn College/Touro College of Pharmacy Articulation Agreement

Brooklyn College has an articulation agreement with Touro College of Pharmacy whereby students who have completed 90 credits of course work toward the B.A. or B.S. degree are eligible for admission to the Touro College of Pharmacy's Pharm.D. program, using Brooklyn College's professional option. Brooklyn College agrees to accept as transfer credits those courses that compose part of the first-year curriculum toward the Pharm.D. degree at Touro up to the credits needed to complete a B.A. or B.S. at Brooklyn College.

## Mellon Mays Undergraduate Fellowship

The Mellon Mays Undergraduate Fellowship program is the centerpiece of The Andrew W. Mellon Foundation's initiatives to increase diversity in the faculty ranks of institutions of higher learning. Established in 1988 by William G. Bowen, then the president of the foundation, and Mellon program associate Henry Drewry, the MMUF program began with an initial cohort of eight member institutions, including Brooklyn College. Since then, the program has grown to include 46 member schools and consortia, including three South African universities and a consortium of historically black colleges and universities within the membership of the UNCF.

The fundamental objective of MMUF is to address, over time, the problem of underrepresentation in the academy at the level of college and university faculties. This goal can be achieved both by increasing the number of students from underrepresented minority (URM) groups who pursue

Ph.D.s and by supporting the pursuit of Ph.D.s by students who may not come from traditional minority groups but have otherwise demonstrated a commitment to the goals of MMUF. The MMUF program is designed to encourage fellows to enter Ph.D. programs that prepare students for professorial careers; it is not intended to support students who intend to go on to medical school, law school or other professional schools.

All students are welcome to apply for MMUF, though applications are particularly encouraged from African Americans, Latinos and Latinas, Native Americans, and other underrepresented minorities. Applications are accepted on a rolling basis from currently enrolled, full-time students with 24 credits or more; see the program website for full details of the application process.

In addition to their major requirements in a Mellon Mays designated field of study, fellows must complete an independent research project in their junior year; two semesters of SPCM 3185 in their senior year; participate in all Mellon Mays colloquia and summer programming; as well as meet regularly with their designated MMUF mentors and the program director.

Visit the national MMUF program website for more information.

## Maximizing Access to Research Careers (MARC)

The Maximizing Access to Research Careers (MARC) program is an honors program for students interested in earning doctoral degrees and pursuing research careers in the biomedical sciences who are also members of groups that the National Institutes of Health has determined and under-represented. For more information, see the section "Maximizing Access to Research Careers (MARC)" later in this chapter.

## Pre-Professional Studies

Brooklyn College provides individualized advising and other services for undergraduate and postbaccalaureate students who are planning to pursue careers in medicine, engineering, the allied health professions and law. Workshops are offered on such topics as academic preparation, volunteer and research involvement, internships, the application process, writing personal statements and interviewing. Other resources include current medical, allied health and
law school admissions materials, catalogs and information regarding on- and off-campus volunteer, internship, mentoring and research opportunities.

## Pre-Professional studies in health-related careers

The director of Pre-health Professions Advisement Services monitors the academic progress of all undergraduate and postbaccalaureate pre-health professions students, meets with them individually on a regular basis throughout their academic career at Brooklyn College, and helps them plan suitable academic programs, prepare for standardized examinations and prepare their applications for health professions schools. The Office of Pre-Health Professions Advisement Services also maintains a credential service for forwarding letters of recommendation to admissions offices of health professions schools. The Office of Pre-Health Professions Advisement Services has two locations. The director may be found in 2231 Boylan Hall, 718.951.4706; two assistants who handle advisement and letters of recommendation are located in 1122 Boylan Hall. A chapter of the American Medical Students Association is active at Brooklyn College.

## Agreement with State University of New York (SUNY) Downstate College of Nursing

An agreement between Brooklyn College and SUNY Downstate College of Nursing offers guaranteed admission to the accelerated nursing program at Downstate to 15 Brooklyn College students who have completed the prerequisite courses as well as graduated in any major with an overall GPA of 3.30 or higher and received a passing score on the entrance examination. The 15-month accelerated nursing program provides professional nursing training, results in a B.S.N. degree and qualifies the graduates to take the RN examination.

## Coordinated B.A.-M.D. Program

Seniors in U.S. high schools who are citizens or permanent residents are eligible to apply to the highly selective Coordinated B.A.-M.D. Program, in which accepted students complete a four-year undergraduate course of study at Brooklyn College and a four-year M.D. program at SUNY Downstate College of Medicine. The undergraduate portion is designed to expose students to a broad range of disciplines, which includes not only the sciences but the humanities and social sciences as well. Graduates then enter medical school better prepared to become skilled and knowledgeable physicians who are also sensitive to
cultural differences and the emotional needs of their patient population.

## Brooklyn College and the State University of New York College of Optometry

Brooklyn College and the State University of New York College of Optometry have an agreement whereby up to six Brooklyn College students per year may be admitted into a seven-year bachelor of arts or science (B.A. or B.S.) and doctor of optometry (O.D.) program. Students accepted to the 3-4 Program are admitted to a designated, prescribed major at Brooklyn College and simultaneously admitted to candidacy into the SUNY College of Optometry's professional program of study. Students interested in the optometry program should contact a pre-health professions adviser in the Office of Pre-health Professions Advisement for further information.

## Brooklyn College/New York Institute of Technology College of Osteopathic Medicine (NYIT-COM)

Brooklyn College has an articulation agreement with the New York College of Osteopathic Medicine in the form of an Osteopathic Medicine Admissions Early Assurance Program for exceptional candidates with outstanding college records and correspondingly high MCAT scores. The agreement does not guarantee a seat in the College of Osteopathic Medicine. It simply offers an early interview to Brooklyn College students whose names have been submitted as possible candidates for admission by the director of pre-health professions advisement at Brooklyn College.

To be eligible for this early action program, the applicant must have completed the first two years of the four-year undergraduate program at Brooklyn College and meet the following criteria: 1) overall and science grade point averages of 3.30 or higher at Brooklyn College; and 2) a favorable recommendation by the Premedical Committee. In addition, to continue enrollment in the program and be accepted to the College of Osteopathic Medicine, the student must meet the following criteria: 1) maintain the overall and science grade point average of at least $3.30 ; 2$ ) an MCAT score equal to or higher than the average MCAT score of NYIT-COM first-year class corresponding to the entry year of undergraduate study; 3) completion of a minimum of eight hours of biology (course/lab), eight hours each of inorganic and organic chemistry (course/lab), eight hours of physics (course/lab) and six hours of English with no grade below $B$ in any of these courses and labs; additional courses may be recommended by the Brooklyn College Premedical

Committee to more fully prepare the applicant for the MCAT examination; 4) passing a personal interview by NYITCOM faculty. Students enrolled in this program who do not meet or exceed the above standards have the privilege of applying for admission to NYIT-COM through the regular channels or procedures. NYIT-COM reserves the right to deny admission to students who, in the opinion of NYIT-COM, may have difficulty obtaining a medical license. Early Assurance application deadline: May 1 following the student's sophomore year; completion of the applicant's file: June 1 following the student's junior year.

## Brooklyn College/New York College of Podiatric Medicine Articulation Agreement

Brooklyn College has an articulation agreement with the New York College of Podiatric Medicine (NYCPM) whereby students who have completed 90 credits of course work toward a B.A. or B.S. degree are eligible for admission into NYCPM using Brooklyn College's professional option. Included in the 90 credits are at least six credits in English with a grade of $\mathrm{C}+$ or higher and at least eight credits in each of the following fields, with a grade of $\mathrm{C}+$ or higher: biology, inorganic chemistry, organic chemistry, and physics. Students must also fulfill the admission requirement of NYCPM: a timely and satisfactory formal application, letters of evaluation from the pre-health professions adviser, official MCAT scores at or above NYCPM's minimum requirement, satisfactory evaluation in a personal interview, and an overall GPA of at least 3.00 in undergraduate course work. Brooklyn College accepts as transfer credits those courses that compose part of the first-year curriculum toward the degree of doctor of podiatric medicine at NYCPM up to the number of credits needed to complete a B.A. or B.S. degree. For further information, contact the director of pre-health professions advisement at Brooklyn College.

## Memorandum of Understanding Between Brooklyn College's Department of Health and Nutrition Sciences and SUNY Downstate Health Sciences University School of Public Health

A memorandum of understanding between Brooklyn College's Department of Health and Nutrition Sciences and SUNY Downstate Health Sciences University School of Public Health provides a mechanism for Brooklyn College students who will be receiving or have received a B.A. or B.S. degree in health and nutrition sciences, have a minimum cumulative GPA of 3.00 on a 4.00 scale, and who meet the
admission criteria for the M.P.H. program, to be given priority consideration for admission to the M.P.H. program at SUNY Downstate School of Public Health.

## Articulation Agreement Between Brooklyn College and Touro College of Pharmacy

Brooklyn College has an articulation agreement with Touro College of Pharmacy, whereby students who have completed 90 credits of course work toward the B.A. or B.S. degree are eligible for admission to the Touro College of Pharmacy's Pharm.D. program, using Brooklyn College's professional option. Brooklyn College agrees to accept as transfer credits those courses that compose part of the first-year curriculum toward the Pharm.D. degree at Touro up to the credits needed to complete a B.A. or B.S. at Brooklyn College.

## Pre-Professional studies in legal careers

A prelaw advisement team-composed of faculty advisers, career advisers in the Magner Career Center and a resource network of lawyers on and off campus-provides individual and ongoing advisement for students planning to pursue careers in legal professions. Faculty advisers help students plan suitable academic programs and guide them to courses that will help them prepare for the LSAT. The Magner Career Center provides career assessment and counseling, panels of special speakers, workshops for professional development, opportunities for mentoring and internships, and up-todate information on areas of interest related to the legal profession, the practice of law, and the status of law schools. Students interested in legal careers should contact the prelaw program assistant in the Magner Career Center, 1303 James Hall, 718.951.5696.

## Brooklyn College and Indiana University Maurer School of Law

Brooklyn College and Indiana University Maurer School of Law have an agreement whereby at least two qualified Brooklyn College students will be admitted to Indiana University Maurer School of Law with a minimum scholarship amounting to approximately 50 percent of tuition, mentorship through a formal mentor program, and other opportunities. This collaboration seeks to provide talented students interested in the study of law the ability to obtain an affordable legal education at one of the nation's top public law schools. Students interested in this program should visit the Pre-Law Program at the Magner Career Center, 1303 James Hall.

## Studies in engineering

Students who intend to major in engineering can complete the first two years of requirements for a four-year engineering degree by taking up to 64 credits at Brooklyn College in chemistry, computer and information science, engineering, the liberal arts, mathematics, and physics. Well-qualified students interested in engineering may also apply to the Honors Academy. Students should consult the engineering counselor about the entrance requirements of engineering schools. Information may be obtained in the Physics Department, 3438 Ingersoll Hall. Additional information is in the "Admission" chapter of this Bulletin.

Brooklyn College has two coordinated engineering programs: with the College of Staten Island Engineering Science Program and the New York University Tandon School of Engineering (NYU-Tandon). In these programs, the wellprepared student attends Brooklyn College for the first two years of study in an engineering curriculum that includes courses in chemistry, computer science, the liberal arts, mathematics and physics. In addition, courses in mechanical and electrical engineering are offered. Upon successful completion of the Brooklyn College component, the student is guaranteed transfer to the College of Staten Island or NYU-Tandon for an additional two years to fulfill bachelor of science degree requirements in one of the following fields: chemical and biomolecular, civil, computer, electrical, or mechanical engineering. The Brooklyn College courses in these programs are fully transferable to the College of Staten Island or NYU-Tandon, and they are generally acceptable at other engineering schools. For information on the Engineering Honors Program, see the section "Honors Academy" in this chapter.

## Brooklyn College/College of Staten Island Engineering Science Program

Students must complete their engineering studies with a grade point average of 3.00 or higher in required computer and information science, engineering, mathematics and science courses in order to transfer with junior-year status to the College of Staten Island Engineering Science Program. Areas of specialization comprise electrical, and mechanical engineering.

For further information, call the Brooklyn College engineering coordinator, 718.951.5418.

## Brooklyn College/NYU-Tandon Coordinated Engineering Program

Students must complete their engineering studies with a grade point average of 3.30 or higher in required computer and information science, engineering, mathematics and science courses in order to be guaranteed admission with junior-year status in the specific, corresponding NYU-Tandon engineering program. Areas of specialization comprise chemical and biomolecular, civil, electrical, computer, and mechanical engineering. Students transferring to NYU-Tandon through this program may be required to complete certain courses during the summer before the junior year. They are also required to take a math assessment test. The engineering degree will be awarded from NYU-Tandon.

For further information, call the Brooklyn College engineering coordinator, 718.951.5418, or the NYU-Tandonassociate director of admissions, 718.260.3100. Information is also available on the Department of Physics website.

## Note on Transfer to the Grove School of Engineering at City College

Although at present there is no formal articulation, students may also transfer to the Grove School of Engineering at City College. It usually takes three additional years to complete the degree there. For admission to Grove, students must complete their engineering studies with a grade point average of 3.00 in the required courses. Areas of specialization comprise biomedical, chemical, civil, computer, electrical, and mechanical engineering. For further information, call the Brooklyn College engineering coordinator, 718.951.5418.

## CUNY Baccalaureate Program

The CUNY Baccalaureate Program is a versatile program that enables students to design their own program of study leading to a B.A. or B.S. degree. Students who have completed at least 15 credits of college-level work with a grade point average of 2.50 or higher for their recent work may apply to the program. Under the guidance of a faculty mentor, chosen from a relevant academic department, participants develop an individual course of study. Every student must complete 90 credits in regular course work and at least 30 credits while in the program. In some cases, credits may be awarded for previous life experience. Students who are admitted are eligible to study at any combination of the 17 undergraduate colleges of the university. The degree is awarded centrally by the City University of New York. Students pay the same tuition
and fees as Brooklyn College matriculants. Information and applicant forms may be obtained in the Center for Academic Advisement and Student Success, 3207 Boylan Hall, 718.951.5471; from the CUNY Baccalaureate Program, 365 Fifth Avenue, New York, NY 10016 (telephone: 212.817.8220); or from the CUNY Baccalaureate Program website.

## Special Opportunities for Underrepresented Groups in Undergraduate Research CUNY Pipeline Program

The CUNY Pipeline Program provides educational and financial support to undergraduates from underrepresented groups, including African-American, Asian-American, Hispanic and Native American students, who are interested in careers in higher education. The program is intended for students who plan to pursue a doctorate in preparation for college-level teaching and advanced research in any field except law or medicine. Students apply as juniors and must be U.S. citizens or permanent residents with a grade point average of 3.20 or higher. The program offers stipends, summer research opportunities, and help in preparing applications to graduate school and tuition waivers for the first year of study in a CUNY Ph.D. program.

## Leadership Alliance

Brooklyn College participates in the Leadership Alliance, a consortium of colleges and universities that seek to increase the participation of underrepresented minority students in graduate programs oriented toward research careers in all fields other than business, law, or medicine. The Leadership Alliance sponsors paid summer research fellowships through its Summer Research Early Identification Program (SR-EIP), which places undergraduate students in major research universities for summer research experience. SR-EIP students also have the opportunity to participate in other activities that enhance their graduate school prospects. Application forms and further information may be obtained from the program coordinator, 4311 James Hall, 718.951.5610. Deadline for application is early February.

## Center for Achievement in Science Education (CASE)

The Center for Achievement in Science Education is an organization that brings together a number of science, science research, and science-related programs at Brooklyn

College. The goal of CASE is to increase the number of underrepresented, economically disadvantaged and firstgeneration students who seek advanced degrees in science toward careers in business, computer studies, industry, law, medicine, scientific research, and teaching.

CASE programs offer financial support, peer-assisted academic assistance, faculty mentoring, academic counseling, research opportunities, and internships. Some CASE programs include a summer session in addition to academic year activities. CASE has multiple entry points for incoming first-year, continuing, transfer, and graduate students interested in science at Brooklyn College, as described below.

## CASE programs for entering first-year students

All programs listed below require that applicants be high school seniors who have been admitted to Brooklyn College for the fall term. Some programs require a summer session in preparation for the fall. For additional information about program requirements and benefits or to apply, contact the program director or coordinator.

## New York City Louis Stokes Alliance for Minority Participation (NYC-LSAMP)

The NYC-LSAMP in science, technology, engineering and mathematics (STEM) is an alliance of 16 CUNY colleges and the CUNY Graduate Center. The goal of the program is to ensure a long-term capacity to produce significantly greater numbers of individuals from groups underrepresented in STEM careers through lasting changes achieved at participating institutions. The program offers financial support for undergraduate and graduate education and opportunities to be part of faculty-supervised research teams at Brooklyn College.

To be eligible, a student must be a U.S. citizen or permanent resident admitted to full-time study at Brooklyn College; be a member of a group underrepresented in science research, including, but not limited to, African-Americans, Native Americans, and Hispanics; be majoring in a STEM discipline; and have a GPA of 3.00 or higher.

For further information, visit the NYC-LSAMP website or contact the program activity coordinator via e-mail or telephone at 718.951.4346, or visit the office in 141 Ingersoll Hall Extension. Deadline for summer and fall applications is April 30; deadline for spring applications is November 30.

## CASE programs for transfer and continuing students

Students in good academic standing who are currently enrolled at Brooklyn College may apply to the programs listed below. Please note the eligibility requirements for each program and contact the program director or coordinator for further information or to schedule an interview. Note that the Louis Stokes Alliance for Minority Participation (LSAMP) also admits students at every level of study, including graduate students.

## Collegiate Science and Technology Entry Program (CSTEP)

The Collegiate Science and Technology Entry Program aims to increase the number of historically underrepresented students who enroll in and complete undergraduate programs that lead to professional license in New York State. CSTEP provides academic and career-enriching experiences for students interested in law, medicine, nutrition and other fields, including careers in health, mathematics, science, and technology.

To be eligible, a student must be a New York State resident, be a member of a minority group (African-American/ black, Hispanic, Native American, or Alaskan Native) or demonstrate economic disadvantage, have a minimum grade point average of 2.70 , and be studying toward a profession that requires a New York State license.

For additional information, call the program coordinator, 718.951.5000 ext. 1712, or visit the CSTEP website. CSTEP accepts applications throughout the year.

## Maximizing Access to Research Careers (MARC)

The goal of MARC is to increase the number of underrepresented groups in biomedical research. Maximizing Access to Research Careers is an honors program that offers faculty mentoring, research experience, and an annual stipend of $\$ 10,000$ to academically gifted undergraduate students who are interested in entering graduate programs leading to research careers in the biomedical sciences.

To be eligible, a student must be a U.S. citizen or permanent resident admitted to full-time study at Brooklyn College; be a member of a group underrepresented in the biomedical sciences, including, but not limited to, African-Americans, Hispanics, Native Americans and Pacific Islanders; have completed 60 to 90 credits; and carry an overall GPA of 3.20 or higher.

For further information, contact the program coordinator 4311 James Hall, 718.951.5171. Deadline for fall application is June 1.

## Latin/Greek Institute

In the summer Latin/Greek Institute at the City University Graduate Center, Brooklyn College offers intensive, totalimmersion instruction in Latin and Greek. In the Basic Program, students cover four to six semesters' worth of college-level material in $101 / 2$ weeks. No previous knowledge of Latin or Greek is required, and students earn 12 undergraduate credits. In the Upper Level programs, experienced readers earn eight undergraduate credits over seven weeks.

In the Basic Latin program, students spend the first five weeks working through the entire basic Latin textbook, while completing short readings, extensive drills and prose composition assignments. These readings quickly progress from textbook sentences to literary texts. In the second half of the course, students read longer texts (Vergil, Sallust, Cicero) in the morning and selections from major poets and prose authors in the afternoon.

In the Basic Greek program, students spend the first six weeks working through the entire basic Greek textbook. During this time, students master the forms and syntax of the language while reading relatively simple selections of unadapted prose and poetry. In the final four weeks of the course, students read longer texts in the morning (Plato, Euripides) and, in the afternoon, survey major authors and genres from the Archaic, Classical, and Hellenistic periods.

The Upper Level program in Latin or Greek is for students who have completed the Basic Program in Latin or Greek or finished at least two years (four semesters) of college-level Latin or Greek. It allows them to read a substantial body of literature at a high level of grammatical precision. The programs last seven weeks: during the first week, students intensively review basic morphology and syntax and establish a common terminology; for the remaining six weeks, the major focus is on translating and analyzing a large body of material.

Information and application forms are available on the institute's website. Further information may also be obtained in the Department of Classics, 2408 Boylan Hall, 718.951.5191, at the Latin/Greek Institute Office, 365 Fifth Avenue, New York, NY 10016 (telephone: 212.817.2081), or by e-mailing the Latin/Greek Institute.

## International Education

Students at all academic levels study abroad in more than 50 countries and received academic credit toward their degree; fulfill major, minor, and elective credit requirements; and add global experience to their résumé. The International Programs and Study Abroad Office provides supportive guidance and information on program options. Hundreds of study abroad opportunities are available through Brooklyn College, CUNY, SUNY, and other programs. The office also advances international education at Brooklyn College through the development and administration of student exchanges and faculty-led programs, international agreements with foreign partner institutions, campus-based international programs, and support for the international interests of faculty. The office administers the Furman Fellows Scholarship, the Karen L. Gould Scholarship for Study Abroad, and other scholarships, and organizes Passport Day twice a year. Students interested in study abroad should attend the Study Abroad 1.0 information session at 1 p.m. on Tuesdays. A study abroad adviser is available to meet with students and assist in locating appropriate programs. The office collaborates with the Magner Career Center, SEEK, the Office of International Students and Scholar Services, and academic departments to promote international engagement.

For further information, visit the International Education website, come in person to the office (1212 Boylan Hall), or contact the office via telephone (718.951.5189) or e-mail.

## Certificate Programs

Credit-bearing certificate programs are offered by several departments. Credits earned in these programs are also applicable toward the baccalaureate degree. For more information on available certificate programs, visit the Undergraduate Programs and Advisers website.

## Adult and Returning Students

A student who wants a second chance to get a college education or a first chance later in life will have that opportunity at Brooklyn College. Convenient scheduling and academic advisement are important features of the services the college provides to adult and returning students. The Center for Academic Advisement and Student Success provides an adviser dedicated to adult and returning students. The Magner Career Center offers workshops designed especially for adult students.

The Women's Center runs the Academic Intervention and Mentoring (AIM) High program, which provides mentoring and academic support for adult women students. The Enrollment Services Center posts evening and weekend hours for the convenience of adult and returning students. Adult students who take classes during the day may select any major offered by Brooklyn College. If they are able to attend classes only on evenings and weekends, they have a choice of 11 majors: accounting, business management, computer and information science, education, English, finance, mathematics, philosophy (options I-IV), political science, psychology, and sociology. Adult students at Brooklyn College may elect to participate in the CUNY Baccalaureate Program in which they design their own program of study and designate Brooklyn College as their home campus. (See the "CUNY Baccalaureate Program" section of this chapter.)

## Adult Literacy

Through funding from New York City and New York State, the Adult Literacy Program offers non-fee-based programs in adult basic education, English as a Second Language and GED preparation. Counselors assist students who successfully complete their respective training programs with job placement. For information, contact the Adult Literacy Program, 718.951.4117.

## High School Partnerships and Collaborations

## College Now

Housed within the Brooklyn College School of Education, the College Now program supports extensive collaborative partnerships between the college, the City University of New York and the New York City Department of Education. The goal of these partnerships is to encourage college-bound awareness and acquisition of essential skills among high school students. The program provides services to ninth through 12th graders in many Brooklyn public high schools.

College Now offers a range of programming centered around a core sequence of precollege and college courses with a strong focus on academic, social and practical college preparedness. Entry points into the program include precollege arts, urban ecology, social science, computer science, service learning and college preparatory classes. College credit courses are open to qualified 11th and 12th graders. Talented CUNY undergraduate and graduate students provide mentoring in each program component,
fostering a supportive learning community. Professional and curriculum development opportunities are made available to tutors and teachers. Open houses for students, school-based professionals and families provide access to information on opportunities within College Now and throughout CUNY. For further information, contact the College Now program, 2210 James Hall, 718.951.5209.

## Brooklyn College Academy

Brooklyn College Academy is the CUNY-affiliated Early College High School at Brooklyn College. There are approximately 650 students across two school sites. Our main site, at 350 Coney Island Avenue, houses the ninth and 10th grades. The 11th and 12th grades attend high school and college classes on the Brooklyn College campus at James Hall. Established in 1986 by the New York City Board of Education in collaboration with the City University of New York, Brooklyn College Academy was created for students who can benefit from more individualized attention and a nurturing environment. It was named one of the top performing schools by the Chancellor's Office in June 2003. The school was named as one of the New York Post's Top 50 High Schools in New York City in 2009, 2010 and 2011 and earned Bronze status in U.S. News \& World Report's Top High Schools edition in 2011, 2017, and 2018. There is a rich spirit of collaboration at Brooklyn College Academy. The school is a member of the Middle College National Consortium and the National Network for Educational Renewal. The close collaboration between Brooklyn College Academy and the Brooklyn College School of Education has afforded the school the opportunity to present its work nationwide.

The mission of Brooklyn College Academy as an Early College High School is to strengthen student performance and to expand students' horizons to include postsecondary educational opportunities where students can earn up to 30 college credits through the collaboration with Brooklyn College. The school consistently fulfills this mission and students are considered college ready with the ability to make a smooth transition to the college of their choice.

Admission to the academy is open to Brooklyn residents, who may apply through the New York City Department of Education's High School Application Process.

## Science, Technology and Research (STAR) Early College High School

The Science, Technology and Research (STAR) Early College School, a collaboration between Brooklyn College and the New York City Department of Education, offers a rigorously challenging, college-enriched curriculum with a science, technology, and research theme designed to equip students to transition from high school to college.

The early college experience is a comprehensive partnership between STAR teachers and administrators and Brooklyn College faculty and staff. The partners have developed a professional structure that both connects and supports the efforts of high school and college faculty. The partners' work is dynamic, continually responding to outcome data and the diverse needs of students and staff. Their focus is unchanging: to prepare traditionally underserved youth to enter and succeed in college.

STAR enrolls approximately 600 students in grades six through 12. The school is located on the Erasmus Campus at 911 Flatbush Avenue. Working closely with Brooklyn College, STAR has developed a careful sequence of higher educational experiences to ease the transition of students from high school to college. Students are introduced to the college campus as early as sixth grade. Beginning in ninth grade, students attend STEM seminars; 10th graders attend writing workshops and begin college classes offered on the high school campus; 11th and 12th graders participate in navigating admissions workshops designed to provide small group and individual advisement for the college process. Ultimately, juniors and seniors are offered a range of college classes on the Brooklyn College campus. STAR students earn an average of 30 college credits by graduation; 40 percent of students earn more than 40 credits, and some earn as many as 60 college credits. Nearly all STAR students attend college after graduation.

STAR is a screened school. Admission is offered through the application process for New York City Department of Education schools.

## Tuition and Fees

Tuition and fees for undergraduate students listed in this Bulletin and in all registration material issued by Brooklyn College are set by the Board of Trustees of The City University of New York and are subject to change without notice. If tuition or fees are increased, payments already made are counted as partial payments. Students will be notified of the additional amount due and of the payment deadline. Visit the Bursar webpage for current tuition and fees.

Students pay tuition and fees for each term they enroll. Tuition is determined by a student's place of residence and classification as a full-time or part-time, matriculated or nondegree student. Fees consist of the Student Activity Fee, Technology Fee, CUNY Consolidated Services Fee, and University Student Senate Fee. Other fees may be applicable based on program or course requirements. The Technology Fee is determined by full- or part-time enrollment status.

Students who have applied for, or are receiving, financial assistance and do not plan to attend classes for a semester must officially drop all courses before the first official day of classes or they will be liable for payment of tuition and fees. Students who are receiving financial assistance and withdraw prior to the 60 percent attendance requirement may have a financial obligation to the college.

Students who are delinquent in paying tuition or fees may have their classes cancelled and will not be permitted to register for subsequent semesters or obtain academic transcripts or other records until all financial obligations have been satisfied. However, students who register but fail to attend classes should not depend on the college to remove them from their classes for nonpayment. Depending on the timing of registration, a student who has not paid may still continue to be registered for the semester; such students will be liable for tuition even if they do not pay tuition or attend classes. It is the responsibility of the students, not the college, to officially drop or withdraw from any classes they have registered for because the failure to drop classes keeps another student from being able to register for that seat in a class.

If a student does not make full payment on his or her tuition and fees and his or her account is sent to a collection agency, he or she will be responsible for all collections costs, including agency fees, attorney fees, and court costs, in
addition to whatever amounts he or she owes the college. Furthermore, nonpayment or a default judgment against the student's account may be reported to a credit bureau and reflected in his or her credit report.

## Undergraduate Tuition for Continuing Matriculated Students

## New York State residents

$\begin{array}{ll}\text { - Full-time } & \$ 3,465 \text { per semester } \\ \text { - Part-time } & \$ 305 \text { per credit }\end{array}$
Nonresidents and international students

- Full-time $\quad \$ 620$ per credit (no limit)
- Part-time $\$ 620$ per credit

Undergraduate tuition for nondegree students

- New York State residents $\$ 445$ per credit (no limit)
- Nonresidents and international students $\quad \$ 915$ per credit (no limit)


## Student Classification

## New York State residents

To be classified as a New York State resident, an applicant must have resided in the state of New York for the 12-month period preceding the first day of classes of the term in which the student enrolls.

The applicant must state his or her intention to live permanently and maintain his or her principal place of residence in New York State.

## Out-of-state residents

Students classified was out-of-state residents pay tuition as nonresident students. Newly admitted students and continuing students may apply to have their status changed to New York State residents online at BC WebCentral via E-Services. Applicants for residency who are under 18 years of age must submit certified copies of a parent's or guardian's federal and state income tax forms. Students who were admitted to Brooklyn College with an immigration permanent resident card must submit the card at the time of filing the residency form.

Additional information and requirements are contained on the City University residency form. Please remember to refer to the academic calendar for the deadline for filing residency.
information or documentation may be classified as an out-ofstate resident.

## Compensatory and Developmental Courses

Compensatory courses offer excess contact hours to provide skills needed for success in the course. Excess hours in compensatory courses are not counted as equated credits and are not calculated in tuition and financial aid load. Equated credits are used to determine tuition and financial aid enrollment status.

Developmental courses carry excess contact hours of a remedial nature that may be counted as equated credits in addition to degree credits. Equated credits are used to determine tuition and financial aid enrollment status.

## Compensatory courses

- Chemistry 1050 and 2050
- Mathematics 1011, 1021, 1026 and 1031
- Physics 1112


## Developmental Courses

- ESLR 1004, 1005, 1006, 1007, 1008, and 1009


## Full-time students

Matriculated students who are enrolled for 12 credits or more each term are classified as full-time students.

## Part-time students

Students who are enrolled for fewer than 12 credits or the equivalent each term are classified as part-time students. All courses taken by part-time students are billed on a per-credit basis except developmental courses, which are billed on an equated credit basis. The tuition charged part-time students on a per-credit basis in any one term may not exceed the term rate for full-time students.

## Summer and January Intersession Tuition

Students enrolled in the summer session and January intersession pay tuition at the per-credit rate according to their classification.

## Student Activity Fee

Students pay the Student Activity Fee for each term and summer session in which they enroll. It covers funding of student government, student organizations, college newspapers, use of athletic equipment and campus facilities, admission to certain social and cultural events, and maintenance and amortization of the Student Center.

| Item | Fall and Spring Semesters | Summer Sessions |
| :--- | :--- | :--- |
| Student Center | $\$ 32.50$ | $\$ 32.50$ |
| Athletics and Recreation | $\$ 18.60$ | $\$ 10$ |
| Early Childhood Center | $\$ 5$ | $\$ 5$ |
| Student Government | $\$ 10.70$ | $\$ 2.50$ |
| Academic Club Association | $\$ 3.50$ | $\mathrm{~N} / \mathrm{A}$ |
| Other Central Depository | $\$ 18.10$ | $\$ 2.50$ |
| Health Clinic | $\$ 20$ | $\$ 20$ |
| NYPIRG (New York Public Interest Research Group) | $\$ 5$ | $\$ 5$ |
| Total Student Activity Fee | $\$ 113.40$ | $\$ 77.50$ |

Additional Fees

| Item | Fall and Spring Semesters | Summer Sessions |
| :--- | :--- | :--- |
| University Student Senate | $\$ 1.45$ | $\$ 1.45$ |
| CUNY Consolidated Services Fee | $\$ 15$ | $\$ 15$ |
| Technology Fee | $\$ 125$ per term for full-time <br> students and \$62.50 for part- <br> time Students | $\$ 62.50$ for all sessions |


| Special Fees (Includ and Material Fees)* | es Library | - Library fines |
| :---: | :---: | :---: |
| - Application | \$65 for undergraduate nondegree students \$70 for first-year and transfer students \$75 for graduate degree and nondegree students \$65 for visiting students (non-CUNY students only) | terial fees |
| - Readmission Fee | \$20 |  |
| - Duplicate diploma | \$30 | - Private music lessons |
| - Late registration | \$25 |  |
| - Program change | $\$ 18$ for adding a course, changing from one course to another, or changing from one section to another if changes are made at one time | *Fees subject to change |
| - Recreation and Athletics | Graduate students: \$18.60; <br> Summer session: \$10 |  |
| - Replacement of ID card | \$10 |  |
| - Reprocessing | \$20 for a check returned by bank as uncollectible |  |
| - Special examination | \$25 plus \$5 for each additional examination |  |
| - Speech and Hearing Center | \$200 for speech-language diagnostic evaluation; \$175 for audiological evaluations; \$770 for 14 45-minute individual speech therapy sessions one time per week; $\$ 1,400$ for 14 individual speech therapy sessions two times per week; \$150 per semester for aphasia group. Brooklyn College students, staff, and faculty with valid college ID receive a 40 percent discount. |  |
| - Transcript | \$7, waived for transcripts sent to other CUNY schools |  |

- Library fines
- Material fees*
- Private music lessons
*Fees subject to change

Students should consult the library for the policy on fines.

Some courses entail a fee to cover the costs of special materials, film rental charges, transportation, field trip expenses, or other noninstructional costs. Material fees are subject to change and are nonrefundable. Details may be found in each term's Schedule of Classes.
$\$ 250$. This fee is for the following music courses and is charged per course, per semester: MUSC 3791, 3792, 3793, 3794, 3795, 3796, 4841, and 4842.

## Undergraduate Students Taking Graduate Courses

Brooklyn College undergraduate students who take graduate courses for graduate credit pay applicable resident or nonresident tuition rates set for graduate students and are subject to the maximum tuition rate set for undergraduate students. Graduate Division tuition rates are listed in the Graduate Bulletin and on the Bursar webpage.

Undergraduate students who take graduate courses for undergraduate credit pay applicable tuition rates set for undergraduate students.

## Post-Graduation Enrollment

Those students who have satisfied their degree requirements but wish to take additional credits beyond the degree are to be charged the nondegree rate per credit unless they have filed for a second degree.

## Tuition Waiver for Employees of the City University of New York

Full-time employees of the City University of New York may be granted a waiver of tuition for undergraduate credit-bearing courses. Courses may not be taken during an employee's working hours. Employees must meet standards and requirements of the college and may be admitted as matriculants or non-degree students. Exemption from payment of tuition does not include exemption from payment of non-instructional fees. Information and applications may be obtained in the Personnel Office, 1219 Boylan Hall. Waiver eligibility is dependent on the employee's Human Resources title.

## Auditing Fee

The fee for auditing a day, evening or weekend course is the same as if the course were being taken for credit. The fee for senior citizens (New York State residents age 60 and older) is $\$ 65$ plus the $\$ 15$ CUNY Consolidated Services Fee per term. Senior citizens who take courses for undergraduate credit must pay the applicable tuition and fee rates set for undergraduate students. The $\$ 65$ auditing fee applies only to undergraduate courses. Senior citizens who wish to audit graduate courses will pay at the established tuition rates for graduate students and receive the AUD grade.

## Payment of Tuition and Fees, and Payment Plans <br> Bills

Bills are not mailed by the college and are issued by special request only.

Students can obtain an official tuition bill/receipt on CUNYfirst by using the eBill feature on the Student Center page.

1. Ensure that any pop-up blockers are disabled for the CUNYfirst website.
2. In the "finances" section, click the "Other Financial..." dropdown menu, select eBill, then click the double arrow button.
3. Select the particular term for the required eBill. (Only the two latest terms for which a student had a tuition bill will be available. If you require a prior tuition bill/ receipt, e-mail a request with your name, EMPLID, and required term.
4. View your official eBill. This includes the following: student's name, EMPLID, and billing address; tuition balance and payment information; enrolled courses; official Brooklyn College letterhead.

## Payment deadlines

Each semester, payment deadlines are posted on the Bursar webpage. If a student's account is not properly settled by the specified due date, registration will be subject to cancellation.

## Payment options

Tuition may be paid online, by mail, in person or under the terms and conditions of an approved university payment plan. Brooklyn College does not accept telephone or faxed payments.

## Online

Bills may be paid in full online via eCheck or credit card. There is no fee for using the eCheck option. There is a nonrefundable 2.65 percent service fee (of the payment amount) charged for a credit/debit card payment.

## By mail

Payments may be mailed to the Office of the Bursar/Student Payment Services, Brooklyn College, 2900 Bedford Avenue, Brooklyn, NY 11210. Students may send any combination of check and money order payments. All checks and money orders should be made payable to Brooklyn College. Students should include their name, CUNYfirst EMPLID, and the semester that they are paying for on all checks or money orders. Please do not mail cash.

## In person

Bills may be paid in person at the Enrollment Services Center, West Quad Center. The balance due may be paid in cash, by check or money order, or any combination thereof. Credit cards are not accepted in person.

## Monthly Tuition Payment Plan

Under the terms of a CUNY-wide program, Brooklyn College students may enroll in the approved budgeted tuition payment plan. To maximize the benefit of this plan, students should enroll in a payment plan as soon as a plan is available. There is no payment plan for the January intersession. There is an enrollment fee and interest is not charged, but late payment fees do apply. For more information about this plan, visit the Bursar webpage.

## Refund Policy

The following refund schedule is subject to change by the Board of Trustees of The City University of New York. Tuition for the fall and spring semesters may be refunded as follows:

- 100 percent refund for dropped courses before the scheduled start date of classes;
- 75 percent refund for dropped courses within one week after the scheduled start date of classes;
- 50 percent refund for dropped courses during the second week after the scheduled start date of classes;
- 25 percent refund for dropped courses during the third week after the scheduled start date of classes.
- No refund is given if a student drops courses later than the third week after the scheduled start date of classes.

Refunds are processed for summer sessions and the January intersession. A schedule for these refunds is established by the number of days in the term and is posted on the Bursar webpage. Unless a student's registration is canceled by the college, or he or she drops his or her courses before the first scheduled day of classes, no portion of the Student Activity Fee or special fees is refunded. Refund of the NYPIRG contribution may be obtained during the first 10 business days of the semester. Refund forms may be obtained in the NYPRIG office, 1433 Ingersoll Hall.

Students who enlist in the armed services, Peace Corps or AmeriCorps and who have not attended classes long enough to qualify for a grade but continue in attendance to within two weeks of induction receive a refund of tuition and all fees, except application fees, as follows:

- 100 percent refund for withdrawal before the beginning of the fifth calendar week (third calendar week for summer session) after the scheduled start date of classes;
- 50 percent refund for withdrawal thereafter. In instances where students who are drafted into the military or are recalled to active duty do not attend for a sufficient time to qualify for a grade, there shall be a 100 percent refund of tuition and all other fees except application fees. Service must be documented with a copy of induction or service orders. No refund is made to a student who has been assigned a grade, whether the grade is passing or failing. To obtain a grade, a student must have been enrolled for approximately 13 weeks, or for five weeks in a summer session.


# Financing Your Education <br> Office of Financial Aid 

308 West Quad Center
Brooklyn College
2900 Bedford Avenue
Brooklyn, NY 11210
Telephone: 718.951.5051
Fax: 718.951.4778
E-mail: finaid@brooklyn.cuny.edu
Website: www.brooklyn.cuny.edu/financialaid

NOTE: Please review the financial aid website for updates on available financial aid services while we continue to be impacted by the COVID-19 pandemic.

The Office of Financial Aid assists eligible students with the obtaining federal and state student financial aid. These financial aid programs are used to help students meet expenses such as tuition, fees, books, and other costs related to higher education. The Office of Financial Aid assists and educates students in understanding their eligibility and in navigating the student aid process.

The types of financial aid for undergraduate study administered by the Office of Financial Aid at Brooklyn College are:

- Federal and state grants (such as, but not limited to, New York State TAP and Federal Pell)
- Federal Work-Study
- CUNY-specific scholarships
- Federal Direct subsidized and unsubsidized loans
- Private alternative educational loans


## A Note About Scholarships

The Scholarships Office administers Brooklyn College-specific scholarship programs. More information about this type of aid can be found below under the "Types of Aid" section. For information regarding the Brooklyn College scholarship application and opportunities, contact the Office of Scholarships, 718.951.4796.

## Establishing Eligibility -Applying for Aid

Eligibility for federal student financial aid is determined by filing the FAFSA (Free Application for Federal Student Aid). Therefore, it is extremely important that students file their FAFSA accurately and as soon as they plan to attend Brooklyn College. Incorrect information on the FAFSA can cause
reduced eligibility or even a total loss of eligibility. Certain federal financial aid programs have a limited allocation from the federal government, so students are encouraged to file early to improve the possibility of being considered for federal supplemental financial assistance. In order for students to receive federal or state student financial aid, they need to meet and maintain certain academic, state and federal eligibility requirements and academic progress standards.

Students who are defined as New York State residents according to the New York State Higher Education Services Corporation (HESC) should also file a New York State TAP (Tuition Assistance Program) application to be considered for state financial aid programs.

## How to Apply

The FAFSA is filed electronically through the Federal Student Aid Portal. The New York State TAP application is available on the HESC website. Additional information regarding application procedures, eligibility requirements, and rights and responsibilities of recipients may be obtained from the Office of Financial Aid.

## Information resources

Detailed information on various student financial aid programs and how to apply is available on the Financial Aid webpage.

## International Students

International students should contact the Office of International Student and Scholar Services, 718.951.4477.

## Financial Aid Services and Locations

## Enrollment Services Center (ESC), Lobby, West Quad Center

The ESC is a point of in-person financial aid general inquiries and certain documents that cannot be submitted electronically. Hours of service may be affected by the COVID-19 pandemic. Please check the Brooklyn College website for updates.

## Virtual Financial Aid Office

During the pandemic the Office of Financial Aid operates the Virtual Financial Aid Office to assist students with inquiries in a similar manner to the ESC. Please check the website for hours and instructions for how to access the Virtual Financial Aid Office.

## Financial Aid Advisement Services, 217-218 West Quad Center

Every FAFSA applicant who enrolls at Brooklyn College is assigned a financial aid adviser. These advisers serve as a primary point of contact for financial aid counseling. An appointment for a person or remote (telephone or virtual) session with your assigned (or other available) financial aid adviser should be made before you enroll so that you have a clear understanding of the aid you are eligible for and how you will finance your education before you register.

To make an appointment, log into your BC WebCentral account and, under e-services, find the link to F.A.S.T. (Financial Aid Specialists Tool). Appointments may be made Monday through Thursday. Usually new appointment slots will open each Monday for the following week. Detailed instructions for how to lookup your financial aid adviser and to make an appointment for both continuing and prospective students is available on the Office Financial Aid Information Guides webpage.

## Additional Financial Aid Resources Available Online

The Office of Financial Aid offers the following online resources to assist students 24/7:

- Financial Aid TV (FATV)—Financial aid videos provide answers to questions 24/7.
- Financial Literacy Counseling Center-Self-paced video sessions to help students learn about managing finances, credit, and more.
- Dynamic Forms-Most forms at the Office of Financial Aid are electronic and can be submitted online through the Dynamic Forms platform. This allows students to submit documents 24/7 and without having to visit the campus.
- Virtual FAFSA Filing Workshop-A video walkthrough for completing the FAFSA accessible 24/7.
- Virtual Financial Aid Office-Allows students to visit the office of financial aid remotely without an advisement appointment.
- The Office of Financial Aid website provides a comprehensive overview of financial aid information, access to services, forms and videos on a 24/7 basis.


## Cost of Attendance

The following cost estimates of the current academic year may help students determine how much assistance they may need. These cost estimates are based on the following assumptions that the student:

- is enrolled for full-time study ( 12 credits) per term, and
- is enrolled for nine months, which is the period of time for the fall and spring semesters combined (two terms).

Please note that a student's cost of attendance budget can increase or decrease based on enrollment status and other individual circumstances.

## Students living with parents

| Books and supplies | $\$ 1,364$ |
| :--- | :--- |
| Transportation (MetroCard) | $\$ 1,122$ |
| Lunch | $\$ 1,360$ |
| Personal expenses | $\$ 1,776$ |
| Housing | $\$ 4,660$ |
| Loan fees (if applicable) | $\$ 58$ |
| Total variable cost | $\$ 10,340$ + tuition and fees |

## Students living away from parents

| Books and supplies | $\$ 1,364$ |
| :--- | :--- |
| Transportation (MetroCard) | $\$ 1,122$ |
| Lunch | $\$ 1,360$ |
| *Personal expense | $\$ 6,933$ |
| Housing | $\$ 13,536$ |
| Loan fees (if applicable) | $\$ 58$ |
| Total variable cost | $\$ 24,373$ + tuition and fees |

*Students living away from their parents are assumed to have additional costs such as paying for food at home and medical expenses in addition to general personal expenses.

Adjustments to a student's cost of attendance budget can be considered by the Office of Financial Aid on a case-by-case basis. Additional information is available on the Office of Financial Aid Website

## FAFSA Verification

FAFSA applications may be selected by the U.S. Department of Education for a process called Verification. If your FAFSA record is selected for verification you will be see this information in the comments section of your Student Aid report (SAR). You will also see To Do List items indicating this process in your CUNYfirst Student Center to complete
the process and determine your eligibility the Financial Aid Office must compare information from your FAFSA with information you provide on your verification worksheet and with any other documents you are required to submit. If there are differences, the Office of Financial Aid could require additional documentation and/or your FAFSA information may need to be corrected. You may not receive federal financial aid until all verification requirements are met and the necessary corrections have been processed by the federal processor.

## Types of Aid

- Federal/State Grant: money awarded by the federal or state governments that you do not need to pay back.
- Loan: money you borrow now and pay back later with interest.
- Work-Study: money you earn by working at an approved Brooklyn College or CUNY work-study job site.
- Scholarship: a type of grant awarded by the college or university based on merit and/or financial need.


## Grants

## Federal Pell Grant

Federal Pell Grants are available to eligible matriculated first-degree undergraduate baccalaureate students only. The amount of the award is determined by the student's enrollment status, expected family contribution (EFC), and approved award amount per year, as determined by the U.S. Congress. It can be used to pay for tuition or other education-related expenses if tuition is already paid for by other means. Students can receive the Federal Pell Grant for no more than 12 full-time semesters (approximately six years if enrolled full-time or its part-time equivalent). This is called a student's Pell Lifetime Eligibility Usage, or LEU. The current maximum annual Pell grant will be $\$ 6,495$, or $\$ 3,247.50$ per semester. Pell awards are subject to change due to individual EFC and enrollment status.

Year-round Pell: The Federal Pell Grant Program allows eligible students to receive up to 150 percent of the student's Federal Pell Grant scheduled award provided that they are enrolled in at least six credits in the term that they are receiving more than 100 percent of the scheduled Pell grant.

## Federal Supplemental Education Opportunity Grant (FSEOG)

Federal Supplemental Education Opportunity Grants provide between $\$ 100$ and $\$ 4,000$ (approximately $\$ 400$ on average)
to matriculated undergraduate students who demonstrate exceptional need. Amounts can vary, as approved each year by Congress. Eligible students must be enrolled for at least six credits and be eligible to receive at least one qualified Pell disbursement for the 2021-22 academic year. Funds for this award are finite and therefore, even if eligibility requirements are met, receipt of an award is not guaranteed.

## The Percy Ellis Sutton SEEK Program

SEEK (Search for Education, Elevation and Knowledge) is the legislatively mandated higher education opportunity program of the senior colleges of the City University of New York. It provides special academic, financial, and counseling assistance to students entering college for the first time.

All SEEK students must demonstrate and document financial need prior to entrance into the program. The SEEK Program awards financial assistance to economically eligible students to help with such expenses as books and college fees. Prospective students must have:

- a high school diploma as well as a high school average less than that normally required for admission to Brooklyn College (usually around an 80 CAA) or a New York State high school equivalency diploma or its equivalent from another state,
- resided in New York State for at least one year prior to application
- not previously attended an institution of postsecondary education, except in the case of veterans who are permitted up to 18 credits earned during or prior to their tour of duty in the armed forces, and
- a gross family income in the qualifying range.


## The Peter F. Vallone Academic Scholarship

The Peter F. Vallone Scholarship (formerly known as the New York City Council Merit Scholarship) is available to New York City high school graduates who have proven their ability to succeed academically while in high school. Students may receive $\$ 700$ per year ( $\$ 350$ per semester). Funding is determined by the New York City Council, and the scholarship award amount is subject to change based upon an allocation provided each academic year. Once a college has reached their allocation amount, no additional recipients can be awarded.

## How to apply

There is no separate application for the scholarship. Students are automatically considered for the award when they apply for admission to CUNY.

## Qualification requirements

To qualify, a student must:

- be a U.S. citizen or eligible noncitizen,
- be a Resident of New York City,
- graduate from a New York City high school with at least an 80 (B) GPA,
- enroll at a CUNY college as a full-time student within one year of graduating from high school,
- register as a full-time student each semester (except summer) and maintain at least a 3.00 cumulative GPA, and
- attend CUNY before attending any other post-secondary institution.


## Pursuit and Progress

- Students must maintain continuous full-time (12 credits) enrollment within the City University of New York system.
- Students must maintain a cumulative GPA of at least 3.00 that is calculated once a year at the end of the spring semester.
- Students pursuing an associate's degree may receive the scholarship for a maximum of six semesters. Those seeking a bachelor's degree are limited to eight semesters of eligibility

Note that the award is not restored once it has been lost.

## Federal TEACH Grant Program

The TEACH (Teacher Education Assistance for College and Higher Education) Grant is offered only to students who are matriculated in a TEACH Grant eligible program. To be considered for this federal student financial aid program, you must:

- meet the basic eligibility criteria for the federal student aid programs,
- complete the Free Application for Federal Student Aid (FAFSA) form,
- be enrolled as an undergraduate, postbaccalaureate at a school that participates in the TEACH Grant Program,
- be enrolled in a TEACH Grant-eligible program,
- meet certain academic achievement requirements (generally, scoring above the 75th percentile on one or more portions of a college admissions test or maintaining a cumulative GPA of at least 3.25),
- receive TEACH Grant counseling that explains the terms and conditions of the TEACH Grant service obligation, and
- sign a TEACH Grant Agreement to Serve.

Students not yet admitted into an approved degree program do not qualify for the TEACH grant.

The TEACH Grant Agreement to Serve explains the terms and conditions for receiving a TEACH Grant:

- You must serve as a full-time teacher for a total of at least four academic years within eight years after you complete or otherwise cease to be enrolled in the program(s) for which you received TEACH Grant funds.
- You must perform the teaching service as a highly qualified teacher at a low-income school or educational service agency.
- Your teaching service must be in a high-need field.
- You must provide ED with documentation of your progress toward completing your service obligation.
- If you do not meet the requirements of your service obligation, all TEACH Grants you received will be converted to Direct Unsubsidized Loans. You must repay these loans in full, with interest charged from the date of each TEACH Grant disbursement.

More information about the TEACH grant is available on the Federal Student Aid website. For information about eligible programs, please contact the Brooklyn College School of Education.

## New York State Tuition Assistance Program (TAP)

This New York State grant is available to qualified undergraduate full-time matriculated students. There are also certain degree and progress/pursuit requirements that need to be satisfied in order to qualify.

## Eligibility

To be eligible for TAP, an applicant must:

- be a legal resident of New York State and have resided in the state for 12 continuous months;
- be a U.S. citizen or eligible noncitizen;
- have graduated from high school in the United States, or earned a high school equivalency diploma by passing a Test Assessing Secondary Completion (TASC) formally known as a GED, or passed a federally approved "Ability to Benefit" test as defined by the Commissioner of the State Education Department;
- study at an approved postsecondary institution in New York State;
- be matriculated in an approved program of study and be in good academic standing with at least a C average as of the fourth semester payment;
- be enrolled as a full-time student taking 12 or more credits applicable toward the degree program, per semester;
- be charged at least $\$ 200$ tuition per year;
- meet income eligibility limitations;
- not be in default on any state or federal student loans and not be in default on any repayment of state awards; and
- be in compliance with the terms of any service condition imposed by a New York State award.

Credit-bearing courses in the student's minimum full-time course load ( 12 semester hours or the equivalent) must consist of courses applicable to the student's program of study as a general education requirement, major requirement, or elective as described in this Bulletin.

Electives are acceptable when taken in accordance with published degree requirements. A student may take courses not applicable to a degree in a given semester as long as the course work is above the minimum full-time requirement of 12 credits. Undergraduate students may receive up to eight TAP payments for eight semesters; SEEK or approved fiveyear program students may receive up to ten TAP payments for 10 semesters.

To receive each TAP payment, a student must:

- meet the eligibility requirements outlined above,
- have completed a specific number of credits in the previous TAP semester,
- have accumulated a specific number of credits toward his or her degree,
- maintain a specific minimum grade point average,
- have declared a major by the time he or she completes 60 credits, and
- meet specific academic standards.

Students' academic progress and pursuit requirements will be evaluated depending on when they received their first TAP payment and whether they are in a remedial program.

## TAP progress and pursuit chart (New York State TAP Satisfactory Academic Progress)

For New York State financial aid purposes, good academic standing consists of two elements: satisfactory academic progress and pursuit of program. Satisfactory progress is a measure of the student's achievement, of earning credits toward a degree or certificate with a specified GPA. Pursuit of program is a measure of the student's effort to complete a program.

In accordance with section 145-2.2 of the Regulations of the Commissioner of Education, each institution participating in New York State student financial aid programs must determine whether a student is in good academic standing based on a standard of satisfactory academic progress
comprising a minimum number of credits to be accrued (earned) with a minimum cumulative GPA in each term an award payment is received. The progress standard is most clearly presented in chart format (see below).

Current regulations mandate a minimum cumulative $C$ average after a student has received four full-time semester award payments or the equivalent ( 24 payment points). Effective for the 2010-11 academic year and thereafter, New York State Education Law requires that a nonremedial student whose first award year is in 2010-11 or thereafter must meet new standards of New York State satisfactory academic progress (SAP). Nonremedial students whose first year was 2007-08 through 2009-10 must meet the SAP requirements enacted in 2006. Those meeting the definition of "remedial student" are not subject to the new SAP standards but will use the requirements established in 2006. The law enacted in 2006 mandated minimum standards of satisfactory academic progress for students receiving their first state award in the academic year 2006-07.

## One-time TAP waiver

Regulations permit undergraduate students to receive a onetime waiver of the good academic standing requirement as an undergraduate student. Reasons for granting a waiver may include:

- personal illness involving either hospitalization or extended home confinement;
- illness in the immediate family requiring your absence from classes for an extended period of time;
- emotionally disabling condition that prevented you from attending classes;
- change in working conditions of your job on which you and your family are dependent; and
- military duty, incarceration or other involvement with agencies of government.


## Waiver of C-average requirement

Unlike the good academic standing waiver, it is possible, should circumstances warrant it, for a student to receive more than one C -average waiver. The C -average requirement may be waived for undue hardship based on:

- death of a relative of the student;
- personal injury or illness of the student; or
- other extenuating circumstances


## Repeated courses

Repeated courses in which you have already received a passing grade cannot be included in meeting the TAP fulltime study requirement unless:

- You repeat a course for additional credit (e.g., certain seminar courses).
- You need to meet a minimum grade requirement for that course. (Please check the Brooklyn College Bulletin or specific department. GPA requirements do not count.)


## New York State Excelsior Scholarship

The New York State Excelsior Scholarship, in combination
with other student financial aid programs, allows students to attend a SUNY or CUNY college tuition-free. Please note that fees are not covered by this scholarship.

Recipients of the Excelsior Scholarship may receive up to $\$ 5,500$ or actual tuition, whichever is less. The maximum scholarship will be reduced by the amount of certain other student financial aid awards that an applicant has received or

First-time TAP Recipients: 2005-06 and Prior, Nonremedial and Remedial Students

| To receive payment number: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| You must have completed at least this many <br> credits in the previous payment semester: | 0 | 6 | 6 | 9 | 9 | 12 | 12 | 12 | 12 | 12 |
| You must have accumulated this many <br> credits toward your degree: | 0 | 0 | 6 | 18 | 31 | 45 | 60 | 75 | 90 | 105 |
| You must have a GPA of: | 0 | 0 | 1.0 | 1.20 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |

First-time TAP Recipients: 2007-08 through 2009-10, Plus Remedial Students)

| To receive payment number: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| You must have completed at least this many <br> credits in the previous payment semester: | 0 | 6 | 6 | 9 | 9 | 12 | 12 | 12 | 12 | 12 |
| You must have accumulated this many <br> credits toward your degree: | 0 | 3 | 9 | 21 | 33 | 45 | 60 | 75 | 90 | 105 |
| You must have a GPA of: | 0 | 1.10 | 1.20 | 1.30 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |

First-time TAP Recipients: 2010 and Beyond, Nonremedial Students

| To receive payment number: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| You must have completed at least this many <br> credits in the previous payment semester: | 0 | 6 | 6 | 9 | 9 | 12 | 12 | 12 | 12 | 12 |
| You must have accumulated this many <br> credits toward your degree: | 0 | 6 | 15 | 27 | 39 | 51 | 66 | 81 | 96 | 111 |
| You must have a GPA of: | 0 | 1.50 | 1.80 | 1.80 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |

## Students receiving TAP who meet ADA definitions and are enrolled part time

Program: Baccalaureate
Calendar: Semester 2015-16 and thereafter (ADA part-time students)

| Before being certified for payment number: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A student must have accrued at least this <br> many credits: | 0 | 3 | 9 | 21 | 33 | 45 | 60 | 75 | 90 | 105 |
| With at least this grade point average: | 0 | 1.50 | 1.80 | 1.80 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |

will receive for the academic year, including, but not limited to, a New York State Tuition Assistance Program (TAP) award and/or Federal Pell Grant.

A recipient of an Excelsior Scholarship is eligible to receive award payments for not more than two years of full-time undergraduate study in a program leading to an associate's degree or four years of full-time undergraduate study, or five years if the program of study normally requires five years, in a program leading to a bachelor's degree.

Students must live in New York State for the length of time they receive the award. Failure to meet these requirements will result in the conversion of the award to a no-interest loan.

## Eligibility

To be eligible for the New York State Excelsior Scholarship, a student must:

- be a resident of New York State and have resided in New York State for 12 continuous months prior to the beginning of the term;
- be a U.S. citizen or eligible noncitizen;
- have either graduated from high school in the United States, or earned a high school equivalency diploma, or passed a federally approved "Ability to Benefit" test, as defined by the Commissioner of the State Education Department;
- have a combined household (student and parent) federal adjusted gross income of $\$ 125,000$ or less;
- be pursuing an undergraduate degree at a SUNY or CUNY college, including community colleges and the statutory colleges at Cornell University and Alfred University;
- be enrolled in at least 12 credits applicable toward his or her degree program per term and complete at least 30 credits each year (successively);
- if attended college prior to the 2021-22 academic year, have earned at least 30 credits each year (successively), applicable toward his or her degree program prior to applying for an Excelsior Scholarship;
- be in a nondefault status on a student loan made under any New York State or federal education loan program or on the repayment of any New York State award;
- be in compliance with the terms of the service condition(s) imposed by a New York State award that he or she have previously received;
- execute a contract agreeing to reside in New York State for the length of time the award was received, and, if employed during such time, be employed in New York State; and
- apply for the FAFSA, and New York State TAP, every year.

For first-time recipients, file a New York State Excelsior scholarship application.

The Brooklyn College website and the New York State Higher Education Services Corporation website contain further information.

## Other New York State Student Financial Aid programs

Information on the following scholarships and awards administered by the Higher Education Services Corporation of New York State is available on the HESC website.

- Veterans Tuition Awards (VTA)
o Eligible students are those who are New York State residents discharged under honorable conditions from the U.S. armed forces and who are:
o Vietnam veterans who served in Indochina between February 28, 1961, and May 7, 1975.
o Persian Gulf veterans who served in the Persian Gulf on or after August 2, 1990.
o Afghanistan veterans who served in Afghanistan during hostilities on or after September 11, 2001.
o Veterans of the armed forces of the United States who served in hostilities that occurred after February 28, 1961, as evidenced by receipt of an Armed Forces Expeditionary Medal, Navy Expeditionary Medal or Marine Corps Expeditionary Medal.
- New York State Memorial Scholarship for Families of Deceased Firefighters, Volunteer Firefighters, Police
- Officers, Peace Officers and Emergency Medical Service Workers
- New York State World Trade Center Memorial Scholarships
- New York State Aid to Native Americans
- Flight 587 Memorial Scholarships
- Flight 3407 Memorial Scholarships
- Military Service Recognition Scholarships
- New York State Math \& Science Teaching Incentive Scholarships
- New York State Scholarships for Academic Excellence
- New York State Volunteer Recruitment Service Scholarships
- New York State Regents Awards for Children of Deceased and Disabled Veterans
- New York State Science, Technology, Engineering and Mathematics (STEM) Incentive Program


## Part-time TAP (PTAP)

New York State Education Law presently allows for a Part-
time Tuition Assistance Program (PTAP) award for New York State students. To be eligible for PTAP, students must meet all of the TAP eligibility requirements, have earned 12 or more credits in each of two consecutive semesters for a minimum total of 24 credits, and maintain at least a $C$ average. PTAP allows for partial TAP payment for students taking six to 11 credits.

## Aid for Part-time Study (APTS)

This New York State grant is available to qualified undergraduate part-time matriculated students who have resided in the state for at least a year and meet stipulated economic criteria. There are also certain degree and progress/pursuit (academic) requirements that need to be satisfied in order to qualify.

APTS recipients are subject to the same requirements for good academic standing that govern the TAP program (see the TAP charts, above). You must demonstrate program pursuit every semester you receive an APTS award and meet the academic progress standard every two semesters. Failure to meet these requirements will result in the loss of your APTS eligibility.

To be considered for APTS, you must be:

- a legal resident of New York State and have resided in New York State for at least 12 continuous months prior to the start of the term;
- have graduated from a high school in the United States, or earned a high school equivalency diploma by passing a Test Assessing Secondary Completion (TASC) formally known as a GED, or passed a federally approved "Ability to Benefit" test as defined by the Commissioner of the State Education Department
- be enrolled as a part-time student;
- be matriculated in an approved program of study in a participating New York State postsecondary institution;
- be in good academic standing;
- be charged at least $\$ 100$ tuition per year;
- meet income eligibility limitations;
- not have exhausted Tuition Assistance Program (TAP) eligibility;
- not be in default on a student loan made under any New York State or federal education loan program or repayment of any New York State award and,
- be in compliance with the terms of any service condition imposed by a New York State award.


## Definition of Part-Time for APTS

For this APTS, part-time study means being enrolled for at least three but fewer than 12 semester hours per semester.

## Income Limits

Eligibility for an APTS award is based on New York State net taxable income; federal, state, or local pension income' and private pension and annuity income, if applicable, from the preceding calendar year.

- For students who were eligible to be claimed as tax dependents by their parents, family New York State net taxable income may not exceed $\$ 50,550$. Family income includes student and parent income.
- For students who were not eligible to be claimed by their parents as tax dependents, their New York State net taxable income (including spouse's income) may not exceed $\$ 34,250$. The spouse's income must be included if they were married on or before December 31 of the previous calendar year.
- For students who were not eligible to be claimed by their parents but were eligible to claim tax dependents other than self and/or spouse, their New York State net taxable income (including spouse's income) may not exceed $\$ 50,550$. The spouse's income must be included if they were married on or before December 31 of the previous calendar year.


## How do I apply?

1. Apply for APTS by filing a FAFSA. (Be sure to indicate Brooklyn College as one of your college choices.)
2. Apply for TAP. You must also submit the New York State TAP application in order to be considered for an APTS award.
3. Complete the CUNY supplement form located in CUNYfirst, under Student Center-Finances sectionFinancial Aid-Supplement Form.

## Application Deadline

You must complete the APTS application process before the fourth week of the semester (generally by September 30 for the fall and March 1 for the spring; however, these dates can fluctuate based on university guidance) in order to receive an APTS award.

## Veterans Administration Educational Assistance

Information about Department of Veterans Affairs educational benefits under the GI Bill and for post-Vietnam-era veterans may be obtained from the Department of Veterans Affairs and from the Brooklyn College Veteran and Military programs office, 1407 James Hall, 718.951.5105, veteransaffairs@ brooklyn.cuny.edu. Federal Veterans Educational benefits are described on the Department of Veteran Affairs benefits webpage.

## Federal Work-Study Program (FWS)

The Federal Work-Study Program is a financial aid program that allows students in good academic standing to earn an hourly wage for work performed at approved sites at the college or at public or other nonprofit agencies. Students may work up to 20 hours per week while enrolled for a minimum of six credits in their division of matriculation. Students must have a Federal Work-Study offering on their financial aid package and they must accept the offering before they can initiate the work-study hiring and job placement process. Federal Work-Study is a financial aid program with fiscal limitation. This means that the U.S. government provides an allocation of a specific dollar amount to award to students. As a result, not all students who meet the income and eligibility requirements will receive an offering. More Information on this program is available through the Office of Financial Aid.

## Federal Direct Student Loans

Unlike grants or Work-Study, loans are a type of financial aid that you must pay back with interest. Interest rates for federal direct loans are determined annually and are fixed for the lifetime of the loan. Repayment typically begins six months after your studies have been completed, or if you fail to be enrolled for at least six credits. The amount of the loan you decide to borrow should be determined only after all available grant-aid has been applied for. Federal loans are available only to matriculated students who are enrolled for a minimum of six credits. Federal Direct loans may be forgiven after a period of time if the student is employed in a public service position after graduation. For more information about federal Direct Loans, visit the Federal Student Aid Portal.

## William D. Ford Direct Loan Program

Federal direct loan programs consist of low-interest loans and are available to both undergraduate and graduate students. Each loan also carries a small origination fee, which is deducted from the loan at the time of disbursement. Details about current-year interest rates and fees are available on the Federal Student Aid website.

## Federal Direct Subsidized Loans

Subsidized loan eligibility is based upon demonstrated financial need as determined when you file your FAFSA. The interest is subsidized (paid) by the federal government until you complete your degree or if you enroll less than half-time. The loan interest rate can vary from year to year as determined
annually by Congress; however, the interest rate for a specific year is fixed for the lifetime of the loan. The interest rates are capped to not exceed $8.25 \%$ in any given year.

If you are a first-time borrower on or after July 1, 2013, there is a maximum period of time (measured in academic years) over which you can receive Direct Subsidized Loans. It is called Subsidized Usage Limit Applies (SULA). This time limit does not apply to Direct Unsubsidized Loans or Direct PLUS Loans. Students will not be able to receive Direct Subsidized Loans for more than 150 percent of the published length of their program. This is the "maximum eligibility period" and is determined by the published length of a student's program. For example, if a student is enrolled in a four-year bachelor's degree program, the maximum period for which he or she can receive Direct Subsidized Loans is six years (150 percent of four years). If a student receives Direct Subsidized Loans for one program and then changes to another program, the Direct Subsidized Loans received for the earlier program will generally count toward the student's new maximum eligibility period. For more information, visit the Federal Student Aid Portal.

There are annual and lifetime borrowing limits for the subsidized loan. A complete outline of the borrowing limits is available on the Federal Student Aid Portal and in the chart below.

## Federal Direct Unsubsidized Loans

Interest accrues from the time the loan is disbursed. Therefore, unlike the subsidized loan, the unsubsizdized loan builds interest while the student is enrolled. To keep interest from accumulating students can make interest payments while they are enrolled. The loan interest rate can vary from year to year as determined annually by Congress; however, the interest rate for a specific year is fixed for the lifetime of the loan. The interest rates are capped to not exceed 8.25\% in any given year. For more information, visit the Federal Student Aid Portal.

There are annual and lifetime borrowing limits for the subsidized loan. A complete outline of the borrowing limits is available on the Federal Student Aid Portal and in the chart below.

## How much can I borrow?

The annual borrowing maximums for the subsidized and unsubsidized loans are subject to the student's dependency status as determined when filing the FAFSA and to reduction if the loan amount and all other aid received within the aid year exceed the cost of attendance. The numbers in the chart below represent only the maximum amounts that federal
government permits to be awarded, not what may actually be packaged following a loan request. The reason for this is that for the subsidized loan both financial need and other aid need to be compared to the cost of attendance. For the Unsubsidized loan, financial need is not a factor, but the total amount of aid cannot exceed the cost of attendance and a loan amount may need to be reduced to ensure that total aid awarded does not exceed the cost of attendance. For more information, visit www.studentaid.ed.gov.

## Aggregate (Lifetime) Undergraduate Loan limit

Dependent students: $\$ 31,000$. No more than $\$ 23,000$ of this amount may be in subsidized loans.

Independent students: $\$ 57,500$. No more than $\$ 23,000$ of this amount may be in subsidized loans.

## Federal Direct Loan proration

Federal regulations require that when an undergraduate student is enrolled in a program that is one academic year or more in length, but is in a remaining period of study that is shorter than a full academic year, the loan must be prorated. Students who graduate in the summer session or fall semester will have their loans prorated. The loan proration formula is available on the Brooklyn College Office of Financial aid website.

## Federal Direct Parent PLUS Loan Program

Parents of dependent undergraduate students may borrow up to the cost of attendance minus any other financial aid resources (grants, scholarships, and other loans) under the PLUS Program. Loans may not exceed the cost of attendance
less financial aid.

Applicants for the Parent PLUS loan are required to:

- be the biological or adoptive parent of the student,
- meet all of the basic eligibility criteria for federal student aid (such as be a U.S. citizen or eligible noncitizen, not be in default on a federal loan etc.), and
- not have an adverse credit history as defined by the U.S. Department of Education and pass a credit check.

Additionally, for the parent to be able to borrow, the student must also:

- complete the Free Application for Federal Student Aid (FAFSA),
- be considered dependent based on the FAFSA criteria,
- be matriculated as a degree-seeking undergraduate student,
- be enrolled for at least half-time (six or more credits), and
- still have expenses in their Cost of Attendance not already covered by other financial aid resources.

Unlike the Subsidized and Unsubsidized loans, the Parent PLUS loan does not have an annual or lifetime maximum. The loan is, however (as noted above), limited by the Cost of Attendance. Dependent undergraduate students whose parent is ineligible for the PLUS loan due to adverse credit history may be eligible to borrow the additional unsubsidized loan amount available to Independent undergraduate students.

## Direct Loan Undergraduate Borrowing Chart (from https://www.studentaid.gov)

| Year | Dependent Students (except students <br> whose parents are unable to obtain <br> PLUS Loans) | Independent Students (and dependent <br> undergraduate students whose parents <br> are unable to obtain PLUS Loans) |
| :---: | :--- | :--- |
| First-Year Undergraduate Annual Loan <br> Limit | $\$ 5,500$. No more than $\$ 3,500$ of this <br> amount may be in subsidized loans. | $\$ 9,500$. No more than $\$ 3,500$ of this <br> amount may be in subsidized loans. |
| Second-Year Undergraduate Annual <br> Loan Limit | $\$ 6,500$. No more than $\$ 4,500$ of this <br> amount may be in subsidized loans. | $\$ 10,500$. No more than $\$ 4,500$ of this <br> amount may be in subsidized loans. |
| Third Year and Beyond Undergraduate <br> Annual Loan Limit | $\$ 7,500$ per year. No more than $\$ 5,500$ <br> of this amount may be in subsidized <br> loans. | $\$ 12,500$. No more than $\$ 5,500$ of this <br> amount may be in subsidized loans. |
| Subsidized and Unsubsidized Aggregate |  |  |
| Loan Limit | $\$ 31,000$. No more than $\$ 23,000$ of this <br> amount may be in subsidized loans. | $\$ 57,500$ for undergraduates. No more <br> than $\$ 23,000$ of this amount may be in <br> subsidized loans. |

Origination fee. Borrowers are charged an origination fee and an insurance fee, which are deducted from the loan proceeds before disbursement. For more information about Parent Plus loans, visit the Federal Student Aid website.

## Private Educational Alternative student loans

These loans are typically sought by nonmatriculated students, international students, students attending less than half-time, and students who have reached their federal aggregate or annual loan limits. Alternative loans are creditbased, private education loans facilitated by a nonfederal third-party lender. Students interested in alternative loans may borrow up to the full cost of their education minus all other aid. However, alternative loans generally carry a significantly higher interest rate because it is based upon individual credit score.

## Withdrawing

Circumstances may necessitate your withdrawing completely from Brooklyn College for a semester in which you are already registered. Withdrawing from all courses impacts your financial aid differently depending on when the withdrawal is initiated and the type of financial aid you have received. However, in all cases, your financial aid must be recalculated.

## Return of Title IV funds formula

Federal financial aid (sometimes called "Title IV aid" since it is Title IV of the Higher education Act of 1965) is recalculated based on the number of days attended, using total federal aid and total institutional charges. The percentage of unearned aid to be returned is equal to the number of days remaining in the semester divided by the number of calendar days in the semester. If you initiate an official complete withdrawal after the 60 percent point in the semester, you will have earned 100 percent of the aid you received for that semester. The date of withdrawal is counted as a completed day. Scheduled breaks of more than five consecutive days within a semester are excluded.

If a return of Title IV aid is required, Brooklyn College will return the unearned portion of Title IV financial aid to the federal programs on behalf of the student. Any return of financial aid funds made by the college on behalf of the student will be charged to the student's account resulting in a balance that the student will need to pay to the college. Payment for these charges is due on demand. Please pay the Brooklyn College Bursar's Office directly for these charges, not the U.S. Department of Education.

If you are one of the few students who are eligible for a post-withdrawal disbursement, you will be sent a letter of notification of your eligibility, which must be returned within 14 days from the date of the notice, or the offer will be rescinded. Students are strongly encouraged to ensure that the mailing address on file with Brooklyn College is always correct.

Title IV funds included under Title IV of the Higher Education Act are Federal Pell Grants, Federal Direct Loans, Federal PLUS Loans, Federal Supplemental Educational Opportunity Grants (FSEOG), Federal Work-Study, and any other type of federal financial aid.

Please note that any Pell funds disbursed as a result of a return of Title IV Funds calculation will be added toward your overall Lifetime Eligibility Usage (LEU).

For purposes of complete withdrawal and the Return of Title IV Funds Formula, Federal Work-Study is not considered. However, in all cases of total withdrawal, you cannot continue to work under the Federal Work-Study Program after your date of withdrawal. Also, any students whose enrollment falls below six credits because they drop/ withdraw (officially or unofficially) or stop attending classes must stop working immediately. Students are responsible for notifying their site supervisor regarding changes in class schedule/enrollment and the Federal Work-Study staff at the Office of Financial Aid. If you have further questions specifically regarding FWS and the impact of withdrawing, contact the FWS staff at 718.951 .5178 or .5816 , or via e-mail.

## Impact on Financial Aid From Official Withdrawal

Depending upon the date of withdrawal, certain situations and recalculations of federal aid may apply:

- If the semester has not yet begun and you drop or cancel your registration, any financial aid transmitted to your account will be removed. However, failure to cancel your registration and failure to attend classes will result in the cancellation of your financial aid and you will be responsible for tuition and fee charges.
- If you drop all classes prior to the first day to officially withdraw (always check the academic calendar for each individual semester for these important dates) you may also be billed for tuition charges for that semester (see the bursar's tuition liability schedule).
- If you officially withdraw before the 60 percent point of the semester has lapsed, the Office of Financial Aid will recalculate your Title IV aid based on the Federal Return of Title IV Funds Formula. You will be responsible for any balance due to the college for that term. In addition, depending on your college entry date, there is a possibility that you may not qualify for federal aid or state aid in future semesters. See Satisfactory Academic Progress, below.
- If you officially process a withdrawal form withdraw after the 60 percent point of the semester, you will not be required to return any Title IV aid you received for the semester up to the point of withdrawal. Please note that any disbursed Pell funds will be added toward your overall Lifetime Eligibility Usage (LEU).
- Federal Direct Loans will be subject to a Return of Title IV Funds calculation for the current semester. However, if funds have not yet been disbursed for the current and future semesters within the same academic year, the college will cancel your loan. Also, if your enrollment status drops to less than half-time (six credits), your loan will be cancelled.
- If you have an outstanding balance on a Perkins and/or Federal Direct Loan, the date on which you drop to less than half-time is the date used for the start of your grace period; you will go into repayment as soon as six months afterward. Please let your lender(s) know when you drop to less than half-time.
- If you withdraw or drop to less than half-time, you must complete an Exit Counseling for your Federal Direct Loan, which will go into repayment six months after you are less than half-time.


## Impact on Financial Aid From Unofficial Withdrawal

If you stop attending classes and do not initiate an official withdrawal, you will incur significant financial aid penalties, including full or partial cancellation of the financial aid you received for the semester. Therefore, it is critical that you initiate an official withdrawal prior to the end of the semester and that you keep your personal information current with Brooklyn College.

- Federal Direct Loans will be subject to a Return of Title IV Funds calculation for the current semester. However,
if funds have not yet been disbursed for the current and future semesters within the same academic year, your loan will be cancelled by the college. Also, if your enrollment status drops to less than half-time (six credits), your loan will be cancelled.
- Courses attempted prior to withdrawal from Brooklyn College will count in the calculation of Satisfactory Academic Progress (SAP). SAP is calculated annually and is checked when you reapply for financial aid. You could be denied future aid if you do not meet the standards of SAP.
- If you have an outstanding balance on a Perkins and/or Federal Direct Loan, the date on which you drop to less than half-time is the date used for the start of your grace period; you will go into repayment as soon as six months afterward. Please let your lender(s) know when you drop to less than half-time.
- If you withdraw or drop to less than half-time, you must complete an Exit Counseling for your Federal Direct Loan, which will go into repayment six months after you are less than half-time.


## Withdrawal Never Attended

A WN grade (withdrew never attended) is given to students who never began attendance in a course. Students will be considered not to have earned any Title IV aid for any course that has a WN grade. Any aid awarded on the basis of attending that course will be cancelled and students will be liable for the tuition.

## Withdrawal Drop

A WD is assigned for officially dropping a course during the add drop period but after the seventh day of the semester. If a student drops or withdraws from all classes, a Return of federal (Title IV) Funds (R2T4) calculation will be performed.

If a Return of Title IV Funds calculation is required, Brooklyn College will return the unearned portion of Title IV financial aid funds to the federal program(s) on behalf of the student. Any return of financial aid funds made by the college on behalf of the student will be charged to the student's account, resulting in a balance that the student will need to pay to the college. Payment for these charges is due on demand

## Federal Satisfactory Academic Progress (SAP) Standards for Federal (Title IV) Financial Aid

Brooklyn College students must meet the qualitative and quantitative Satisfactory Academic Progress (SAP) standards, as defined by the U.S. Department of Education and Brooklyn College, in order to remain eligible for federal financial aid.

Federal aid programs governed by these regulations are:

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal TEACH Grant
- Federal Work-Study (FWS)
- Federal Direct Subsidized, Unsubsidized Ioans
- Federal Direct Parent Loan for Undergraduate Students (PLUS)
- All other Title IV aid programs


## Definition of SAP

SAP is defined in three components:

- Qualitative Standard:
o GPA,
- Quantitative Standard:
o Pace of Progression
o Maximum Time Frame


## Qualitative standard

Undergraduate students must achieve the following grade point averages (GPA):

- 1-12 credits: 1.50
- 13-24 credits: 1.75
- 25 or more credits: 2.00

The regulations also stipulate that, if enrolled in an educational program of more than two academic years, a student must have a GPA of at least 2.00 or the equivalent at the end of the second academic year. This means that a student must maintain a minimum 2.00 GPA after being at the school for four semesters or six quarters without regard to enrollment status and superseding the above requirements.

## Quantitative standard / Pace of progression

For baccalaureate programs, accumulated (or earned) credits must be equal to or greater than a certain percentage of the total credits attempted. For more information on this standard visit the Brooklyn College financial aid website.

## Maximum Time Frame

Students may not attempt more than 150 percent of the credits normally required for completion of their degree program. Therefore, for a 120-credit program you could only attempt 180 credits. Beyond that credit amount will cause a failure to meet SAP.

## Determination of Cumulative Attempted Credits and Cumulative Earned Credits

Attempted credits, as defined in this section, pertain to the courses and credits that must be included to calculate pace of progression and maximum time frame. The accumulation of attempted credits usually reflects the semester course enrollment maintained in a student's permanent record at the college and will usually reflect a student's enrollment as of the last day to add a class (also called the Form A date). Accumulated credits should reflect credits that the student has earned toward the completion of the degree program in which the student is enrolled.

In applying the Federal (Title IV) SAP standard, the college must address how the following types of courses, situations and procedures may affect a student's GPA and pace of progression:

## Withdrawals

Because the last date to add a class (also called the Form A date) usually reflects a student's course load for the term, net of program adjustments, withdrawals as part of the program adjustment period (i.e., "drops") will not be included as cumulative attempted credits. Withdrawals that are recorded on a student's permanent record will be included as cumulative attempted credits and will have an adverse effect on the student's ability to meet the pace of progression standard.

Note: Retroactive "non-punitive" administrative withdrawal activity may result in the requirement for the student to repay any assistance received as a result of the student's enrollment at the time of receipt of the student assistance funds.

## Incomplete grades

Courses with incomplete grades are included as cumulative attempted credits. However, these courses cannot be used as credits accumulated toward the degree because successful completion is the criterion for positive credit accumulation (i.e., earning the credit). If the student fails to meet the pace of progression standard due to a lack of successful completion grades for incomplete courses, the recording of successful completion grades within a term that brings the accumulated credit level to the appropriate standard will restore eligibility for the term and subsequent terms within the academic year.

## Repeated courses

Successfully completed courses can generally be accepted toward degree requirements once. However, each time a student attempts a course, even if that course is part of a forgiveness or amnesty policy whereby credits attempted and grades earned in prior semesters are excluded from the GPA, it must be included as part of the cumulative attempted credit record for the measuring of pace of progression. Therefore, repeated courses, regardless of the prior grade, reduce a student's capacity to meet the pace of progression standard.

Note: The revised regulations allow students to receive Title IV aid for one-time repeat of a previously passed course as long as the student is again receiving credit for the course. Should the student subsequently fail the course, any additional attempt of that course cannot be included in the student's enrollment status for federal (Title IV) assistance. There is no regulatory limit on the number of times a student may be paid to retake a failed course, unless the student has also previously passed that course.

## Transfer of credit

Transfer students from colleges inside and outside of CUNY shall have their pace of progression status initialized for purposes of Satisfactory Academic Progress measurement by using the number of credits determined to be acceptable toward the degree as both cumulative attempted credits and cumulative earned credits.

## Treatment of nonstandard situations

## Readmitted students

A student not making SAP cannot re-establish eligibility for Title IV program assistance by re-enrolling after a one-year or longer period of non-enrollment. Upon readmission after any period of non-enrollment, the student's Title IV progress standing must be re-evaluated for SAP under the standard as the record stood at the end of his or her last term of attendance. If the student has taken any action during the period of non-enrollment that would bring him or her into compliance with the progress standard (e.g., successfully completing transferable courses at another institution during the period of absence), this should also be factored into the reassessment. If the readmitted student has not taken any such action, or if the action taken is not sufficient to bring the student back into compliance with the progress standard, the student remains on financial aid suspension and must file a successful appeal to re-establish eligibility.

## Second-degree students

A student enrolling for a second baccalaureate shall have his or her pace of progression status initialized for purposes of Satisfactory Academic Progress measurement by using the number of credits determined to be acceptable toward the degree as both the student's cumulative attempted credits and cumulative earned credits.

## Change of major

Students who change majors within the same degree or certificate program must complete the degree within the maximum time frame, unless the college has allowed for such changes by establishing various time frames for different programs leading to the degree or by individually re-evaluating the time frame for these students.

## Change of degree

If a student changes his or her objective and begins pursuing a different degree or certificate, the college may make the student subject to the maximum time frame it establishes for the new objective without regard to time spent pursuing the previous degree or certificate. The college also has the flexibility to develop a policy that is more restrictive and limits the student to an overall time frame for the completion of his or her studies.

## Additional Federal SAP Requirements

The following points are required by the U.S. Department of Education and have been implemented since the 2011-12 academic year:

- Students' records are reviewed annually at the end of each academic year. A student who is found to be deficient in one or more components as defined above is ineligible for any future financial aid immediately. No tolerance is permitted. A student who is ineligible has the right to appeal in order to regain eligibility if there are extenuating circumstances that contributed to the deficiency.
- First-year students must earn a minimum of a 1.50 GPA within their first 12 credits and a 1.75 by their 24 th. Continuing students at 25 or more credits must earn a minimum of a 2.00 GPA.


## Satisfactory Academic Progress (SAP) Appeal

The Office of Financial Aid has established an appeal process for suspension of financial aid related to satisfactory academic progress. All students failing SAP will be notified of their SAP status. Students who have failed to meet the requirements and wish to submit an appeal must complete the Satisfactory Academic Progress Appeal Form, which can be found on the Office of Financial Aid website. Any student who wishes to appeal the suspension of financial aid should read the following instructions.

Procedure: The process for submitting a financial aid federal Satisfactory Academic Progress appeal is outlined on the Brooklyn College financial aid website.

Guidelines: Be specific when explaining your circumstances. Lack of information or documentation may result in a denial of your appeal. If health problems played a role in your circumstances, please attach supporting documentation from a physician or counselor. Appeals are considered only for extenuating situations that can be documented. Students who appeal will have their appeal considered for the following reasons:

- serious physical or mental illness of the student
- serious physical or mental illness of a member of the student's immediate family
- death of a member of the student's immediate family or
- other documentable extreme circumstances

The circumstance must have occurred during the time the student struggled academically. All appeals must have documentation of the circumstances claimed in the appeal. Approved appeals can result in no more than one term of financial aid eligibility. Students whose appeals are approved are granted one term of financial aid probation.

For continued eligibility, students must resolve all SAP deficiencies and/or meet the terms of their academic plan during the period of probation. Students who cannot mathematically resolve all deficiencies within one term and/ or who fail to meet the terms of their academic plan will once again become ineligible for federal financial aid.

There is no limit to the number of times a student may follow the financial aid appeals procedure. Although a student may file only one appeal per payment period (semester), additional appeals to extend financial aid probation to subsequent semesters must vary in nature from the originally appealed and approved appeal reason, or show cause as to how it may still remain relevant.

As in the original appeal, the student would indicate the mitigating circumstances, the reasons why SAP was not achieved, and what has ensured or will ensure that the student will be able to meet SAP at the next evaluation via an academic plan.

## Re-establishing eligibility

Other than having eligibility restored through filing a successful appeal, a student on financial aid suspension may regain eligibility by taking action that brings the student into compliance with the appropriate progress standard. The mere passage of time is insufficient to restore Federal Student Aid (Title IV) eligibility to a student who has lost eligibility due to not meeting the SAP standard. Therefore, students may not re-establish eligibility solely by leaving the college for at least one year because this action, by itself, would not bring the student into compliance for Federal SAP.

Students who choose to remain enrolled without receiving Federal Student Financial aid may request a review of their academic record after any term in which they were on financial aid suspension to determine if they were able to reattain appropriate standard.

## Unusual Enrollment History (UEH)

The U.S. Department of Education utilizes the Unusual Enrollment History (UEH) Flag to the Institutional Student Information Record (ISIR), which is a record of the FAFSA that the college receives (electronically). The purpose of the UEH Flag is to identify instances of potential fraud and abuse of the federal student aid programs (e.g., students enrolling only to receive a financial aid refund and then ceasing enrollment thereafter).

While some students have legitimate reasons for unusual enrollment histories, other students may enroll in postsecondary schools long enough to receive credit balance payments, leave the institutions and repeat the process at other schools. For this reason, the institution is responsible for reviewing the student's federal student aid payment history and for collecting all academic transcripts in order to validate that the student has earned credit. The periods that are reviewed are the four most recent academic years.

## Determining Federal (Title IV) Aid eligibility

Brooklyn College has established policies and procedures to determine whether the documentation obtained supports the student's explanation and demonstrates that the student did not enroll only to receive a Title IV credit balance payment. Brooklyn College must document its decision in the student's file, and the student cannot appeal the decision to the department.

## Eligibility approved

If the documentation supports an assertion that the student did not enroll in multiple schools/programs solely to obtain the credit balance payment or in certain cases depending on the type of UEH flag on the ISIR the student has received a payment of Pell or Direct Loan aid in the prior four academic years at Brooklyn College, then the student is eligible for additional Title IV funds. Brooklyn College must document its determination in the student's file and process the student's Title IV aid accordingly.

## Eligibility denied

The student loses eligibility for all federal (Title IV) aid if both of the following are true: the student did not earn academic credit at one or more of the prior schools, and, after reviewing a student's submitted UEH Appeal, Brooklyn College determines that the documentation fails to disprove that the student enrolled in multiple programs solely to obtain the credit balance payment.

Brooklyn College will document its determination in the student's file and provide the student with an opportunity to question and appeal the decision. The Brooklyn College Office of Financial Aid will also provide students with information about regaining eligibility.

## Reinstatement of eligibility

All students who have lost eligibility for all federal (Title IV) aid and would like to appeal for reinstatement must schedule an appointment with their assigned financial aid adviser.

Note: The U.S. Department of Education indicates that it expects the school's policies to require that the student complete academic credit as at least a part of the basis for a UEH appeal and potential reinstatement of federal (Title IV) aid. When a student regains eligibility under these provisions, eligibility for Pell Grant and campus-based aid begins in the payment period during which the student regained that eligibility. For Direct Loans, eligibility begins with the period of enrollment during which the student regained eligibility.

## COVID-19 Pandemic and National Emergency Declaration

The country has been impacted by the novel coronavirus, SARS-CoV-2, since March 13, 2020, when the U.S. government declared a national emergency. As a result of the national emergency certain allowances have been made for SAP, certain verification requirements, R2T4, and other areas. If you were impacted by COVID-19 and had a significant change in your financial situation please schedule an appointment with a financial aid adviser to discuss what options may be available to you. Additionally, New York State's HESC and the federal U.S. Department of Education continue to provide new policy and regulatory updates.

## Scholarships, Awards, and Prizes

More than 600 scholarships, awards and prizes are given each year to Brooklyn College students. Friends of the college, including trustees of the Brooklyn College Foundation, Inc., have joined to support the college's continuing academic excellence through the establishment of endowed funds to support the education of qualified students.

Scholarships and awards range from partial to full tuition for the academic year and, in some cases, are given for multiple years. Selection criteria may include academic performance, financial need, field of study, community service, extracurricular activities, career plans, and/or other stipulations established by donors. Some scholarships are restricted by academic departments or schools or, in some cases, by designated committees and are awarded to students in specific areas of study or special programs. Preference for scholarships and awards is given to first-time degree-seeking students. CUNY employees receiving a tuition waiver are not eligible for Brooklyn College Foundation scholarships.

## Office of Scholarships, 213 West Quad Center, 718.951.4796

The Office of Scholarships oversees the distribution of Brooklyn College's extensive scholarships and awards and acts as a liaison with external scholarship agencies. Through the office students may apply for on-campus funding and may learn about opportunities available through outside organizations.

The office assists students with the completion of scholarship applications, including nationally competitive fellowships, such as Rhodes, Marshall, Truman, and Fulbright. It offers workshops on fellowship requirements, developing personal statements and proposals, and preparing for interviews. For the most current scholarship information and to find out how to apply for scholarships, awards and prizes, visit the Scholarships and Awards website, or the Brooklyn College WebCentral portal. Applications are available beginning in September for the following fall semester.

Accepted students should apply through the Brooklyn College WebCentral portal by visiting the "Student Transactions" section of the eServices tab.

## Conditions of Scholarship and Award Receipt

Scholarships and awards are applied directly to a student's Brooklyn College account. Any funds that exceed the current semester charges are refunded by mail or direct deposit via the Office of the Bursar. Some types of scholarships and financial aid may need to be adjusted prior to distribution of refunds.

In order for funds to be disbursed, a student must have completed all the following requirements of the aid receipt process. The student must:

- receive an award letter from the Office of Scholarships,
- resolve any existing financial obligations,
- be enrolled in a degree program and in good academic standing, with a minimum GPA of 2.00 ,
- be registered for the required credit hours on which the scholarship was based, and
- submit a thank-you letter to the office, addressed to the donor.

It is the student's responsibility to meet the above requirements and to ensure that all documentation requested by the Office of Scholarships is received. Brooklyn College reserves the right to reduce or rescind scholarships if financial circumstances dictate.

Donors of outside scholarships should be instructed to send checks to the Office of Scholarships. Checks should include the name of the scholarship, the term(s) for which the award is made, and the student's complete legal name and student identification number. If the donor does not provide instructions otherwise, the amount of the scholarship check will be divided and applied to the student's account equally for the fall and spring semesters.

# Academic Regulations and Procedures 

Major Academic Support Services

Center for Academic Advisement and Student Success (CAASS), 3207 Boylan Hall, 718.951.5471

The Center for Academic Advisement and Student Success provides academic advisement to entering undergraduate students. It offers continuing guidance to all students to help them meet college-wide requirements and assess their academic strengths and weaknesses.

## Office of Academic Standing, 3219 Boylan Hall

The Office of Academic Standing receives student requests for modifications of college procedures and regulations. Department undergraduate advisers provide major advisement.

A student may appeal a decision of a professional adviser of CAASS to the director of the Office of Academic Standing and to the Faculty Council Committee on Course and Standing. All appeals are made through the Office of Academic Standing. On each level of appeal, a student may have a personal hearing.

## Office of the Registrar, 306 West Quad Center, 718.951.5000 ext. 5441

The Office of the Registrar prepares the Schedule of Classes, facilitates registration for continuing students through CUNYfirst, determines eligibility for graduation, maintains records, processes applications for readmission, and issues transcripts and diplomas. Information on these and related matters are available at the Enrollment Services Center (ESC). Students should consult the ESC regarding any questions about transcripts and applications as outlined in this chapter and in the "Admission" chapter. Many of the services provided by the Office of the Registrar are also available through the BC WebCentral portal under the eServices tab. New eServices functions and information are added to the portal on an ongoing basis.

## Transfer Evaluations Office, 306 West Quad Center, 718.951.5263

The Transfer Evaluation Office is responsible for processing all transfer credits for courses taken prior to attending Brooklyn College for new undergraduate students, both freshmen and transfers. This includes college courses taken while still in high school, Prior Learning Assessment by External Standardized Exams such as Advance Placement (AP), College Level Examination Program (CLEP) and higher-level courses in the International Baccalaureate (IB) Organization Diploma Program, yeshiva/seminary credits, and international credentials. The Transfer Evaluation Office serves as an agent and liaison to students and academic departments to assist faculty with the process of evaluating transfer credits. More information can be found on the Transfer Evaluations Office's website.

## Identification Policies and Procedures ID card

A student is issued a photo identification card for the entire period of enrollment. The card must be validated each term. It is used as an entry permit to college facilities and a library card. It is required identification for receiving checks distributed by the college. A student must report a lost card to the Security Office, and the card must be replaced; a fee of $\$ 5$ is charged.

## Social Security number

In accordance with New York State Education Law Section 2-b, Social Security numbers are used internally as the permanent identification of a student's college record. A student who does not have an identification number should obtain one from the Admissions Office before registration.

## EMPLID

Each student is issued a student ID number called an EMPLID. The EMPLID is assigned by the CUNYfirst system once the student's record is created in that system. This ID number will be associated with the student's record throughout his or her career at CUNY. Most transactions, documents and forms will require the student to submit this number for identification purposes.

## Change of name/address

Students may change their address on CUNYfirst via Student Self Service for many different types of addresses such as mailing, billing, or home. Change requests for permanent
addresses, however, must be filed at the Enrollment Services Center. Students may access a Change of Address Form on the BC WebCentral portal. A change of name must be made in person, with supporting documentation, in the Office of the Registrar or the Enrollment Services Center. The form is available under the "My Info" tab on the WebCentral portal. Change-of-name requests must be substantiated with a photo ID with the new name as well as a marriage certificate, United States passport, or court order.

## Degree Requirements

Students should become familiar with degree requirements as they are described in this Bulletin and plan programs in consultation with appropriate college, department, or program advisers. It is the student's responsibility to be certain that he or she follows a program of study that satisfies all requirements. Degrees are awarded to students in the semester they have completed all degree requirements, provided that they have fulfilled all financial obligations to Brooklyn College.

To earn a bachelor's degree, a student must complete a set of general education requirements established by the college and fulfill major requirements in an academic department or program. Concentration requirements and minor requirements in an academic department or program may also constitute a portion of a student's undergraduate degree.

Students must meet the general requirements in effect at the time of their entrance to Brooklyn College. When there are changes in any of the degree requirements, a student in attendance may continue to follow the old requirements or choose to fulfill the new requirements in effect at any time during the student's continuous attendance at Brooklyn College.

The student may choose general education requirements, major requirements, concentration requirements, and minor requirements from different Bulletin years during his or her attendance. In the event that any courses in a department or program are withdrawn, a student who has not met the old requirements must satisfy the substituted requirements.

Additionally, students who declare or change their major or minor are given the requirement term currently in effect at the time of their declaration. Students may choose to follow an older requirement term providing they were in continuous attendance from the term they are asking for.

Students who are readmitted to the college after an absence of two or more terms must meet the requirements for degrees in effect at the time of readmission.

Students in good standing who plan to interrupt their studies for one or more full terms, up to a cumulative maximum of two years, may apply for a leave of absence through the BC WebCentral portal. A Leave of Absence application should be submitted via the BC WebCentral portal prior to the beginning of the term for which the student wishes to take leave. Upon their return, such students may choose to fulfill the requirements that were in effect prior to their leave of absence.

The Faculty Council Committee on Course and Standing may permit exceptions to college, department or program requirements. Exceptions to department or program requirements may be considered only on the recommendation of the department chair or program director. Petitions for exceptions must be filed online.

## Hours and credits

Statements in this Bulletin regarding a certain number of class hours or credits refer to the number of weekly class hours (or their equivalent). Thus a listing that reads " 3 hours, 3 credits" means that the course will meet for three 50-minute class hours each week for 14 weeks, exclusive of the final examination, or for some other scheduling pattern that equates to 2,100 minutes ( 3 hours $\times 50$ minutes $\times 14$ weeks) during the term. Every weekly hour of lecture or recitation meeting for 14 weeks is equal to one semester hour of credit. The same is true for the following: a) two weekly hours of laboratory work, b) two weekly hours of supervised fieldwork, c) three hours of unsupervised honors work, or d) three hours of unsupervised fieldwork. Exceptions to this general rule apply in certain programs or courses and are specified in the Bulletin.

## Modes of instruction

The following is the CUNY definition of modes of instruction and their corresponding symbols. Each course in the Schedule of Classes is designated by a single symbol, indicating its mode of instruction.

- P: In-Person. In an in-person class, all required class meetings occur on campus, during scheduled class meeting times. Contact includes instruction, learning activities, and interactions (both student-student and student-instructor). An in-person class where material is provided online, via a learning management system or website, does not displace any of the required contact hours that would normally occur in a scheduled inperson class. Assignment deadlines and exam days/ times are maintained and included on the class syllabus. All in-person class meeting days/times must be listed in the Schedule of Classes.
- H: Hybrid. In a hybrid class, online contact hours (synchronous* or asynchronous**) displace some portion of the required contact hours that would normally take place in a scheduled in-person (face-to-face) class. Contact includes instruction, learning activities, and interactions (both student-student and student-instructor). A hybrid class is designed to integrate face-to-face and online activities so that they reinforce, complement, and elaborate one another, instead of treating the online component as an addon or duplicate of what is taught in the classroom. Assignment deadlines and exam days/times are maintained and included on the class syllabus. All inperson and synchronous online class meeting days/ times must be listed in the Schedule of Classes.
- O: Online. In an online class (synchronous* or asynchronous**), all required contact hours are online. Contact includes instruction, learning activities, and interactions (both student-student and studentinstructor). All the class work, examinations, quizzes, writing assignments, lab work, etc., are fully online. All synchronous class meeting days/times must be listed in the Schedule of Classes.
*Synchronous: Synchronous class meetings resemble traditional on-campus in-person classes in that students must be (virtually) present at the same time. Though they are conducted virtually, synchronous classes meet in real-time. Students must commit to scheduled class times and sign onto their virtual learning platform on schedule. During these classes, students will engage with the instruction during online lessons and presentations and even have virtual class discussions. Assignment deadlines and exam days/times are maintained and included on the class syllabus. All synchronous class meeting days/times must be listed in the Schedule of Classes. Per best practices, instructors should make effective use of learning management systems for the posting of class materials and submission of class assignments.
**Asynchronous: Asynchronous class meetings do not require students to $\log$ in to their virtual classroom at a specified time. Students do not have to follow a strict schedule to engage in live classes or discussions, and the only requirement regarding when they turn in their work is the assignment deadline, not an arbitrary timeline. Assignment deadlines and exam days/ times are maintained and included on the class syllabus. Per best practices, instructors should create nonmandatory opportunities for live interactions with and among students.


## Equated credit for noncredit instruction

All hours associated with regular courses are college level, and all credits are applicable toward the degree. The degree credits and the equated credits are equal and used to determine tuition and financial aid enrollment status. Below is CUNY's definition and configuration for equated credit for noncredit instruction.

## Developmental courses

Developmental courses are designed for students who have not demonstrated skill proficiency, and are not open to students who have achieved proficiency as defined by the university. Developmental courses carry some degree credit. Academic credit shall be given only for the collegelevel instruction in the course. Developmental courses carry excess contact hours of a remedial nature, which may be counted as equated credits in addition to the degree credits. Equated credits are used to determine tuition and financial aid enrollment status. For example, a developmental course that meets for six hours per week for a 15-week semester, of which three hours per week are below college level, generates three degree credits, six contact hours and six equated credits.

## Compensatory courses

Like regular courses, compensatory courses are designed for students who have met the university's skill proficiency standards, and consist of college-level material. However, compensatory courses offer additional mandatory excess hours designed to provide skills needed to succeed in the course. The additional instruction may be offered in workshops, seminars, tutorials, study labs or other instructional formats. Degree credit shall be awarded only for the contact hours associated with college-level work. Excess hours in compensatory courses are not counted as equated credits and are not calculated in tuition and financial aid or academic load. For example, a compensatory course that meets four hours per week over a 15 -week semester, of which one hour per week is compensatory, generates three degree credits, four contact hours and three equated credits.

## Compensatory ESL courses

ESL courses may be regular, developmental or compensatory.

All follow the above definitions with the exception of compensatory ESL course offerings. Like regular courses, compensatory ESL courses are designed for ESL students who have met the university's skill proficiency standards, and consist of college-level material. Compensatory ESL courses offer additional mandatory excess hours designed to provide skills specific to the ESL population that are needed by students to succeed in the course. The additional instruction may be offered in workshops, seminars, tutorials, study labs or other instructional formats. Degree credit shall be awarded only for the contact hours associated with college-level work. However, excess hours in compensatory ESL courses carry excess contact hours of a developmental nature, which may be counted as equated credits in addition to the degree credits. Equated credits are used to determine tuition and financial aid enrollment status. For example, a compensatory ESL course that meets four hours per week over a 15-week semester, of which one hour per week is ESL compensatory, generates three degree credits, four contact hours and our equated credits. Such courses or class sections are identified with an ESL indicator.

## Credits required for a baccalaureate degree

The college requires 120 credits and a GPA of 2.00 or higher for a baccalaureate degree.

A student who has earned at least 150 credits but does not have a GPA of 2.00 or higher on the entire Brooklyn College record may present 120 credits in courses in which the minimum grade of $C$ has been earned. These 120 credits must include all college requirements. A student who is pursuing this option and has earned a grade lower than C in a required course must repeat the course. Students who wish to pursue this option are strongly advised to consult the Center for Academic Advisement and Student Success. For information on the requirements for the CUNY Baccalaureate program, see the section "CUNY Baccalaureate Program" in this Bulletin.

## College-wide requirements

All students must satisfy the following general education requirements:

- Academic Foundations requirements in mathematics, reading, English composition and library research (fulfilled by satisfying English 1010 and 1012), and the writing-intensive requirement
- Pathways requirements as stated in the "Pathways" section of the chapter "Programs of Courses and Instruction" in this Bulletin


## Requirements for a major

All degree-seeking students must declare a major by the time they have earned 60 credits in a baccalaureate degree program. Registered course work must be applicable to the student's degree requirements, which include the general education curriculum, major requirements, minor requirements (if applicable), and electives if they are needed to reach the number of credits required for degree completion. Whereas a declaration must be made by the time 60 credits are earned, students are, of course, free to change their choice of major. A student who has earned 60 credits toward a baccalaureate degree and has not declared a major shall have a hold put on his or her registration, and as such will not be able to register for courses until the student has declared a major. Some degree programs may have additional requirements for declaring a major.

Students declare a major by submitting their request through the BC WebCentral portal. Submission deadlines are published in the Academic Calendar, and they are enforced. Faculty advisers in each academic department advise prospective majors about the undergraduate programs and related career possibilities. The Center for Academic Advisement and Student Success and the Magner Career Center also offer assistance in choosing a major. The college expects that students select their major with careful consideration and with good knowledge of the range of options. Students who have not declared a major by the 60 -credit point are ineligible for TAP financial aid.

A major consists of the following requirements, which are specified for each major on the Undergraduate Programs and Advisers Web page.

- Specified introductory courses in the major department or program and in other departments or programs.
- No fewer than 15 credits in advanced courses in the major department or interdisciplinary program which must be completed with a grade of C or higher in each course.
- Additional requirements for a bachelor of science degree in specified major fields are noted below.
- Specified additional advanced courses in the major department and/or courses in other departments; minimum GPAs may be required for these courses.

Students should be aware of the meaning of any symbol preceding a course number, such as the asterisk (*) and dagger ( $\dagger$ ) and the section (§), which refers to independent work. These and other symbols, which are defined at the
start of each department's listings, may restrict the use of certain courses in fulfilling major or degree requirements.

Students who declare a major in education should be aware that, due to state certification, the education major must always be the primary/first major recorded on CUNYfirst. For further information on state certification, students should contact their adviser in the School of Education.

## Requirements for the dual major in a special program

Interdisciplinary programs within the college that offer a dual major are Caribbean studies and studies in religion. Dual majors are not independent majors. The student must also complete a major in an approved department or program of Brooklyn College.

## Additional requirements for a bachelor of science degree

Candidates for a B.S. degree with a major in biology, chemistry, computer and information science (including computational mathematics and information systems), earth and environmental sciences, mathematics, physics or psychology must complete at least 60 credits in science and mathematics; 24 of these 60 credits must be completed in advanced courses in the major department or departments. These 24 credits must be completed at Brooklyn College with a grade of C - or higher in each course (departments of Biology, Chemistry, Earth and Environmental Sciences, Mathematics, and Psychology) or with a grade of C or higher in each course (departments of Computer and Information Science, and Physics).

Several departments have specific course requirements for a B.S. degree; these requirements are described under each department listing. The following courses may be applied toward the 60 credits in science and mathematics: all courses in the departments of Biology, Chemistry, Computer and Information Science, Earth and Environmental Sciences, Mathematics, Physics, and Psychology; courses marked with a (\#) symbol in the Department of Health and Nutrition Sciences; Anthropology 2201, 3199, 3230, 3240, 3250, 3260, 3440, and 4665; Core Studies 5, 5.1, 5.2, 7.1, 7.2, 8.1, and 8.2; Biology 1010; Chemistry 1007; Physics 1005; Earth and Environmental Sciences 1010; CORC 3301 through 3399; Economics 3400, 3410, 4410, and 4422; Philosophy 3203, 3204, and 3601; Kinesiology 3271, 3275, and 4229; MCHC 2001; and Sociology 2701.

## Residence requirement

Residence, which in this context refers to the number of credits that must be taken at Brooklyn College, is one of the requirements for a degree. Candidates for a bachelor's degree are required to complete at least 30 credits at Brooklyn College, including:

- No fewer than 15 credits in advanced courses in the major department or interdisciplinary program, which must be completed with a grade of C or higher in each course.
- Satisfaction of the student's College Option requirement (see the "Pathways" section in this Bulletin). For the corresponding requirements for students following the general education residence requirements in effect prior to fall 2013, see appropriate Bulletin.
- The specific in-residence course requirements described under each department listing and additional requirements for the bachelor of science degree as noted in the "Degree requirements" section, above.


## Requirements for the minor

A minor consists of at least 12 credits in advanced electives as determined by a department or program, each completed with a grade of C - or higher. At least six of these credits must be completed at Brooklyn College. Specific requirements are described under department and program listings on the college website.

## Transfer students

Transfer students who are candidates for a bachelor's degree must meet Brooklyn College residence requirements, including the requirement for the major as described in item 2 in the "Residence requirement" section, above.

The Transfer Evaluation Office processes transfer credit evaluations for college courses completed prior to attendance at Brooklyn College. For transfer credit evaluation policies and procedures, see the "Admission" section of this Bulletin and online at the Transfer Evaluations Office's website.

Transfer students satisfy Brooklyn College's writing-intensive requirement, as described in the "Academic Foundations Requirements" section, below.

Pathways requirements for transfer students are stated in the "Pathways" section of this Bulletin.

## Second undergraduate degree

Students with an undergraduate degree from Brooklyn College may earn a second undergraduate degree from Brooklyn College in a different academic department or program if they meet all the requirements for the second degree and if they complete 30 credits in residence beyond the requirements for the first degree, including at least 15 advanced elective credits in the major department or program for the second degree.

Students with an undergraduate degree from Brooklyn College who wish to earn a second undergraduate degree from the same department as the first degree must complete the requirements for the second degree and obtain approval from the chair of the department.

Students with an undergraduate degree from a school other than Brooklyn College are held to the same requirements. All second-degree applicants are required to file an application with the Office of Undergraduate Admission. Please visit the office or the Admissions webpage and print the application.

Second-degree students may apply for e-permits.

There are no restrictions on the number of courses that students can take on e-permit beyond residency requirements, or on the number of campuses to which students can apply for a course or courses on e-permit.

Students should visit the college website for rules and regulations pertaining to students seeking a second undergraduate degree at Brooklyn College.

## Academic Foundations Requirements

Academic Foundations are those requirements that must be satisfied by all undergraduate students who enroll at Brooklyn College. These requirements include tests and courses or exemption from those tests or courses. The tests include those that must be taken prior to enrollment (CUNY Assessment Tests) as well as those taken for a student to be exempted from taking a course. (These tests do not include examinations taken in courses.) The Academic Foundations requirements include any ESL or SEEK courses required to prepare students for courses at Brooklyn College, English composition, library research, and the writing-intensive requirement.

## Pre-matriculation testing requirements and outcomes

The following students are required to take the CUNY Assessment Test in Writing (CATW) prior to registering for classes:

- Students who meet the university's definition of ESL and do not meet the benchmark scores for English proficiency for reading and writing skills are required to take the CUNY Assessment Test in Writing (CATW) to determine placement in ESL developmental courses or English 1010.
- Students who are considered ESL by the university's standards and have a bachelor's degree or higher from an accredited program are required to take the CUNY Assessment Test in Writing (CATW). Students who do not receive a minimum score of 56 must take the appropriate ESL courses before taking the required English 1010 and 1012.


## Requirements for SEEK and ESL students

Prior to their initial registration, incoming SEEK and ESL students must attend all assigned summer and any required intersession immersion programs at Brooklyn College. They shall not be permitted to complete fall or spring registration unless they have enrolled in and attended such programs.

SEEK and ESL students who have scored 480 or higher on the verbal section of the SAT; 20 or higher on the English section of the ACT; or 75 or higher on the New York State Regents Examination in English Language Arts are exempt from taking the CUNY Assessment Tests in Reading and Writing. The results of the CUNY Assessment Tests shall determine the compensatory courses students must take.

SEEK and ESL students shall not be permitted at any time to delete, drop, or withdraw from an assigned course without permission of the Center for Academic Advisement and Student Success, and in the case of SEEK, their SEEK counselor, and the relevant department chair.

## Requirements for ESL students

Students admitted to the ESL program must continue to enroll in ESL courses or workshops each semester until they meet the criteria for their ESL course.

Students selected for the ESL program on the basis of the CUNY Assessment Test in Writing shall be placed in ESLR 1004,1006 , or 1007. The placement based on the combined score from the two tests is as follows:

- 24-39— ESLR 1004
- 40-55 - ESLR 1006
- 40-55- ESLR 1007


## Other Academic

## Foundations Requirements

## English composition requirement

All students who graduate from Brooklyn College must receive credit for English 1010 and English 1012, which, as of fall 2013, comprise six credits of the Pathways 12-credit Required Common Core requirement (see the "Pathways" section in this Bulletin), or their equivalents.

Transfer students who have received a grade of C- or higher from their former college for Composition 1 will receive credit for the course and may register for English 1012. Transfer students who have received a C- or higher for both Composition 1 and Composition 2 are exempt from the composition sequence at Brooklyn College. Such placement or exemption shall be noted on students' transcripts.

Students in English 1010 take a departmental final exam at the end of the semester. This test, worth 20 percent of the student's final grade, is prepared by the Department of English and administered during the final examination period. Grades for English 1010 are: A+, A, A-, B+, B, B-, C+, C, C-, NC, or F. Note that the minimum passing grade is C -

Students who have completed all the course work but are not yet writing at the college level will receive a grade of NC; students who have not completed the course work will receive a grade of $F$.

Students who do not pass English 1010 must repeat it the following semester. The course may not be taken more than three times; students who receive three grades of $\mathrm{F}, \mathrm{NC}$, and/ or WU may be dismissed from the college.

Students who receive a grade of $A+$, , or A- in English 1010 and have been recommended by their instructors may be eligible for exemption from English 1012 based on an evaluation of their performance on the English 1010 final exam and submission of a research paper written for a course at Brooklyn College. Such exemption shall be noted on the students' transcripts.

Students must register for English 1012 within two semesters of having passed English 1010.

Grades for English 1012 are: A+, A, A-, B+, B, B-, C+, C, C-, NC, or F . Note that the minimum passing grade is $\mathrm{C}-$. Students who do not pass English 1012 must repeat the course the following semester. The course may not be taken more than two times; students who receive two grades of F and/or NC may be dismissed from the college.

## Library research requirement

The foundations of research are the ability to recognize when information is needed and the ability to locate, evaluate and use the needed information effectively and ethically. Students need multiple opportunities to learn and practice these skills so they can understand the principles that underlie the organization and retrieval of information and thus gain the confidence to tackle new information problems as they encounter them.

All students in English 1010 will complete the required Brooklyn College library orientation, which will introduce them to the services and resources of the library, including access to and ethical use of its print and electronic resources.

All sections of English 1012 shall visit the Brooklyn College Library for at least one class session of hands-on instruction on the nature, access, and efficient and ethical use of print and electronic resources of the library targeted to the research theme of the course.

All courses with a research component shall encourage students to use the resources of the Brooklyn College Library, including working with library faculty, for completing research assignments. All courses with a research component are encouraged to work with library subject specialists to establish the availability of research materials, design rewarding research assignments and arrange for advanced instruction sessions as appropriate.

## Writing-intensive requirement

All students must satisfy the college writing-intensive requirement by either a) completing one or more writingintensive courses in their major or an allied field, or b) completing a writing-intensive major. Currently, art, classics, education, English, music, philosophy and political science are writing-intensive (WI) majors. Writing-intensive courses are designated with a W after the course number.

Students should be aware that most programs require one or more W courses within their major or a related discipline.

Students may register for a writing-intensive course only after passing or being exempted from English 1012.

In writing-intensive courses, students employ writing as a way of exploring and using course content, and they practice the kinds of writing they will need for jobs or graduate studies in the discipline. Students are expected to produce at least 10 pages of prose, and they should have the opportunity to revise at least one assignment. Most faculty members assign more writing than these minimal requirements. In a writing-intensive major, effective writing is both a program goal and a means to promote and assess student learning. In a writing-intensive major, a preponderance of required courses has writing as a learning objective, writing is integral to the mastery of course content, and some courses allow students an opportunity to revise papers or to develop papers in stages.

Students who matriculated before September 2001 are exempt from the writing-intensive requirement. This does not include students readmitted after one or more terms of absence.

## Information for transfer students

Transfer students satisfy Brooklyn College's writing-intensive requirement if they a) successfully complete a Brooklyn College writing-intensive (W) course; b) fulfill the requirements of a writing-intensive major; c) demonstrate that they have taken such a course by submitting an acceptable portfolio of previous college writing from the course in question to the Writing Across the Curriculum committee.

If a course taken at another college is deemed equivalent to a Brooklyn College W course, except that it is not writingintensive, credit for the Brooklyn College course will be granted. If the student wishes to take a Brooklyn College W course in an allied field, the student must obtain the approval of the chair of the major department prior to enrolling in the course to fulfill the department's requirement.

No associate's degree automatically satisfies the writingintensive requirement in the major, and hence those degrees would not exempt the student from a writing-intensive course required for his or her major.

## Withdrawal from Academic Foundations courses

Students are not permitted at any time to delete, drop, or withdraw from an assigned Academic Foundations course without obtaining permission of the academic department
involved and consulting the Center for Academic Advisement and Student Success.

## Exemption Examinations

The Brooklyn College course exemption examination is designed to permit students of unusual ability to accelerate and enrich their college education. Such students may qualify, after suitable independent preparation, for exemption from designated courses on the basis of examination procedures prescribed by the faculty of the department or program responsible for the regular course. The examination reflects the full scope of the course. In addition to an examination, there are, where appropriate, papers, reports, laboratory experiments, or any other assignments that the faculty of a department considers proper for the course.

## The following rules govern exemption examinations:

- The student must be registered for the term during which the exemption examination is to be taken.
- The student must have a minimum overall Brooklyn College GPA of 3.00 at the time of application for the examination. This requirement is waived for a student who is in the first semester of college attendance.
- The student may offer for credit toward the baccalaureate degree a maximum of six courses taken by Brooklyn College exemption examinations.
- The student may take no more than two exemption examinations in any one term.
- The student may not take exemption examinations in courses in which he or she was previously registered, whether or not the course was completed.
- The student may not take an exemption examination in a course after auditing that course.
- The student may not repeat an exemption examination in a course.
- Departments will designate those courses in which credit may be earned through an exemption examination.
- Students apply for an exemption examination at the Enrollment Services Center. The Office of the Registrar keeps a record of courses attempted by the student through exemption examinations.
- Grades and credits: With a grade of B- or higher on an exemption examination, the student earns credit for the course and the grade is counted in the GPA. A grade of C+ or lower is not considered satisfactory on an exemption examination. The student is not exempt from the course, no credit is earned, the grade is not counted in the GPA and the course is not listed in the transcript. Grades
lower than passing are not recorded on the transcript or counted in the GPA. No honors credit may be earned for courses completed by exemption examination. A course for which a student earns credit through an exemption examination incurs tuition once that course is created on the academic record.


## Credits for Military Service

Brooklyn College offers two different ways that students can earn military credits:

## Option 1

Brooklyn College provides veteran and military students the option of having their military transcripts reviewed for undergraduate academic credit.

Veteran and military students who have served in the United States Army, Air Force, Marine Corps, Navy, or Coast Guard can request that their American Council of Education (ACE) recommendation transcript be reviewed by the Transfer Evaluation Office and the academic department evaluators for college equivalencies and credits.

The college will also accept DSST (DANTES) exams with a minimum score of 400 on Criterion Referenced test or 45 on Norm Referenced test.

The Military Transfer Credit policy is designed to reflect the academic content obtained through military instruction, including, but not limited to, basic training, noncommissioned and staff noncommissioned officers' courses, leadership training classes, international deployments, military language institutes, and the military equal opportunity programs (EOP). Academic credits are awarded based upon the ACE recommendations and the approval of the academic departmental evaluators at Brooklyn College.
Some points to consider:

- Applicability of transfer credit toward graduation requirements will vary depending on equivalency granted by the academic departmental evaluator and the student's major/minor requirements.
- Most credits are general elective credits, which may reduce the number of credits needed toward the 120-credit requirement for graduation but are not direct equivalents to courses within the major/minor/Pathway requirements.
- If elective requirements are complete, this may limit the options for course selections during the duration of the program. This can be an issue for students who need to keep a full-time course load for GI Bill ${ }^{\circledR}$ usage.


## Option 2

A veteran may receive up to six credits toward a baccalaureate degree for four months or more of documented active service and up to 12 credits for at least one year of documented active service. Veterans must have an honorable discharge from U.S. services. When granted, these credits are given as elective credits only.

During their next-to-last term at the college or upon completion of 90 credits, veterans may apply for these credits in the Center for Academic Advisement and Student Success. Veterans must carry a full program each term even though they apply for credits for military service. A GPA of 2.00 or higher is required to qualify for credits for military service.

## Registration

Registration takes place four times per academic year: fall, January intersession (winter session), spring, and summer. Registration for January intersession courses takes place during the fall semester.

New undergraduate first-time degree-seeking first-semester freshmen and transfer students are required to register in person with an adviser, by appointment. Registration instructions are included in the admissions acceptance packet.

All continuing degree- and nondegree-seeking undergraduates register via Self Service in CUNYfirst at an assigned appointment time. Enrollment (registration) appointments are assigned via the CUNYfirst system. Students are not required to attend in-person registration. Registration information is communicated via e-mail.

Some academic departments and/or programs may require students to obtain permission for certain classes or departmental advisement before being allowed to register.

A Schedule of Classes, Final Examination Schedule, and Academic Calendar are published each semester and are available on the Brooklyn College website.

## Course Restrictions

An exclusion clause closes a course to a student who is enrolled in or has completed a course similar in content. A prerequisite indicates the academic preparation and special permission that may be required for a course; a co-requisite indicates required work to be completed in conjunction with a specific course.

It is each student's responsibility to be aware of and be guided by exclusion clauses, prerequisites and co-requisites that apply to any courses for which he or she plans to register. Students will not be permitted to register for a course unless they have fulfilled the prerequisites as listed in this Bulletin.

## Program Changes

After a student has completed initial registration, program changes may be made by adding, dropping (including dropping all courses), or exchanging (swapping) one class or course section for another.

Deadlines, fees and other information regarding program changes are posted online each semester. Students whose initial registration requires the approval of an adviser must obtain approval from the adviser for any subsequent program changes.

## Adding a course

Generally, the last day to add a course without special permission is the seventh day of the term, unless otherwise indicated on the academic calendar.

## Dropping a course

During the first seven days of the fall and spring semesters, a student may drop courses without special permission. These courses will not appear on the permanent record. The deadline date is posted on the academic calendar. Beginning on the eighth day, until the end of the third week, a dropped course will be assigned the administrative grade of WD. This grade is used for financial aid calculations and does not appear on the official transcript.

## Withdrawing from a course with or without penalty

After the end of the three-week drop period described above, a student may drop a course via CUNYfirst and receive a grade that is dependent on the date of the drop. The course, however, will remain on the student's permanent record. The procedure to be followed and the grade to be assigned will vary according to the time periods listed below:

- Fourth week through the last day of classes: Students may drop a course via CUNYfirst. The nonpenalty grade of W will be assigned after the end of the "program-change" period but prior to the end of the 10th week of classes. However, prior approval of the Center for Academic

Advisement and Student Success (CAASS) is required for a) students whose programs require an adviser's approval prior to registration, and b) students who wish to withdraw from Academic Foundations courses (e.g., English 1010).

- Unofficial withdrawals Students who unofficially withdraw from a course-i.e., attended at least one class session and stop attending during the semester-will be assigned a WU (unofficial withdrawal, equivalent to F) by the instructor. Because the WU grade is a penalty grade, students should consult with an academic adviser prior to taking actions that would result in these grades. A *WN grade will be assigned to students who are listed on the official registration roster but did not attend even a single class.


## Withdrawals in relation to financial aid

Students receiving financial aid assistance who apply for withdrawal from a course should discuss with a financial aid counselor the effect of such a withdrawal on financial aid eligibility for that semester and for future semesters prior to taking any action on their withdrawal. Students should give themselves sufficient time to meet with a financial aid adviser to take such action so as not to obtain any additional financial liability with the college due to improper planning. It is the students' responsibility to inform themselves of their options and to act within established college, state and federal guidelines.

## Veterans' Registration

Each term, before or during registration, veterans claiming benefits must complete application forms in the Veteran and Military Programs Office, 1407 James Hall.

## Taking a Course at Another College

Brooklyn College students who want to take one or more courses at a non-CUNY college must apply for permission in advance in the Office of the Registrar on the third floor of the West Quad Center. Students who want to take one or more courses at another CUNY college must submit an e-permit on the CUNY website.

## E-permit Policies

Undergraduate first-year students in the Macaulay, CUNY BA, and ROTC programs can take e-permit courses in their first semester and throughout their college careers. Other
undergraduate students can start taking e-permit courses in their second semester and can continue thereafter. There are no restrictions on the number of courses that students can take on e-permit beyond residency requirements or on the number of colleges to which they can apply for courses on e-permit. Undergraduate students must have at least a 2.00 GPA to qualify for an outgoing ePermit.

## Admission of Seniors to Graduate Courses

Matriculated undergraduate seniors (achievement of 90 or more undergraduate units) who have earned a GPA of 3.00 or higher may apply for permission to take graduate classes. Permission to do so is obtained from the academic department in which the course of interest is being offered. Graduate courses may be applied as undergraduate or graduate credit. How the credit will be applied must be specified when departmental permission is obtained. Tuition will be different for the two options (see the chapter "Tuition and Fees").

## Auditing a Course

Anyone may audit a course provided there is room in the class. Auditing allows interested students to increase their knowledge and proficiency by attending courses without receiving either a grade or credit toward a degree. The amount of student participation in an audited course may vary, at the discretion of the instructor, from complete fulfillment of all course requirements to classroom attendance alone.

Auditing requires permission of the instructor, permission of the department chair, and official registration. The Auditing Form is available online through the Office of the Registrar or in person at the Enrollment Services Center. Unofficial auditing (attending a course without enrolling) is not permitted. Audit registration takes place during the first week of classes of any given semester from the first day of classes until the last day to add a course, as listed in the academic calendar. Senior citizens who wish to audit undergraduate classes require all the above permissions. They must also present proof of their senior citizen status. Acceptable forms of proof are listed on the form. See the chapter "Tuition and Fees" in this Bulletin for information regarding auditing costs and fees.

## Pass-Fail Option

Often students hesitate to take courses in new areas because they have no way to gauge their capabilities in such areas. The pass-fail option is designed to encourage students to explore areas of inherent interest and thus achieve greater breadth of view.

To be eligible to take courses for a pass or fail grade, students must be sophomores, juniors or seniors who have declared their major, have a grade point average (GPA) of 2.00 or higher, and be in degree status for the baccalaureate. A pass grade is not counted in a student's GPA; a fail grade is counted in the GPA. A GPA of 2.00 or higher is not required for the pass-fail option in the physical education activities referred to below.

A total of 10 courses may be taken under the option. Students may take a maximum of six courses that are not kinesiology activities courses, with the exceptions noted below.

All students, except majors in exercise science, may also take four kinesiology courses from Kinesiology 1101 to 1131.

The following courses may not be taken for a pass or fail grade:

- College-wide requirements, including Pathways courses taken to fulfill Pathways general education requirements. Students not opting into Pathways should consult the 2012-13 Bulletin regarding pass/fail policy.
- All courses in the student's major.
- Courses outside the major department that are required to complete the major.
- Honors courses.

In the fall and spring semesters, students may take for a grade of pass or fail no more than two courses each term as follows: one physical education activity course and one course chosen within the other limitations noted above. During summer sessions, students may apply to take kinesiology courses from Kinesiology 1101 to 1131 for a pass or fail grade.

The registration procedure for taking a course for a grade of pass or fail is the same as for any other course; application to elect the pass-fail option is made through the BC WebCentral portal after a student registers. The specific deadlines for each semester are posted on the academic calendar on the college website.

A student who takes a course under the pass-fail option must complete the course under that option. A pass grade may not be changed to another grade. All requirements of a course taken for a pass or fail grade, including term papers and examinations, must be completed satisfactorily. Honors projects may be submitted. However, courses completed with a pass grade are not counted in computing a student's eligibility for the Dean's Honor List. A student who receives a pass grade in a department that subsequently becomes the student's major department may apply to the Center for Academic Advisement and Student Success for permission to apply the course toward requirements for a degree.

## Course Load

Full-time enrollment is 12 to 18 units. For courses designated as ESL, contact hours may be counted instead of credits in the determination of course load and tuition.

Limitations are as follows:

- Entering first-year students may take a maximum of 16 credits.
- Upper first-year students who have at least a B average (3.00 GPA) may take a maximum of 17 credits; eligible upper first-year students may petition a CAASS adviser to take 18 credits.
- All students who have at least 27 credits and who have at least a 2.00 GPA for the preceding term may take a maximum of 18 credits. Students with a GPA of at least 3.00 may petition a CAASS adviser to take 19 credits; no student may take 19 credits without permission from a CAASS adviser.
- Students whose cumulative GPA is below 2.00 are subject to the probation policy; they may not take more than six credits and must see an academic adviser.

Students should bear in mind that typically at least three hours of work per week (classwork plus homework) are assumed for every credit. Thus, a student carrying 15 credits should plan on 45 hours per week for class, homework and study time.

Students who are employed or have other obligations or responsibilities that substantially restrict their study time are advised to reduce their workloads as follows:

- Employed 10 to 15 hours: reduce workload by three credits.
- Employed 16 to 25 hours: reduce workload by four to six credits.
- Employed 26 to 35 hours: reduce workload by seven to nine credits.

Permission to carry more than the permitted number of credits may be given to superior students on application to the Center for Academic Advisement and Student Success. Students should apply at least one week before registration.

Students who receive Social Security benefits and recipients of certain scholarships and financial aid are responsible for finding out the size of program they must carry each term and the academic standards they must meet to be eligible for these programs.

## Credits Required for Classification

A student's academic level is determined by the number of credits earned, as follows:

- Lower freshman: 0-14.9 credits
- Upper freshman: 15.0-29.9 credits
- Lower sophomore: 30.0-44.9 credits
- Upper sophomore: 45.0-59.9 credits
- Lower junior: 60.0-74.9 credits
- Upper junior: 75.0-89.9 credits
- Lower senior: 90.0-104.9 credits
- Upper senior: 105.0 or more credits


## Attendance

Class attendance may be recorded each session. Students are expected to attend all scheduled sessions of every class for which they register. Students late for class may be excluded from the room.

Current CUNY regulations require that registered students who do not attend a single class from the beginning of classes until the end of the add period are assigned an administrative nonpenalty withdrawal grade of *WN.

An instructor may consider attendance and class participation in determining the term grade. First-year students absent from a course for a number of times equivalent to two full weeks of class meetings may be denied credit for the course.

Instructors may e-mail students in advance to inform them of class cancellations or lateness. Please ensure that your e-mail address is accurate in CUNYfirst and the BC WebCentral Portal. When an instructor is late, students should remain in class for 10 minutes before consulting the department office for instructions. When an instructor is absent and no substitute is provided, the department informs the class.

Students are responsible for taking examinations as scheduled and for submitting assignments on time.

## Final Examinations

Unless the Faculty Council specifically exempts a course, a final examination is required in the 15th week of every fall and spring course, on the final day of every winter session, and on one of the last two days of every summer session. A student who has done A-level work in an advanced course may be excused from the final examination at the discretion of the instructor. The Final Examination Schedule is posted online each semester.

## Second Final Examination for Graduating Seniors

A student who is a candidate for graduation may receive authorization from CAASS, with the concurrent approval of the instructor and/or the department chair, to take a re-examination in a course to raise the final grade. The course must be one taken in the last term and must be essential to graduation requirements.

## Grades

By the end of the first week of classes, instructors are expected to provide students with a syllabus that makes grading procedures clear to students. Instructors should return all papers and tests, except for final examinations, after grading. Students should be informed of where and when the instructor is available to discuss course work and grades. Students should raise questions promptly about test marks or grades on papers.

## Final grades

Students receive a final letter grade in every course. The grade submitted by the instructor and entered on the student's transcript stands unless there is good reason to change it. A change is made if an error was made in entering the grade or if the instructor agreed in advance to late completion of work. When a grade has been assigned and recorded, the instructor may not raise the grade by accepting additional work except when the grade INC has been assigned. If a student elects to appeal a grade, the appeal should be submitted as soon as possible after the grade is assigned. See "Protest of final grade," below. Grades cannot be changed once a student has graduated and his or her academic record is closed.

At the end of each term, grades are available through CUNYfirst. Students should report immediately a discrepancy between a grade received from an instructor and a grade on the transcript to the Office of the Registrar.

## Grading system

The following grading system is used:

| - $A+, A, A-$ | 90-100 percent |
| :---: | :---: |
| - B+, B, B- | 80-89 percent |
| - C+, C, C- | 70-79 percent |
| - D+, D, D- | 60-69 percent (lowest passing grade) |
| - F | Failure |
| - AUD | Auditor |
| - P | Pass (applicable only in the pass-fail option) |
| - CR | Credit earned; no grade assigned |
| - FIN | Failure because incomplete work is not completed |
| - INC | Term's work incomplete |
| - NC | No credit earned |
| - PEN | Grade pending (final grade requires further evaluation) |
| - S | Satisfactory |
| - U | Unsatisfactory |
| - W | Withdrew without penalty or prejudice |
| - WA | Administrative withdrawal (non-punitive grade for failure to satisfy immunization requirements; no academic penalty) |
| - WD | Withdrew Drop (dropped after FA certification date during the program adjustment period.) |
|  | Student attended at least one class session. |
| - WF | Withdrew failing, counts as failure |
| - WN | Never attended, non-punitive grade |
| - WU | Withdrew unofficially (student attended at least one class session) |

For grades A through D, a plus sign indicates a stronger performance and a minus sign indicates a weaker performance within the range of the letter. If a failing grade is preceded by a pound sign (for example, \#F, \#FIN, \#WF), see the "F-grade replacement" section below.

## F-grade Replacement Policy

Undergraduate students who receive a failing grade in a Brooklyn College course and who retake that course at Brooklyn College and earn a grade of C- or higher may have the failing grade deleted from the calculation of the GPA and
replaced by the passing grade. The original failing grade will remain on the transcript, but a special note will indicate that it is not used in the computation of the GPA. The F-grade Replacement Policy does not pertain to an F resulting from an academic integrity violation.

The number of failing credits that can be replaced in calculating the GPA shall be limited to a total of 16 for the duration of the student's undergraduate career in any of the institutions of the City University of New York.

A failing grade may not be partially deleted from the calculation of the GPA. For example, a student who has used 14 credits of the 16-credit total may only replace a failed two-credit course.

In order for the grade of C- or higher to replace a failing grade in the calculation of the GPA, students must repeat the course at the same college where they originally received the failing grade.

## INC grade: Unresolved grades and absence from final examination

A grade of Incomplete (INC) may be given at the discretion of the instructor when a student 1) has satisfactorily completed most, but not all, course requirements, and 2) provides to the instructor evidence documenting the extenuating circumstances that prevent the completion of course requirements by the end of the semester. The instructor may change the grade of INC to another grade when the work has been completed.

An INC grade may also be given at the discretion of the instructor when a student 1) has been fulfilling course requirements but is absent from the final examination, and 2) provides to the instructor evidence documenting the extenuating circumstances that prevent the taking of the scheduled final examination. The instructor may change the grade of INC to another grade after the final exam has been taken.

Deadlines for resolution of unresolved grades appear in the academic calendar posted each term. Students who do not meet the deadlines are assigned a grade of FIN.

## Appeal of final grade

In the academic community, grades are a measure of student achievement toward fulfillment of course objectives. The responsibility for assessing student achievement and assigning grades rests with the faculty, and, except for unusual circumstances, the course grade given is final.

The grade appeals system affords recourse to a student who has evidence or believes that evidence exists to show that an inappropriate grade has been assigned as a result of prejudice, caprice or other improper conditions such as mechanical error or assignment of a grade inconsistent with those assigned other students. A student who believes he or she has reason to challenge a penalty grade assigned for an alleged violation of academic integrity shall use the Academic Integrity Appeal procedures.

## Option One: Informal appeal

Students who believe that they have received an unfair or inappropriate grade are required to meet with the instructor of record to attempt to resolve the matter informally. The student must explain the grounds for the grade appeal to the instructor and attempt to understand the instructor's reasons for assigning the grade. The purpose of the meeting is to reach a mutual understanding of the instructor's rationale for the grade and to resolve differences in an informal and cooperative manner.

## Option Two: Formal appeal

If the matter is not resolved, the student has the right to appeal the grade to the department chair or designee. When the department chair or designee receives a formal grade appeal following the student's informal appeal to the instructor, the chair or designee may attempt mediation. Upon failure of mediation, the chair or designee shall convene a Grade Appeals Committee to investigate the appeal and to render a decision.

To ensure that all departmental committees conform to the principles of due process, the following procedures apply:

1. The student must submit a completed form to show that he or she has met with the instructor and that informal resolution failed.
2. The student must submit all relevant documentation to show that he or she has met the course requirements, including, but not limited to, a) course syllabus, b) all documented grades (graded tests, papers, projects, etc.),
and c) a list of all other grades that the student knows he or she received in the course and any other factors that may have influenced the grade.
3. The Grade Appeals Committee has the authority to screen out appeals that do not set forth the aforementioned ground for appeal. The convener will explain any such finding in writing to the student, the faculty member and the department chair.
4. The department chair will notify the instructor that a formal grade appeal has been initiated, and the instructor shall provide the grade distribution breakdown for the student and any other relevant information.
5. During the regular semester, the Grade Appeals Committee will review the material presented and will advise the student and instructor of its decision, in writing, within 30 calendar days from the date the student submitted a complete formal grade appeal with all necessary documentation. If the appeal is submitted after May 5, the Grade Appeals Committee must respond to the student by the following September 30.

## Time limits for appeal

A student who wishes to file a formal grade appeal must submit a petition and supporting documentation to the department chair within 30 calendar days of the beginning of the full semester following the one in which the contested grade was received. Spring and summer session courses must be appealed during the following fall semester; fall and January intersession courses must be appealed during the following spring semester. Appeals that are not initiated by these deadlines will not be considered.

## Appeal of Departmental Grade Appeals Committee's decision

A student who wishes to appeal the decision of the Departmental Grade Appeals Committee shall submit the appeal to the Faculty Council Committee on Course and Standing through CAASS. The decision of the Committee on Course and Standing will be final.

## Record-keeping and retention

The chair of the department should maintain the student grade appeal files in a designated location. Each member of the committee may keep his or her own files while the matter is pending. After a decision has been issued, the files should be merged into one official file, with duplicate documents shredded.

The change of grade records shall be retained by the department for a minimum of six years after the decision is rendered by the department, or if appealed, after the decision is rendered by the Committee on Course and Standing. The grade appeal procedure and petition may be accessed in the BC WebCentral portal.

## Grade point average (GPA)

To demonstrate satisfactory academic progress, Brooklyn College students must maintain at least a 2.00 cumulative grade point average (GPA). Students may calculate their GPA at any time by using the GPA calculator in the BC WebCentral portal.

## How the GPA is calculated

Step 1: Based on the following values, the number of credits in each course is multiplied by the numerical value of the grade in each course. The sum of those equals the total number earned.

| - A+ and A | = | 4.00 |
| :---: | :---: | :---: |
| - A- | = | 3.70 |
| - B+ | = | 3.30 |
| - B | = | 3.00 |
| - B- | = | 2.70 |
| - $\mathrm{C}+$ | = | 2.30 |
| - C | = | 2.00 |
| - C- | = | 1.70 |
| - D+ | = | 1.30 |
| - D | = | 1.00 |
| - D- | = | 0.70 |
| - F, FIN, WF | = | 0.00 |

Step 2: The total number of credits is determined as follows: It includes credits for courses passed as well as failed but does not include the final grade of W or the unresolved grade of INC. Once resolved, final letter grades that replace the INC are included in the GPA calculation. To calculate the effect of repeating a course, see the "Repeating a course" section in this chapter.

Step 3: To calculate the GPA, the total number earned (sum from step 1) is divided by the total number of credits taken (sum from step 2). For example, the cumulative GPA of a student who has completed 55 credits with the letter grades indicated below calculates as follows:

| Grade | GPA Value | Credits Taken | Total |
| :--- | :---: | :---: | ---: |
| A+ | 4.00 | 3 | 12.0 |
| A | 4.00 | 12 | 48.0 |
| B+ | 3.30 | 10 | 33.0 |
| B-- | 2.70 | 5 | 13.5 |
| C | 2.00 | 17 | 34.0 |
| D-- | .70 | 3 | 2.1 |
| WF | 0.00 | 5 | 0.0 |
| Total |  | 55 | 142.6 |
| GPA | 2.592 |  |  |

## Academic Integrity

The faculty and administration support an environment free from cheating and plagiarism. Each student is responsible for being aware of what constitutes cheating and plagiarism and for avoiding both. The CUNY website provides detailed information. If a faculty member suspects a violation of academic integrity and, upon investigation, confirms that violation, or if the student admits the violation, the faculty member must report the violation.

## Retention Standards

## Satisfactory academic progress and the grade point average

To demonstrate satisfactory academic progress, students must maintain at least a 2.00 cumulative grade point average (GPA) based only upon credits attempted at Brooklyn College. Students experiencing difficulty with their course work should see an adviser in their major department and a counselor in the Center for Academic Advisement and Student Success for assistance and counseling. Students whose cumulative GPA falls below 2.00 are subject to probation and dismissal from Brooklyn College.

## Repeating a course

When a student repeats a course or its equivalent and the student received a grade of D- or higher the first time he or she completed the course, the student does not receive credit for the repetition. Brooklyn College does not compute the grade received for the repeated course, whether a passing grade, F, FIN or WF, into the student's cumulative GPA.
There are instances in which a student must successfully complete a sequence of two courses in order to receive credit for the first course. When Brooklyn College withholds credit for graduation because the student has completed
only the first course, the grade for that course is not counted in the cumulative GPA.

Some departments limit the number of courses or credits in a particular discipline that a student may apply toward the baccalaureate degree-for example, in writing courses in the Department of English and physical education courses for students not majoring in exercise science. If a student completes courses in excess of the limitations, Brooklyn College records the credits and grades earned on the transcript with a symbol. The symbol indicates their inapplicability to the fulfillment of the baccalaureate degree requirements, and they are not included in the computation of the GPA.

## Academic standing, probation, dismissal and reinstatement

A student's academic standing is reviewed at the end of each semester. Students whose cumulative GPA falls below 2.00 are subject to dismissal from the college, based upon the following guidelines:

## Academic probation

Students are placed on academic probation if:

1. Their cumulative GPA falls below 2.00 ; or
2. They have two consecutive academic semesters in which their semester GPA falls below 2.00 regardless of their cumulative GPA.

Students placed on academic probation will receive a letter from the Center for Academic Advisement and Student Success (CAASS) informing them of their academic standing and blocked registration and notifying them of the necessary steps they must take in order to remove themselves from academic probation.

Students placed on academic probation for condition 1 (cumulative GPA falls below 2.00) will remain on probation for three successive semesters (including the semester in which they are originally placed on probation). During probation, students must maintain satisfactory academic progress to restore their cumulative GPA to 2.00 , which includes earning a GPA of at least 2.30 while on probation. Failure to maintain satisfactory academic progress during the probationary period will result in dismissal.

Students placed on academic probation for condition 2 (they have two consecutive academic semesters with semester GPAs below 2.00 regardless of their cumulative GPA) will
remain on probation until they maintain a minimum GPA of 2.00 for two successive semesters.

Students who have been placed on academic probation and who make satisfactory progress will continue to maintain their academic standing with the college and their concurrent eligibility for financial aid.

## Dismissal

Students who do not maintain satisfactory progress toward restoring their cumulative GPA to 2.00 during the academic probation period (described above) will receive a letter from the registrar advising them of their dismissal from Brooklyn College. Students dismissed from the college for unsatisfactory academic progress cannot apply for reinstatement for at least one full semester (excluding summer session), and when they apply for reinstatement, they must provide evidence that they are capable of performing at the level required to prevent further dismissals. Brooklyn College encourages students to meet with a CAASS counselor to review their options once dismissed and the evidence they will need to provide for reinstatement.

Students in the SEEK program who do not meet the program's academic standards will be placed on academic probation. SEEK students on probation must meet regularly with their SEEK counselors, SEEK academic mentors, and SEEK tutors. Students who do not improve their academic standing and who do not meet the program's requirements while on probation will be dismissed from the SEEK program and/or Brooklyn College.

## Reinstatement on academic probation

In accordance with CUNY policy, a student dismissed for unsatisfactory academic performance may apply for readmission on academic probation no sooner than two terms, excluding summer session and January intersession, following dismissal. Brooklyn College rarely considers readmission, however, until dismissed students have remained absent from college for a full year. Although there is no guarantee of readmission, the student may be admitted on probation based upon the following reinstatement guidelines.

After remaining out of Brooklyn College for at least one full term, students who have been academically dismissed may apply for reinstatement by presenting evidence that they are capable of performing at the level required to prevent a second dismissal. Once reinstated, students must apply for
readmission to Brooklyn College and adhere to the general guidelines for reinstated students as follows:

1. Following reinstatement, students formerly dismissed from Brooklyn College will remain on academic probation until they complete 24 credits with a cumulative GPA of 2.00 and will be subject to final academic dismissal if they fail to meet the requirements for removal from academic probation as listed above.
2. Once removed from academic probation, they will be subject to the same conditions for subsequent academic probation and dismissal as students not previously academically dismissed.

## Reinstatement after two or more years: Brooklyn College Fresh Start

The following reinstated students may apply for the Brooklyn College Fresh Start program, which includes having none of their previous Brooklyn College course work counted toward graduation and the computation of their grade-point standing: - those who have completed an associate's degree with a minimum GPA of 2.50 at a community college;

- those who have acquired 60 credits of course work at another accredited institution of higher education with a minimum GPA of 2.50 ; and
- those who have not attended a college or university for two or more years.

All students seeking admission to the Fresh Start program must first complete at least 12 Brooklyn College credits on academic probation with a GPA of 2.00 or higher after readmission. The calculation of the GPA after readmission begins with the semester of readmission. Students in the Fresh Start program will remain on academic probation until they complete 24 credits with a cumulative GPA of 2.00 and will be subject to final academic dismissal if they fail to meet the requirements for removal from academic probation as listed above. Students who wish to apply for the Brooklyn College Fresh Start program must meet with a counselor in the Center for Academic Advisement and Student Success.

Part- or full-time students may take advantage of the Brooklyn College Fresh Start rule. If a student has completed a degree and re-enrolls, the Fresh Start does not apply to Brooklyn College courses credited toward the degree already completed. Moreover, students may use the Fresh Start option only once, and they are subject to the same conditions for academic probation and dismissal as students not enrolled in the program.

## Status Change Requirements

Students with nondegree-bearing status may apply for degree-bearing status through the Office of Undergraduate Admissions on the basis of having achieved one of the following:

- a GPA of 2.50 for the first 14 credits earned at Brooklyn College in a well-balanced academic program of liberal arts and Pathways courses.
- a GPA of 2.00 for 14.5 or more credits earned at Brooklyn College in a well-balanced academic program of liberal arts and Pathways courses.

Students transferring as nondegree students from other colleges will not have their credits from that institution evaluated until they have been accepted by Brooklyn College as matriculated students. Applicants must provide official records of high school and previous college attendance as well as syllabi and course descriptions for courses taken at other colleges. Applications and deadlines for status change can be found on the Brooklyn College website.

- All students must meet the CUNY Proficiency requirements in English and mathematics before registering for classes. Additional information regarding these examinations may be found in the "Academic Foundations requirements" section of this chapter.


## Leave of Absence

A student who plans to miss two or more consecutive semesters, but less than two years, of school may apply for a Leave of Absence. A Leave of Absence through the BC WebCentral portal. The application should be submitted prior to the beginning of the term for which the student wishes to take leave.

A processed Leave of Absence will require the student to be out of school for at least two semesters. To return from a leave of absence, simply submit a quest via the BC WebCentral portal.

Students who submit a Leave of Absence application and return before the two-year deadline will be able to, upon their return, continue to fulfill the requirements that were in effect while they were in residence and do not need to readmit to the school.

## Readmission

After two or more terms of absence, students who want to be readmitted to the college must apply prior to the deadlines. Students can be readmitted only into the same category in which they were initially enrolled. If a student earned an undergraduate degree and wishes to return to the college in a new category, such as second degree or nondegree, he or she must submit a new application through the Office of Undergraduate Admissions. Students must have copies of their records sent directly to the Transfer Evaluations Office by any institution attended since they last attended Brooklyn College. For transfer credit evaluation policies and procedures, see the "Admission" section of this Bulletin.

Students must meet the requirements for degrees in effect at the time of readmission. For exceptions to this policy, see "Degree requirements" in this chapter.

## Scholastic Honors

Students may earn honors recognition for scholastic achievement. Honors credit may be earned in several ways at Brooklyn College: through membership in the Honors Academy and taking Honors-designated courses (see the section "Honors Academy" in this Bulletin), by completing honors work in a departmental major, and by doing independent study projects in regular courses.

## Honors credit for regular courses

Honors credit is earned by doing substantial supplementary work in an introductory or advanced course in the regular undergraduate curriculum. Students interested in honors credit must arrange with the instructor at the beginning of the semester to do an honors project in that course.

To apply to do an honors project, students should discuss thoroughly the nature of work to be done with their instructor.

At the end of the semester, the instructor submits the honors grade through an application on the BC WebCentral portal. Honors credit will be allowed when the final grade in the course is $\mathrm{A}+, \mathrm{A}, \mathrm{B}+, \mathrm{B}$, or P . Honors credit is indicated on transcripts in the form of an official transcript note.

## Dean's Honor Lists

Students are nominated each year for selection to the Dean's Honor's List.

There are two Dean's Honor Lists: one for full-time students and one for part-time students. Eligibility criteria for both are as follows: A student must achieve a 3.50 GPA excluding courses assigned a grade of $P$, credits granted for life experience and summer session courses; cannot have grades of F, FIN, NC, or WF, or grades with \# or * in front of them; cannot have a grade of INC unless these grades are resolved in the semester immediately following and the student becomes eligible, in which case the student will be named to the list retroactively; and must be a matriculated student seeking a Brooklyn College degree (nondegree students are not eligible). Students cease to be eligible after the semester in which 135 credits have been completed.

Additional criteria for each list are as follows: Full-time students who are eligible for the Dean's Honor List must have achieved at least 12 completed credits (excluding courses taken for a grade of pass or fail) in the semester for which they are being considered. Students who are eligible for the Dean's Honor List, Part-time, will have been parttime students for a full academic year beginning with the fall semester-i.e., registered for less than 12 total credits (excluding courses taken for a grade of pass or fail) in each of the two consecutive semesters. Students must have achieved a total of at least 15 credits (excluding courses taken for a grade of pass or fail) over the two consecutive semesters.

## Student Honor Societies

National honor societies with chapters on the Brooklyn College campus are Alpha Epsilon Rho (radio and television), Upsilon Pi Epsilon (computer science), Kappa Delta Pi (education), Pi Delta Phi (French), Pi Mu Epsilon (mathematics), Psi Chi (psychology), Alpha Kappa Delta (sociology), Sigma Delta Pi (Spanish), Sigma Alpha Eta (speech) and Golden Key International Honour Society (all disciplines).

## Alpha Sigma Lambda

The Brooklyn College Chapter of Alpha Sigma Lambda, Zeta of New York, is a member of the national honor society for evening colleges. Candidates for undergraduate degrees are elected to membership on the basis of scholarship, leadership and integrity.

## Phi Beta Kappa

The Brooklyn College Chapter of Phi Beta Kappa, Rho of New York, is a constituent member of the Phi Beta Kappa society, whose purpose is to recognize and encourage scholarship and cultural interests. Members are elected primarily on the basis of broad cultural interest, scholarly achievement and good character. Only those students whose work has been definitely liberal in character and purpose are considered for election as members. Grades earned in applied or professional courses are not considered in determining eligibility for election to membership.

Weight is given to the breadth of the course program as well as to grades earned. Weight is also given to college-level foreign language study. Candidates are expected to show evidence of elective study beyond the general education requirements and outside their major in at least two of the three broad areas of the humanities, the social sciences, and the sciences. The Committee on Admissions considers all eligible students; candidates do not apply to Phi Beta Kappa.

## Honors awarded at graduation

At graduation there are two honors designations: honors for general excellence and honors for excellence in advanced study centered in a department.

## Honors for general excellence

A degree summa cum laude is granted for a GPA of at least 3.90. A degree magna cum laude is granted for a GPA of 3.75 or higher, but less than 3.90. A degree cum laude is granted for a GPA of 3.50 or higher, but less than 3.75. For transfer students, the GPA for honors is computed on the basis of the complete college record, including all transfer credits, as well as separately on the basis of grades earned in courses taken at Brooklyn College, and those courses are transferred in. A minimum GPA of 3.50 must be obtained in each to be considered for honors. The required GPA for graduation with honors for general excellence must be achieved in both cases.

## Honors for excellence in the major

A degree with honors for excellence in the major is granted for a GPA of at least 3.50 in all advanced work in the major and for satisfactory completion of at least three credits in honors work at an advanced-course level or its equivalent as determined by the individual department or program. Brooklyn College encourages students to begin making plans to graduate with departmental honors late in their
sophomore year or early in their junior year. Students should begin making these plans by talking with a faculty member in their major department, with the department chair or with the department's honors committee chair. Some departments publish an honors brochure explaining requirements for graduating with honors. Departmental honors courses, usually numbered 5000 through 5999, are open primarily to juniors and seniors. Qualified upper sophomores may be admitted with the written permission of the department chair. The chair submits the departmental honors through an application of the BC WebCentral portal.

## Application for Graduation

Students should file for graduation after completing 90 credits via Student Self Service on CUNYfirst. Students who expect to complete all degree requirements in the summer session should file for graduation by the preceding March 15. Students who expect to complete all degree requirements in the fall semester or winter intersession should file for graduation by the preceding September 15 . Students who expect to complete all degree requirements in the spring semester should file for graduation by the preceding February 15. Applications on file by the proper date will be processed in time for graduation. Failure to meet this deadline may delay graduation and may impact the student's ability to participate in the commencement ceremony. Students who apply for graduation in one semester and do not graduate must reapply for graduation for the semester in which they expect to graduate via CUNYfirst. All work must be completed by the end of the term in which a student expects to graduate. Degrees are awarded to students in the semester in which they have completed all degree requirements provided that they have fulfilled all financial obligations to Brooklyn College.

## Student Rights and College and University Rules

As a public institution of higher education that is part of the City University of New York, the college and its students, faculty and staff are required to comply with federal, state and local laws, rules and regulations as well as university and college policies that seek to enforce them. Those currently in effect are summarized below with links to relevant websites for the complete text of each, subject to change by the appropriate authorities.

## Policies on Acceptable Standards of Behavior

## Maintenance of public order

The tradition of the university as a sanctuary of academic freedom and center of informed discussion is long-honored and must be guarded vigilantly. The principle of intellectual freedom, rights of professors to teach and engage in scholarly research, and rights of students to learn and express their views free from external pressures and interference are deeply held values of institutions of higher education, including Brooklyn College. CUNY's regulations to secure these benefits and ensure the academic freedom for all in this educational community and the penalties for violations may be found on the Brooklyn College website.

## Notice of Nondiscrimination

It is the policy of the City University of New York-applicable to all colleges and units-to recruit, employ, retain, promote, and provide benefits to employees and to admit and provide services for students without discriminating on the basis of actual or perceived race, color, creed, national origin, ethnicity, ancestry, religion, age, sex, sexual orientation, gender, gender identity, marital status, partnership status, disability, genetic information, alienage, citizenship, military or veteran status, pregnancy, status as a victim of domestic violence/stalking/ sex offenses, unemployment status, caregiver or familial status, prior record of arrest or conviction, or any other legally prohibited basis in accordance with federal, state and city laws. This policy is set forth in CUNY's Policy on Equal Opportunity and Non-Discrimination.

CUNY's Policy on Sexual Misconduct prohibits all forms of sexual misconduct, including sexual harassment, gender harassment, and sexual violence. Inquiries concerning sexual misconduct or sex discrimination may be made to the individuals specified in that policy or may be referred to the U.S. Department of Education, Office for Civil Rights.

It is also the university's policy to provide reasonable accommodations and academic adjustments, when appropriate, to individuals with disabilities, individuals observing religious practices, individuals who have pregnancy or childbirth-related medical conditions, and victims of domestic violence/stalking/sex offenses. The process for addressing these issues is set forth in CUNY's Procedures for Implementing Reasonable Accommodations and Academic Adjustments.

Retaliation for reporting or opposing discrimination, cooperating with an investigation of a discrimination complaint, or requesting an accommodation or academic adjustment is also prohibited.

For more detailed information, please refer to the CUNY Policy on Equal Opportunity and Non-Discrimination, the CUNY Policy on Sexual Misconduct, and the CUNY Procedures on Reasonable Accommodations and Academic Adjustments.

The following people have been designated at Brooklyn College to handle inquiries and complaints relating to CUNY's Policy on Equal Opportunity and Non-Discrimination and Policy on Sexual Misconduct and to ensure compliance with CUNY's Procedures for Implementing Reasonable Accommodations and Academic Adjustments:
Ivana Bologna, Esq.
Title IX Coordinator
2147 Boylan Hall
718.951.5000, ext. 6468

Anthony Brown, Esq.
Chief Diversity Officer and Special Assistant to the President 2147 Boylan Hall
718.951.4128

The following federal, state, and local agencies enforce laws against discrimination:

- New York City Commission on Human Rights
- New York State Division on Human Rights
- U.S. Equal Employment Opportunity Commission
- United States Department of Justice
- United States Department of Education, Office for Civil Rights


## Workplace violence

The City University of New York Workplace Violence Policy and Procedures prohibits violence in the workplace. Violence, threats of violence, intimidation, harassment, coercion and other threatening behavior toward people or property will not be tolerated. Complaints involving workplace violence will be given the serious attention they deserve. Students are not directly covered by this policy, but they should contact the Office of Campus and Community Safety Services to report concerns about workplace violence. The full text of the policy is available there and on the CUNY website.

## Sexual and Gender-Based Harassment and Violence

Every member of the Brooklyn College community, including students, employees, and visitors, deserves the opportunity to live, learn, and work free from sexual harassment, genderbased harassment, and sexual violence.

Sexual harassment is unwelcome conduct of a sexual nature -such as unwelcome advances and requests for sexual favors. Gender-based harassment is unwelcome conduct of a nonsexual nature based on an individual's actual or perceived gender, including conduct based on gender identity, gender expression, or nonconformity with gender stereotypes. Sexual violence is rape or attempted rape, forcible touching, or sexual abuse.

Brooklyn College encourages individuals who have experienced sexual harassment, gender-based harassment, or sexual violence to report the incident(s) to campus authorities, even if they have reported it to outside law enforcement and regardless of whether the incident(s) occurred on campus. Investigations of sexual harassment are conducted fairly, promptly, thoroughly, and as confidently as possible under the circumstances. After the investigation, if a complaint is found to be true, appropriate action can include formal disciplinary action, including termination of employment, and suspension or expulsion of students. The college may also be able to provide victims of sexual harassment with special accommodations to help them make it through their class or work assignments.

If you were recently assaulted:

- If the incident occurred on campus, call Public Safety or 911.
- If the incident occurred off campus, call 911 or go to the local NYPD precinct. Contacting the police does not require you to file charges.
- Seek medical attention as soon as possible. Campus Public Safety or the police can help you get medical care, or you can go on your own (or with a friend) to an emergency room.
- We also encourage you to contact the Brooklyn College Title IX Coordinator.


## Contact

Anthony Brown
Chief Diversity Officer
P: 718.951.5000, ext. 3350
Ivana Bologna
Title IX Coordinator
P: 718.951.5000, ext. 6468
Ron Jackson
Vice President for Student Affairs / Dean of Students and Chief Student Affairs Officer
P: 718.951.5000, ext. 5352
Donald Wenz
Public Safety Director
P: 718.951.5511 or 5444

## Sexual and interpersonal violence prevention and response training

As part of New York State's Enough is Enough statute, all New York State colleges must provide ongoing education and training about sexual misconduct to their employees and students. To be in full compliance with this law, CUNY implemented the Sexual and Interpersonal Violence Prevention and Response Course (SPARC). This training also includes domestic violence, dating violence, stalking, sexual harassment, gender-based harassment, and sexual violence. We thank you in advance for your cooperation.

## For employees

Employee Sexual and Interpersonal Violence Prevention and Response Course (ESPARC) provided by the City University of New York. New York State Law requires employees to complete this training by August 15, 2021, and then at least annually thereafter. The course is provided via CUNY Blackboard. Once you log into Blackboard, you will find Brooklyn College ESPARC 2019-20 under the "My Organization" section. Blackboard log-in instructions (pdf)

- If you have questions about the course content, e-mail Ivana Bologna, Title IX Coordinator (Interim).
- For questions about your registration for this course, e-mail the Office of Human Resource Services.


## For students

SPARC: Sexual and Interpersonal Violence Prevention and Response Course Online Training. In compliance with the Campus SaVE Act and New York State Education Law Section 129B (Enough is Enough), CUNY requires all freshmen, transfer students, club/organization officers, study abroad participants, student athletes, and residential life occupants to take the training. Student athletes must complete SPARC annually to be eligible to play. The course is provided via CUNY Blackboard. Once you log into Blackboard, you will find Brooklyn College ESPARC 2018-19 under the "My Organization" section.

- Blackboard log-in instructions (pdf)
- SPARC instructions (pdf)

Failure to complete the course will result in a hold on your account, impacting your ability to register and maintain your classes as well as conduct college business until the course is completed.

- If you believe that you have already completed SPARC for the academic year but had a hold placed on your account, e-mail Ivana Bologna, Title IX Coordinator.
- If you are experiencing technical issues and require assistance accessing or viewing SPARC, e-mail the Division of Student Affairs.


## Hate crimes

All members of the Brooklyn College community are subject to New York State law on hate crimes. The law applies to criminal acts involving violence, intimidation and destruction of property based upon bias and prejudice. In such crimes, victims are intentionally selected, in whole or in part, because of their race, color, national origin, ancestry, gender, religion, religious practice, age, disability or sexual orientation. Information on the law and examples of the hate crimes that are prohibited may be found online under the "Campus Info" tab on the BC WebCentral portal.

## Smoke-free policy

Effective as of September 4, 2012, the use of tobacco is prohibited on all grounds and facilities of CUNY, including those at Brooklyn College. This includes all indoor and outdoor locations.

## Drug, alcohol, and tobacco use

The New York State Legislature has made the possession or purchase of certain drugs without authorization a crime, including the selling or giving of alcohol to any "visibly intoxicated person." The possession and consumption of alcohol is illegal under state law for those under 21 years of age, as is the selling of tobacco products to anyone under age 18. All members of the Brooklyn College community are expected to comply with these laws. No member of the academic community who may be liable for criminal prosecution and conviction will receive special consideration due to his or her status within the college. The police and other law enforcement agencies are required to investigate violations of the law wherever these may occur. Search warrants may be obtained and undercover agents placed on the campus without college approval or knowledge. Disciplinary proceedings will be initiated against any member of the academic community who uses, possesses, sells, or transfers illegal drugs on campus.

The college recognizes the personal difficulties and complexities that are associated with drug and alcohol use. Members of the college community seeking help are invited and encouraged to use the confidential therapeutic and counseling services that are available. Professional substance-abuse counselors together with trained students have proved of great assistance over the years in drug and alcohol rehabilitation. An appointment for these services may be obtained by calling the Personal Counseling Office, 0203 James Hall, 718.951.5363. More information about the Brooklyn College and CUNY policies on drug, alcohol and other substance abuse and resources for assistance with abuse problems may be found online.

## Freedom of information and process to access public records

Requests to inspect public records at the college should be made to the records access officer, 718.951.3118. Public records are available for inspection and copying by appointment only. If a request for access to records is denied, the requestor has a right to appeal to the CUNY general counsel and vice-chancellor for legal affairs. Copies of the CUNY Procedures for Public Access to Public Records and the appeal form are available at the reference desk of the Brooklyn College Library and online under the "Campus Info" tab of the BC WebCentral portal.

## Policies Concerning Students and Faculty

## Policies on submission of fraudulent or incomplete admissions materials

The submission of such documents in support of applications for admission as transcripts, diplomas, test scores, references or the applications themselves that are forged, fraudulent, altered from the original, materially incomplete, obtained under false pretenses or otherwise deceptive (collectively referred to as fraudulent documents) is prohibited by CUNY and may be punishable by a bar on applying for admission, suspension and/or expulsion. The term "applications for admission" includes transfer applications. Materially incomplete applications include applications that fail to include all prior post-high school college-level courses, regardless of whether the courses were taken in the United States or abroad, whether the applicant received a degree or the courses were taken for credit, or whether the applicant is changing academic majors or fields. The complete text for this policy may be found on the CUNY website.

## Student complaints about faculty conduct

The university and its colleges have a variety of procedures for dealing with student-related issues, but those procedures generally do not cover student complaints about faculty conduct in the classroom or other formal academic settings. The university respects the academic freedom of the faculty and will not interfere with it as it relates to the content or style of teaching activities. At the same time, however, the university recognizes its responsibility to establish procedures for addressing student complaints about faculty conduct that is not protected by academic freedom and not addressed in other procedures. CUNY's policy on student complaints about faculty may be accessed on the CUNY website.

## Academic integrity

The CUNY Board of Trustees has adopted a policy on academic integrity that applies to all students at Brooklyn College. Academic dishonesty is prohibited and is punishable by penalties, including failing grades, suspension and expulsion. Cheating is the unauthorized use or attempted use of material, information, notes, study aids or devices or communication during an academic exercise. Plagiarism is the act of presenting another person's ideas, research or writing as one's own. Internet plagiarism includes submitting
downloaded papers or part of term papers, paraphrasing or copying information from the Internet without citing the source, and cutting and pasting from various sources without proper attribution. The full text of the CUNY Academic Integrity Policy may be found on the CUNY website. Brooklyn College's procedures for implementing the CUNY policy and other explanatory material may be found online under the "Campus Info" tab on the BC WebCentral portal.

## Acceptable use of computer resources

The computer resources of Brooklyn College and the City University of New York must be used in a manner that is consistent with the university's educational purposes and environment. CUNY recognizes that there is a concern among the university community that because information created, used, transmitted or stored in electronic form is by its nature susceptible to disclosure, invasion, loss and similar risks, electronic communications and transactions are particularly vulnerable to infringements of academic freedom. CUNY's commitment to the principles of academic freedom and freedom of expression includes electronic information. Therefore, whenever possible, CUNY will resolve doubts about the need to access CUNY computer resources in favor of a user's privacy interest.

However, the use of CUNY computer resources, including the use for electronic transactions and communications, like the use of other university-provided resources and activities, is subject to the requirements of legal and ethical behavior.

This policy is intended to support the free exchange of ideas among members of the CUNY community and between the CUNY community and other communities while recognizing the responsibilities and limitations associated with such exchange. The full text of the CUNY Policy on Acceptable Use of Computer Resources may be found on the CUNY website.

All users of computer resources are expected to act in a spirit of mutual respect and cooperation, and to adhere to the regulations for their use set forth below. Users of CUNY computer resources therefore:

- Must have a valid authorized account to use computer resources and may use only those resources that are specifically authorized. Accounts may be used only in accordance with their authorized purposes.
- Are responsible for safeguarding their computer account. Passwords should be changed frequently and not be disclosed to anyone. All necessary precautions should
be taken to protect the account, no matter what type of computer resources are used.
- May not circumvent system protection facilities.
- May not knowingly use any system to produce system failures or degraded performance.
- May not engage in unauthorized duplication, alteration or destruction of data, programs or software. Data, programs or software belonging to others may not be transmitted or disclosed; copyrighted material may not be duplicated.
- May not engage in abusive or improper use of computer hardware. This includes, but is not limited to, tampering with equipment, unauthorized attempts at repairing equipment and unauthorized removal of equipment components.
- May not use computer resources for private purposes, including, but not limited to, the use of computer resources for profit-making or illegal purposes.
- May not use computer resources to engage in abuse of computer personnel or other users. Such abuse includes the sending of abusive, anonymous or unsolicited messages within CUNY or beyond via network facilities.

The use of college computer resources may be subject to college regulations. All students, faculty and staff members are expected to be familiar with these regulations.

The university reserves the right to monitor, under appropriate conditions, all data contained in the system to protect the integrity of the system and to ensure compliance with regulations. Any user who is found to be in violation of these rules shall be subject to the following:

- suspension and/or termination of computer privileges;
- disciplinary action by appropriate college and/or university officials;
- referral to law enforcement authorities for criminal prosecution; and/or
- other legal action, including action to recover civil damages and penalties


## Peer-to-peer file-sharing programs and copyright violations

Peer-to-peer (P2P) file-sharing programs have become a popular way to exchange music, movies, games and software over the Internet. Academic applications of these programs are also expanding, but their use is not without risk. P2P filesharing programs are not illegal. However, they can be used for illegal copying or distributing of music, movie, software and other files. Most material is copyrighted; downloading or distributing such material without permission of the
copyright holder is a violation of U.S. copyright law. If students use a P2P program to download, trade or share files without appropriate permission, they may be liable for monetary damages and even subject to jail time. This kind of use is also in violation of CUNY's policy on the use of CUNY computer resources and may subject students to disciplinary action. A statement from CUNY about file-sharing and copyright may be found on the CUNY website.

## Nonattendance because of religious beliefs

The New York State Education Law provides that no student shall be expelled or refused admission to an institution of higher education because he or she is unable to attend classes or participate in examinations or study or work requirements on any particular day or days because of religious beliefs. Students who are unable to attend classes on a particular day or days because of religious beliefs will be excused from any examination or study or work requirements. Faculty must make good-faith efforts to provide students absent from class because of religious beliefs equivalent opportunities to make up the work missed; no additional fees may be charged for this consideration.

If classes, examinations, or study or work requirements occur on Friday after 4 p.m. or on Saturday, similar or makeup classes, examinations, or study or work requirements will be made available on other days, where possible and practical. The faculty and the administration will not allow any adverse or prejudicial effects to accrue to students availing themselves of this regulation. If students have complaints about the application of this policy, they are entitled to bring action or a proceeding for enforcement of their rights in the Supreme Court of Kings County.

## Nondiscrimination for students with disabilities

Brooklyn College, as a unit of the City University, does not and will not discriminate against qualified students with disabilities in access to its programs and services. Disability, for purposes of this policy, is defined to mean a "physical or mental impairment that substantially limits one or more major life activities," such as walking, seeing, hearing, speaking, breathing, or learning.

Brooklyn College operates its programs and activities so that these programs and activities will provide meaningful accessibility to qualified students with disabilities and reasonable accommodation in delivery of educational and
other services. This commitment is reflected in adjustments to academic and other activities and structural modifications to college facilities if this is required for accessibility and is fiscally reasonable and does not fundamentally alter the program or activity.

Students who need individual accommodations should direct their needs to the Center for Student Disability Services, 138 Roosevelt Hall, 718.951.5538. If a requested academic adjustment cannot be implemented or if a student believes that he or she is being discriminated against on the basis of a handicap or disability, the student should contact the director of the center. Students may also consult with the Office of Diversity and Equity Programs, 2147 Boylan Hall, 718.951.4128, which will, as appropriate, refer the matter to the center, attempt to resolve the dispute among the parties, or accept a formal complaint in accordance with applicable procedures.

## Immunization requirements

New York State health law requires students to submit documentation proving immunity to measles, mumps and rubella as well as a Meningococcal Meningitis Vaccination Response Form. Information on the New York State Department of Health immunization requirements may be found in the Health Programs / Immunization Requirements Office. Questions may be referred to the office in person at 0710 James Hall, by telephone at 718.951.4505 or .4266, or via e-mail.

## Medical withdrawal and re-entry

As part of its commitment to the academic success and personal growth of its students, CUNY and its constituent campuses are responsible for providing a safe learning and working environment for students, faculty, staff and other members of the university community. CUNY has a policy that deals with students' behavior that is attributable to a medical condition and that presents a direct threat of harm to self or others or substantially disrupts the learning and working environment of others. In such situations, the safety and security of the campus community, including the individual student, is paramount. Besides taking action to protect the security and safety of the campus community, a college may address the student's conduct to determine whether action under this policy or under the student disciplinary process is appropriate. When a student's conduct directly threatens or substantially disrupts the learning or working environment of others and appears to relate to a
medical condition, the campus may, at its option, address the student's conduct either in accordance with this policy or through the student disciplinary process. If the student's conduct constitutes a threat solely to himself or herself, it should be addressed under this policy rather than the disciplinary process. This policy may be read in full on the CUNY website.

## Policies Concerning Privacy and Student Records

## Access to student records (FERPA procedures)

The college abides by provisions of the Federal Education Rights and Privacy Act (FERPA) of 1974, a federal law concerning the privacy of student records and the obligations of the institution, primarily regarding the release of records and access provided to records. The complete texts of the revised CUNY Board of Higher Education policy as adopted on April 23, 1979, and the Family Educational Rights and Privacy Act of 1974, as amended, are available for review in the Office of the Registrar, West Quad Center.

Under these provisions, students have the right to be advised of what student records and information are maintained by the college, who maintains them, who has access to them and for what purposes, and of policies for reviewing and expunging student records, procedures for granting access to them and for challenging them, cost charged for copies, and other rights and requirements under the law. Students also have the right to deny access by others who have not obtained their written consent. Brooklyn College may disclose, without consent, directory information (student's name, address, telephone number, e-mail address, date and place of birth, dates of attendance, major field of study, class, year or date of expected graduation, degrees and awards received, participation in officially recognized activities and sports, photograph, most recent educational agency or institution attended, and the height and weight of members of athletic teams) to persons having a legitimate interest in this information. Students may stipulate that any or all of the information above not be released without their written consent. Conversely, a student may request to allow disclosure of nondirectory information to specified individuals. To exercise either of these options, students must complete and submit a corresponding form that may be downloaded from the Privacy Statement webpage. A student's education records, other than information stated above, can be released without the student's consent only
to university officials-including trustees, college officials, faculty and staff—with a legitimate educational interest. Upon request, the college may disclose education records without consent to officials of another school in which a student seeks or intends to enroll.

A student who wishes to inspect and review his or her educational records may make the request to the student records access officer in the Office of the Registrar or to the person in charge of the office who is the official custodian of the record in question, but a request pertaining to records in the custody of a teacher or counselor should be made directly to that teacher or counselor. Requests made to the student records access officer in the Office of the Registrar must be made by completing a request form. Requests for records in other locations may be oral or written. Requests will be granted or denied within 15 days of receipt of the request.

If the request is granted, the student will be notified of the time and place where records may be inspected. If the request is denied or not responded to within 15 days, the student may appeal. Additional information regarding the appeal procedure will be provided to the student if a request is denied.

A student may request an amendment of education records that he or she believes are inaccurate or misleading. In this case, the student should write to the college official who is responsible for the record, clearly identify the part of the record that is in question, and specify why it should be changed. If the college decides not to amend the record, the student will be notified of the decision and advised of his or her right to a hearing. When the student is notified, additional information will be provided regarding the hearing procedures.

## Policy on withholding student records

According to a CUNY Board of Trustees resolution, students who are delinquent and/or in default in any of their financial accounts with the college, the university or an appropriate state or federal agency for which the university acts as either a disbursing or certifying agent, and students who have not completed exit interviews, as required by the National Direct Defense Student Loan (now Perkins Loan) Program and the Nursing Student Loan Program, are not to be permitted to register or obtain a copy of their grades, financial aid transcripts, transcripts of their academic records, or certificates or degrees, nor are they to receive funds under the federal campus-based student assistance programs or the Pell (Basic) Grant Program unless the Financial Aid Office waives this regulation in writing due to cases of exceptional hardship, consistent with federal and state regulations.

## Sale of Term Papers

Title I, Article 5, Section 213-b of the New York State Education Law provides in pertinent part that: "No person shall, for financial consideration, or the promise of financial consideration, prepare, offer to prepare, cause to be prepared, sell or offer for sale to any person any written material which the seller knows, is informed, or has reason to believe is intended for submission as a dissertation, thesis, term paper, essay, report, or other written assignment by a student in a university, college, academy, school, or other educational institution to such institution or to a course, seminar, or degree program held by such institution."

## Grievance Procedures

Grievance procedures for specific college rules and regulations differ depending on the nature of the complaint. Any student who has a grievance against another member of the college community may receive guidance on the appropriate complaint procedure in the Office of the Vice President for Student Affairs, 2113 Boylan Hall.

## Academic Resources

## Libraries

## Brooklyn College Library

The Brooklyn College Library provides integrated information support for instructional and research programs. The library is one of the most technologically advanced in the City University of New York as well as one of the largest in the New York City metropolitan area. Occupying the library's 6.5 acres of space are more than 2,300 student seats, 21.5 miles of shelving, 22 group-study rooms, six computer classrooms and more than 900 computers for student and faculty access in a beautiful, light-filled setting conducive to study and research. Many seats are configured for computer use, and wireless network connectivity is widely available. Laptop loan programs exist for students and faculty alike.

The physical collections total nearly 1.6 million volumes, over 57,000 print and electronic journals, and about 25,000 audiovisual units (sound recordings, videotapes and DVDs). The library's substantial digital collections include both electronic subscriptions and works of reference as well as nearly 170,000 electronic books. The library's collections are represented in CUNY+, the online catalog of the City University of New York. The library also houses the Brooklyn College Archives, the New Media Center, and both academic and administrative computing.

Brooklyn College Library faculty members provide extensive in-person and online reference service to faculty and students. The collections support both graduate and undergraduate study in the humanities, sciences and social sciences. The library also holds important archival and special collections, among which are the Brooklyniana Collection and the Manuscripts Collection.

## Morton '59 and Angela Topfer Library Café, first floor, Whitehead Hall, 718.951.4672

The Library Café, open 24 hours a day, seven days a week, features 80 PC- and Macintosh-networked computer stations. Each has the latest versions of multiple software packages and Internet browsers. Notebook computers, plug-ins for personal laptops, and high-quality laser printers (in color and black and white) are also available. There are group-study rooms and areas for individual study or reading. Modeled on the style of Internet cafés, the sleek, state-of-the-art facility, with large windows facing a landscaped courtyard providing
natural light, is a popular site for computing, study and student interchange or merely having a sandwich, coffee, or soda.

## Walter W. Gerboth Music Library, second floor, Brooklyn College Library

The Music Library is named in memory of its principal founder and first librarian, teacher and scholar Walter W. Gerboth. It offers facilities for music study, research, listening and viewing. The collection comprises thousands of scores (including the "Douglas Hedwig Brass Ensemble \& Trumpet Music Collection") and books about music (classical, popular, world) and dance, many of which circulate for out-of-library use; sound- and video-recordings; journals (both in print and on microfilm) and other serials including critical, scholarly editions of composers' "complete works" and "monumental editions." Digital databases-of both text and audio filesaccessible via the library's homepage and the "Music" subject page, are an important component of the diverse, multimedia collections of the Music Library.

## Costas Memorial Classics Library, 2405 Boylan Hall

The library contains a non-circulating collection of more than 4,000 volumes of Greek and Latin texts and books on classical topics donated by the late Professor Procope S. Costas and other members and friends of the Classics Department. The library is open to students and faculty members for research when classes are in session and the library is not in special use.

## Meier Bernstein Art Library, 5300 Boylan Hall

Located in an attractive suite of rooms in the Art Department, the art library's non-circulating collection of over 3,000 art books, as well as textbooks, periodicals, digital materials, and computers with internet access, may be used for reading, study, reviewing course materials, obtaining information about the art world, looking at pictures, browsing, or passing the time between classes. The library has sponsored artists-in-residence, lectures and studio critiques by guest artists, art historians, critics, museum curators, gallery directors, art magazine editors, and others, including famous people drawn from the New York art world. The library is named for the painter who established the Meier Bernstein Foundation to promote fine-arts education, from which it received most of its funding; additional support comes from the Art Department and its faculty, alumni, and friends.

## Centers and Institutes

## Africana Research Center, 3105 James Hall, 718.951.5597

Founded in 1969, the Africana Research Institute (ARI) is dedicated to promoting research and the dissemination of knowledge in the field of Africana Studies and related disciplines. The institute's core mission is twofold: first, to augment the curriculum of the Department of Africana Studies by offering programs that speak to the study of blacks in Africa, the Caribbean, and the United States and in other areas of the African Diaspora. Secondly, the institute serves as a bridge between Brooklyn College and the African Diasporan community of New York through research, sponsored programs, and community engagement. Through research and dialogue we highlight the importance of the African Diasporan community in both historical and contemporary conversations as well as expand the intellectual and personal relevance of the Brooklyn College experience for our students. The institute is also the repository of a collection of books, a collection of African art, and documents memorializing the history of the Department of Africana Studies.

## Archaeological Research Center, 0207 Ingersoll Hall, 718.951.4714

The center supports excavations abroad on sites dating from early Neolithic to medieval times. The center also supports and directs excavations in New York. Evidence is recovered and studied from these and other digs in which members and students participate. The center publishes its findings.

## Aquatic Research and Environmental Assessment Center (AREAC), 100 Ingersoll Hall Extension and 123 Ingersoll Hall Extension (office), 718.951.5631

The mission of Brooklyn College's Aquatic Research and Environmental Assessment Center is to foster basic and applied research and educational activities in (1) environmental assessment and monitoring, (2) the biology and behavior of marine and freshwater organisms, and (3) biotechnology. For the latter two areas, the current emphasis is on micro-algae (for bio-fuels), behavior of select invertebrates and fish, and aquaculture. AREAC's greenhouse (fifth floor, Ingersoll Hall Extension) has an aquaponics system and lab space for other faculty and student
research projects. AREAC seeks to increase awareness and understanding of the aquatic sciences through education and public outreach. AREAC welcomes faculty and students from the Brooklyn College community, from other CUNY campuses, and from other universities, to participate in research and educational opportunities at our facility.

## Center for Child and Adult Development, 1107 James Hall, 718.951.5876

The School Psychologist Graduate Program of the School of Education sponsors the center. It serves the community and professionals in the fields of education, psychology and counseling by providing, through conferences and symposia, current information on educational and mental health practices, and recent research relevant to child and adult development.

## Center for Computer Music, 118 Roosevelt Hall Extension, 718.951.1418

The Brooklyn College Center for Computer Music (BC-CCM), part of the Conservatory of Music, is both a place and a community of artists and researchers, with a rich history dating back to the 1970s. The mission of the BC-CCM is to explore the creative possibilities of technology in relation to the creation of music, sound art, sound design and multimedia arts. These explorations include composition of new artistic work, pursuit of research projects, and discussions of the role of new technologies in musical culture. The BC-CCM hosts guest artists and researchers, presents workshops, and sponsors conferences. Since 1990, the center has hosted an International Electroacoustic Music Festival, with performances of music, video, film and live electronic works by artists from around the world. Courses related to the BC-CCM cover techniques of music creation with digital tools and instruments, theories and use of sound processing and synthesis, design and creation of new music and multimedia performance instruments (both software and hardware), audio production, and history and aesthetics of electroacoustic music and sound art.

## Center for the Study of Brooklyn, 3114 Boylan Hall, 718.951.5000, ext. 1529

The center's mission is to connect and support on-campus faculty, students, departments, and programs with offcampus partners to contribute to the public good and cultural richness of the borough of Brooklyn. CSB aims to support existing work by securing funding and in-kind
donations, providing visibility, and connecting additional students, faculty, and local partners. The center also aims to further strengthen partnerships with public institutions throughout the borough to enhance student learning and career opportunities and provide community benefits.

## Children's Studies Center for Research, Policy and Public Service, 1304 James Hall, 718.951.3192

Established in 1997, the mission of the Children's Studies Center is to promote a human rights and social justice approach to and participation in local, national and international research and policy efforts on behalf of children and youth. The center's work complements the pedagogical approach to the study of children and youth in the Children and Youth Studies Program, which offers a children and youth studies major, concentration and minor. With a focus on research, policy and public service, the center works closely with key stakeholders in government, child advocacy agencies and community-based organizations to formulate and implement strategies that will improve the lives of children and young people.

## CUNY Haitian Studies Institute, 1108 Boylan Hall, 718.951.5000, ext. 5187

The CUNY Haitian Studies Institute (CUNY-HSI) focuses chiefly on research and dissemination of primary and secondary documents and findings that advance scholarship on Haiti and people of Haitian origin. The CUNY HSI equally engages in policy analysis work to link scholarship to social actions impacting the lives of Haitian populations and other ethnic communities. The institute collaborates with various individuals and agencies that are serving Haitian communities at the local, national, and international levels. To foster sustainable partnerships, the CUNY HSI provides technical assistance to help collaborating entities to build capacity and become more efficient.

Additionally, the CUNY-HSI supports the scholarly needs of a growing group of CUNY-based academics, teaching faculty, and students desirous of expanding knowledge about the Haitian diaspora and Haiti. The institute's research projects and programs complement and enhance the university's strength in Haitian studies. Moreover, the CUNY-HSI helps to shed light on the achievements, challenges, and hopes of people of Haitian origin in New York State and the United States.

## Environmental Sciences Analytical Center, 5135 Ingersoll Hall, 718.951.5000 ext. 2647

The Environmental Sciences Analytical Center (ESAC) is equipped with state-of-the-art instrumentation for environmental research and education, and provides analytical services to a wide range of customers. Core facilities include a Perkin-Elmer Dynamic Reaction Cell Inductively Coupled Plasma-Mass Spectrometer (ICP-MS), an Analytical JEOL 200-kV Transmitted Electron Microscope (TEM), and a Philips Multi-Purpose X-Ray Diffractometer (XRD). An environmental geochemistry laboratory is available for both research and teaching activities.

## Ethyle R. Wolfe Institute for the Humanities, 2231 Boylan Hall, 718.951.5847

The Ethyle R. Wolfe Institute for the Humanities supports excellence in research, publication, teaching, and all forms of academic discourse on the campus of Brooklyn College. Toward that end, it sponsors a varied series of lectures, seminars, colloquia, conferences, and study groups, often in collaboration with other academic programs and student organizations, with the aim of keeping public conversation at Brooklyn College in touch with advances in the humanities and social sciences. The institute brings leading scholars to campus and sponsors a faculty fellowship each year for research in the humanities.

## H. Wiley Hitchcock Institute for Studies in American Music, 415 Whitehead Hall, 718.951.5655

The H. Wiley Hitchcock Institute for Studies in American Music, part of the Conservatory of Music, is a research center dedicated to the study, preservation and presentation of a wide spectrum of American music, including jazz, popular, folk and art music. It sponsors conferences, symposia and concerts. In recent years, it has focused on contemporary composers in the greater New York area and on musical traditions of immigrant communities surrounding the college. The institute has published more than 30 monographs on various topics in American music as well as bibliographies, discographies and a semiannual newsletter. Its research collections, including books, periodicals, scores and recordings, are open to students and scholars by appointment.

## María E. Sánchez Center for Latino Studies, 1204 Boylan Hall, 718.951.5561

The center, an extension of the Department of Puerto Rican and Latino Studies, serves students, faculty and the community by stimulating interest in Puerto Rican and Latinx affairs. It sponsors conferences, workshops, lectures, seminars, internships, undergraduate research assistantships and non-credit courses. It encourages curricular development and research on topics related to the Latinx experience and fosters educational exhibits as well as artistic and cultural expression. It maintains a facility for special collections, publications and research.

## Preparatory Center for the Performing Arts

Founded in 1978, the Preparatory Center for the Performing Arts offers outstanding instruction in music, theater, and dance. The foundation of the Preparatory Center's activities is its highly qualified faculty of professional artist-teachers. In addition to an established reputation as a teacher, each faculty member has distinguished performing credentials

## Roberta S. Matthews Center for Teaching and Learning, 2420 Boylan Hall,718.951.5211

The mission of the Brooklyn College Roberta S. Matthews Center for Teaching and Learning is to foster an outstanding educational experience for all students by providing faculty with resources for effective teaching and learning. As a forum for the thoughtful and respectful exchange of ideas and practices, the Center for Teaching and Learning encourages high-impact learning and active engagement with students. It supports curricular development, pedagogical innovation, program improvement, planning, assessment, and a campuswide culture focused on excellence in teaching, through an emphasis on self-reflection among the teaching faculty.

## Science and Resilience Institute at Jamaica Bay

The Science and Resilience Institute at Jamaica Bay, hosted by Brooklyn College, is a top-tier research center that promotes the understanding of resilience in the urban ecosystem and adjacent communities. The institute, a partnership among academic institutions, nongovernmental organizations, and community groups, performs the following functions:

- Conducts research to:
- understand the temporal nature and robustness of the resilience of Jamaica Bay, New York Harbor, Hudson Raritan Estuary, and Gateway National Recreation Area; develop models for studying the fundamental nature of resilient systems, and; determine how best to manage ecosystems to ensure resilience and sustainability.
- Provides technical assistance and guidance to the institute's governmental partners, including the National Park Service, New York City Parks, and the New York City Department of Environmental Protection.
- Serves as a center for education and the dissemination of knowledge about processes that affect resilience and contribute to the changes in the urban ecosystem


## Shirley Chisholm Center for Research on Women, 1207 Ingersoll Hall, P: 718.951.5640

The mission of the center is twofold. It will promote research on women by initiating projects and programs on campus that support the work of faculty, encourage student learning, and provide information and resources to the wider Brooklyn community. It will also aim to uphold and preserve the legacy of the late Shirley Chisholm, a distinguished alumna of Brooklyn College, who served in the U.S. Congress and was the first African American woman to seek the presidency.

# Additional Campus Services and Facilities 

Center for Student Disability Services, 138 Roosevelt Hall, 718.951.5538

The Center for Student Disability Services serves as the primary program for ensuring the successful integration of students with disabilities into the college community and for making determinations of what will constitute appropriate, reasonable accommodations and academic adjustments. Most accommodations are based on the current nature of the student's disability or disabilities and the supporting documentation. Commonly offered services and accommodations include pre-admission interviews; priority registration; testing accommodations and arrangements; auxiliary aids; alternate print format; advocacy; direct liaison with offices providing college services and through CUNY LEADS; and assistance with facilitating successful academic and career outcomes. In the center, students also have access to the Frank and Mamie Goldstein Resource Center, a special resource center where a wide variety of assistive technology is available. Similar technology is also available at the Brooklyn College Library, the West End Building, the Learning Center, the Student Center, and the Topfer Library Café.

## Computer Language Instruction Center (CLIC), 4316, 4311 and 4305 Boylan Hall, 718.951.5231

The Computer Language Instruction Center (CLIC) is an integral part of the Department of Modern Languages and Literatures.

The Main Classroom Lab, 4316 Boylan Hall, is equipped with 24 Internet-connected computers running Windows. Students may access specialized, foreign-language instruction software, audio-visual lessons, and a collection of foreign films and videos, stored on the center's main server. They can also access their textbooks digital manuals.

## Department of English, English-as-a-Second-Language Program, 1414 Ingersoll Hall, 718.951.5928

This program is for students whose native language is not English. Students are assigned to the program on the basis of the CUNY Assessment Tests in Reading and Writing. Course descriptions may be found on the ESL website.

## ESL Reading and Writing Laboratory, 1408 Ingersoll Hall

The laboratory is open to students enrolled in ESL courses.

## Diana Rogovin Davidow Speech Language Hearing Center at Brooklyn College, 4400 Boylan Hall, 718.951.5186

The Diana Rogovin Davidow Speech Language Hearing Center serves as the clinical teaching laboratory in which undergraduate, graduate, and doctoral students from the Department of Communication Arts, Sciences, and Disorders, and the CUNY Doctoral Audiology Program obtain supervised clinical experience as part of their academic preparation. Individuals throughout the lifespan who present with or without speech, language, communication, voice, fluency, swallowing, and hearing differences and disorders are seen for evaluations and intervention, including the dispensing of hearing aids, under the supervision of licensed speechlanguage pathologists and audiologists. Facilities include an array of sound-treated rooms, audio and video recording equipment, and audiometric booths containing the latest instrumentation for testing and research. The center invites students, faculty, and staff to follow it on Facebook and Twitter.

## Learning Center, 1300 Boylan Hall, 718.951.5821

The Learning Center (LC) offers Brooklyn College students free peer tutoring in courses across the curriculum in a comfortable, supportive environment well stocked with computers and reference materials. Students working on writing assignments can get help with every stage of the writing process. Those who wish to work on their writing are recommended to schedule an appointment for regular weekly meetings or an individual session. For all other subjects unrelated to writing, students may drop in
without an appointment during our advertised days and times. Sessions are conducted in small groups or one-onone, depending on availability. Additionally, the LC offers comprehensive review sessions before midterm and final exams. Students are encouraged to visit the website or e-mail the center for updated schedules and additional information.

## Office of Research and Sponsored Programs, 2158 Boylan Hall, 718.951.5622

The office provides extensive advisement and support for faculty and staff who are engaged in sponsored programs and who are seeking external funding for research projects and other scholarly pursuits. The grants office identifies and disseminates funding opportunities for research, training, curriculum development and other projects; assists in the preparation, review and submission of proposals and budgets to government and private agencies; and facilitates the administration of funded projects and interaction between Brooklyn College, the CUNY Technology Commercialization Office and the Research Foundation of the City University of New York.

## Student Ombuds Services (SOS) 2113 Boylan Hall, 718.951.5352

The mission of Student Ombuds Services (SOS) is to ensure that students are able to define and articulate their concerns or issues and are referred to the appropriate contact persons on campus to help them arrive at a solution in an effective and timely manner. SOS will act as a source of information on university rules, regulations, policies, and procedures, and will provide guidance in utilizing these resources as appropriate. For more information, e-mail Student Affairs or call 718.951.5352.

## Television Center, basement of Whitehead Hall, 718.951.5585

The Television Center works in conjunction with the Department of Television, Radio and Emerging Media to facilitate the production of high-quality programs by our many talented students, faculty, and staff. The Television Center's primary services include providing field production equipment, television studio facilities, and a post-production lab. The center also provides engineering support, setbuilding capabilities, and additional post facilities for M.F.A. students as well as tech support for the Radio Lab and WBCR.

The Television Center houses a full complement of production gear, including HD cameras, field lighting, and grip and camera support equipment, as well as a variety of microphones, mixers, and digital recorders. Students enrolled in production classes or the M.F.A. program may utilize the facilities and borrow equipment free of charge. The Television Center also provides limited video production services to the college community as well as independent clients

## Testing Office, 245 West End Building, Testing@brooklyn.cuny.edu

The Office of Testing is responsible for administering evaluative tests and assessments in accordance with the City University's Testing Program. The Office of Testing also provides proctoring services by administering exams for distance learning students and the College Level Examination Program and serves as a host site for Kryterion, Castle Worldwide Testing, and PearsonVue. The following tests are administered: the CUNY Assessment Test in writing (CATW) for incoming ESL students, the Ability-To-Benefit (ATB) test, College Level Examination Program (CLEP), and Distance Education Exams. The office may be reached by e-mail.

## Veterans and Military Programs and Services, 1407 James Hall, 718.951.5105

The office provides an orientation counseling; offers assistance with admission procedures, academic planning and tutoring; and serves as a liaison with the Veterans Administration and other government agencies. It also provides referrals for pro bono legal services, medical benefits, post-traumatic stress disorder (PTSD) counseling, career opportunities, and updated information on federal and state benefits. Peer counselors are available to assist with filing applications for GI Bill benefits, internships, and scholarships

## Programs and Courses of Instruction

## General Education Program: Pathways

All candidates for a baccalaureate degree must complete Brooklyn College’s Pathways requirements.

Starting in fall 2013, CUNY implemented the Pathways initiative across its undergraduate colleges. Students who enter a CUNY college in fall 2013 or thereafter, either as firsttime freshmen or as transfer students from another CUNY college or from a non-CUNY college, will be automatically enrolled in the Pathways curriculum. Pathways establishes a new system of general education requirements and new transfer guidelines across the university and by doing so reinforces CUNY's educational excellence while easing student transfer between CUNY colleges. The centerpiece of this initiative is a 30 -credit general education Common Core. Each CUNY college can require bachelor's degree students to take another six to 12 credits of general education through the College Option. Once fulfilled at one CUNY college, these general education credits will carry over seamlessly if a student transfers to another CUNY college. Pathways also aligns gateway courses for a number of popular majors.

## General Education requirements

A new general education framework is a central feature of Pathways. It lays out requirements that undergraduate students across CUNY must meet. It also guarantees that general education requirements fulfilled at one CUNY college will carry over seamlessly if a student transfers to another CUNY college. Through the three elements of this framework-the Required Common Core, the Flexible Common Core, and the College Option RequirementPathways seeks to provide students with well-rounded knowledge, a critical appreciation of diverse cultural and intellectual traditions, an interest in relating the past to the complex world in which students live today, and the ability to help society create a fresh and enlightened future. The framework allows students to explore knowledge from various perspectives and to develop their critical abilities to read, write, and use language and symbol systems effectively. It also develops students' intellectual curiosity and commitment to lifelong learning.

Brooklyn College Pathways requirements are as follows: Required Common Core (12 credits / four courses) Student must complete:
English Composition (two courses)

- ENGL 1010 English Composition I, and
- ENGL 1012 English Composition II

Mathematical and Quantitative Reasoning (one course)

- CISC 1001 Computing and Quantitative Reasoning, or
- CISC 1002/PHIL 2200 The Outer Limits of Reasoning, or
- MATH 1311 Thinking Mathematically, or
- MATH *1501 Elements of Statistics with Applications, or
- a course from the list of approved alternatives in the section "STEM variant courses," below


## Life and Physical Sciences (one course)

- ANTH 1200 Human Origins, or
- BIOL 1010 Biology: The Study of Life, or
- CHEM 1007 Chemistry in Modern Life: An Introduction for Nonmajors, or
- EESC *1010: The Dynamic Earth, or
- PHYS 1005 Physics: The Simple Laws That Govern the Universe or
- a course from the list of approved alternatives in the section "STEM variant courses," below


## Flexible Common Core (18 credits / six courses)

Students must complete a minimum of two courses in the Creative Expression category and a minimum of one course in each of the four other categories. No more than two courses with the same four-letter department code may be used to fulfill Flexible Common Core requirements.

World Cultures and Global Issues (one course)

- AFST 3135 Black Political Identity in a Transnational Context, or
- ANTH 1105 Comparative Studies in Cultures and Transformation, or
- ARTD 3105 The Development of the Silk Road, or
- ARTD 3134 Subject, Creator, Consumer: Women and African Art, or
- CLAS 1110 Tyranny, Democracy, Empire: Classical Cultures, or
- CLAS 3245 Contemporary Identity Politics, (also qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes) or
- ENGL 2004/CLAS 2104 Literature and Film, or
- ENGL 2007 The Emergence of the Modern, or
- ENGL 2008 The Quest for Ethnic, Cultural, and National Identities in Literature, or
- ENGL 2009 Introduction to Literary Studies, or
- HIST 1101 The Shaping of the Modern World, or
- JUST 1145 Classical Jewish Texts, or
- PRLS 3105 Puerto Rican and Latin@ Cultural Formations (also qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes)
U.S. Experience in Its Diversity (one course)
- AFST 3265 (Re)presenting Black Men, or
- AMST 1010 American Identities, or
- AMST 3212 Decade in Crisis: The 1960s, or
- ANTH 3135 The American Urban Experience: Anthropological Perspectives, or
- ENGL 2001 Literature, Ethnicity, and Immigration, or
- FILM 2124 American Film Comedy, or
- HIST 1201 American Pluralism to 1877, or
- HIST 1202 American Pluralism Since 1877, or
- JUST 2047 American Jewish History, or
- JUST 2085 Jews of New York, or
- MUSC 3101 Music in Global America (also qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes) or
- POLS 1230 People, Power, and Politics, or
- PRLS 1001 Introduction to Puerto Rican and Latino Studies, or
- PRLS 3203 Latin@ Diasporas in the United States, or
- SEED 1001 Critical Issues in U.S. Education, or
- SOCY 1201 Sociology of Hip Hop, or
- SPCL 3000 LGBTQ Youth in Educational Contexts, or
- WGST 1001 Introduction to Women's Studies: Sex, Gender, and Power


## Creative Expression (two courses)

- ARTD 1010 Art: Its History and Meaning
- MUSC 1300 Music: Its Language, History and Culture, and/ or
- MUSC 1400 Fundamentals of Music, and/or

Individual and Society (one course)

- CASD 1707 Public Speaking, or
- CLAS 2109 The Self and Society, or
- CLAS 3200 / RELG 3030 Heroes, Gods, Monsters: Clasical Mythologies, or
- ECAE 2004 Early Childhood Education Foundations, or
- ENGL 2002 Ideas of Character in the Western Literary Tradition, or
- ENGL 2006 Text/Context, or
- HNSC 3314 Human Encounters with Death and Bereavement, or
- JUST 2017 Jewish Approaches to Ethical Issues, or
- MLAN 2015 Con, Cop, and Mark: Representations of Criminality and Authority, or
- MLAN 2610 Literature in Translation, or
- PHIL 2101 Introduction to the Problems of Philosophy, or
- PHIL 2501 Philosophical Issues in Literature, or
- RELG 3003 / CLAS 3246 Questions of Text and Truth: Introduction to Judaism, Christianity, and Islam, or
- SEED 2001/CBSE 2001 Historical, Philosophical, and Cultural Foundations of Education, or
- SOCY 1200 Sociology of Sport

Scientific World (one course)

- ANTH 2205 Forensic Anthropology, or
- CHEM *1011 Pharmaceutical Research, Development, and Approval, or
- CHEM 1012 Chemistry in the Arts and Archaeology, or
- CHEM 1037 / ANTH 1205 Studies in Forensic Science, or
- CISC 1003 Exploring Robotics, or
- EESC 1060 Exploring Issues in Sustainable Water Resources Management, or
- EESC 1050 Society and the Ocean, or
- HNSC \#*1100 Personal and Community Health, or
- HNSC \#1200 Fundamentals of Nutrition, or
- PHYS 1040 The Making of the Atomic Bomb, or
- PHYS 1070 Cosmology, or
- PHYS 1080 Energy Use and Climate Change, or
- a course from the list of approved alternatives in the section "STEM variant courses," below


## STEM Variant Courses

STEM variant courses are courses in math and the sciences that can be substituted for courses in any or all of the following three areas of the Common Core: Life and Physical Sciences, Mathematics and Quantitative Reasoning, and the Scientific World. Any student can, at his or her discretion, take a STEM variant course from the following list of approved STEM variant courses:

## Mathematics and Quantitative Reasoning

- BUSN 3400 Introduction to Economic and Business Statistics
- EESC 3800 Statistics and Data Analysis in Geosciences
- ECON 3400 Introduction to Economic and Business Statistics
- MATH 1006 College Algebra for Precalculus
- MATH 1011 Precalculus Mathematics
- MATH 1012 Precalculus With Recitation
- MATH 1021 Precalculus Mathematics A (together with MATH 1026)
- MATH 1026 Precalculus Mathematics B (together with MATH 1021)
- MATH 1201 Calculus I
- MATH *1401 Elementary Mathematics From an Advanced Standpoint (together with MATH 1021)
- PSYC 3400 Statistical Methods in Psychological Research


## Life and Physical Sciences

- ANTH 3265 / BIOL 1501 / HNSC 2302 / KINS 3281 Human Anatomy and Physiology 1
- ANTH 3266 / BIOL 1502 / HNSC 2303 / KINS 3285 Human Anatomy and Physiology 2
- ANTH 3470 / CLAS 3212 Summer Archaeological Field School
- BIOL 1001 General Biology 1
- BIOL 1002 General Biology 2
- CASD 1178 Speech-Language and Hearing Science: Anatomy and Physiology
- CHEM 1040 General Chemistry for Health-related Professions
- CHEM 1100 General Chemistry I
- CHEM 1200 General Chemistry I Lecture
- CHEM 2050 General Chemistry IB
- CHEM 2060 General Chemistry IB Lecture
- CHEM 2100 General Chemistry II
- CHEM 2200 General Chemistry II Lecture
- HNSC 2300 / KINS 3271 Human Physiology
- KINS 3275 Human Anatomy


## Scientific World

- EESC 1101 Introduction to Earth Science
- LING 2001 Introduction to Linguistics
- PHYS *1100 General Physics I
- PHYS *1150 Calculus-based General Physics I


## Learning Outcomes for the Pathways Required and Flexible Core

## English Composition

A student will:

- Read and listen critically and analytically
- Write clearly and coherently in varied, academic formats
- Demonstrate research skills
- Support a thesis with well-reasoned arguments
- Formulate original ideas


## Mathematical and Quantitative Reasoning

A student will:

- Interpret and draw appropriate inferences from quantitative representations
- Use algebraic, numerical, graphical, or statistical methods
- Translate problems from language to math
- Effectively communicate answers to mathematical problems
- Evaluate solutions to mathematical problems
- Apply mathematical methods to problems in other fields


## Life and Physical Sciences

A student will:

- Identify and apply concepts ad methods of science
- Apply the scientific method to explore natural phenomena
- Use scientific tools to carry out collaborative laboratory work
- Gather, analyze, and interpret data in reports
- Use research ethics and unbiased assessment

All Flexible Core courses must meet the following three learning outcomes:
A student will:

- Gather, interpret, and assess information from varied sources
- Evaluate evidence critically
- Produce well-reasoned arguments using evidence


## World Cultures and Global Issues

This course will require students to do at least three of the following:

- Apply concepts and methods of a discipline to world cultures or global issues
- Analyze and describe culture, globalization or global diversity
- Analyze the history of a non-U.S. society
- Analyze a major movement that has shaped a non-U.S. society
- Analyze the role of identity categories in a non-U.S. society


## U.S. Experience in Its Diversity

This course will require students to do at least three of the following:

- Identify and apply concepts and methods of a discipline or field exploring to U.S. experience in its diversity
- Analyze and explain a major theme of U.S. history from multiple perspectives
- Evaluate the impact of indigenous populations, slavery, or immigration on the U.S.
- Explain and evaluate the role of the U.S. in international relations.
- Identify and differentiate among the influence of the legislative, judicial, and executive branches of government
- Analyze and discuss U.S. society in terms of race, ethnicity, class, gender, sexual orientation, belief, etc.


## Creative Expression

This course will require students to do at least three of the following:

- Apply concepts and methods of a discipline to creative expression
- Analyze and describe the significance of arts from diverse cultures of the past
- Articulate how the arts/communications interpret and convey meaning and experience
- Demonstrate knowledge of the skills involved in the creative process
- Conduct research and communicate using appropriate technologies


## Individual and Society

This course will require students to do at least three of the following:

- Apply concepts and methods of a discipline or to exploring the relationship between individual and society
- Examine how an individual's place in society affects experiences, values, or choices.
- Articulate and assess ethical views and their underlying premises.
- Articulate ethical uses of data and other information to respond to problems and questions.
- Identify and analyze local/national/or global trends or ideologies, and their impact on individual/ collective decision-making.


## Scientific World

This course will require students to do at least three of the following:

- Apply concepts and methods of a discipline or field to exploring the scientific world
- Demonstrate how problems can be analyzed and solved using tools of science, math, technology, or formal analysis
- Articulate and evaluate the empirical evidence supporting a scientific or formal theory.
- Articulate and evaluate the impact of technologies and scientific discoveries on today's world
- Understand the scientific principles underlying sciencerelated matters of policy or public concern


## College Option

| CUNY Associate $\rightarrow$ Brooklyn College Bachelor's <br> Students who transfer from a CUNY associate to a Brooklyn College bachelor's degree program | Earned Associate Degree: <br> 6 College Option credits required <br> Earned More Than 30 Credits: <br> 9 College Option credits required <br> Earned 30 or Fewer Credits: <br> 12 College Option credits required |
| :---: | :---: |
| Non-CUNY Associate $\rightarrow$ Brooklyn College Bachelor's <br> Students transferring to Brooklyn College from non-CUNY colleges | Earned Associate Degree: <br> 6 College Option credits required <br> Earned More than 30 Credits: <br> 9 College Option credits required <br> Earned 30 or Fewer Credits: <br> 12 College Option credits required <br> Brooklyn College will decide whether any courses taken at the original college fulfill the College Option requirements. |
| Brooklyn College Bachelor's <br> Students pursuing a bachelor's degree at Brooklyn College (without transferring) | 12 College Option credits required (specified by Brooklyn College) |
| CUNY Bachelor's $\rightarrow$ Brooklyn College Bachelor's <br> Students who transfer from another CUNY bachelor's degree program to Brooklyn College | 12 College Option credits required. However, students can transfer the College Option credits they earn in a bachelor's degree program at one CUNY college toward their College Option requirement at Brooklyn College. |
| Non-CUNY Bachelor's $\rightarrow$ Brooklyn College Bachelor's <br> Students transferring to Brooklyn College from non-CUNY colleges | 12 College Option credits required. Brooklyn College will decide whether courses taken at the original college fulfill any of the College Option requirements. |
| Second Bachelor's Degree Students <br> Students with earned bachelor's degrees from institutions that are accredited and recognized by a regional accrediting U.S. agency as well as students from international universities with degrees that are equivalent to a baccalaureate degree as determined by Brooklyn College | No College Option credits required. These students are deemed to have automatically fulfilled the College Option. |

## Beginning in Fall 2019

The Brooklyn College general education program requirements vary for students and depend not only on how many credits they are required to take of "College Option" general education and Brooklyn College, but also whether they are proficient in a language other than English.

## Proficiency in language other than English

Students are considered proficient in a language other than English if they:

- pass a proficiency examination administered by the college, or
- have passed one course in a foreign language at Level 2 (the second semester of study at the college level, or
- have successfully completed three years of one language in high school and have passed the Regents Level 3, or
- are ESL students.

General education requirements for students based on these designations are detailed in the table below.

| "College Option" Credits Required |  |  |  |
| :---: | :---: | :---: | :---: |
| Proficient in a language other than English | - One three-credit course in a language other than English (at a higher level in the language of proficiency or an appropriate level in another language) OR in Inter-Cultural Competency <br> - One course in World Cultures and Global Issues OR U.S. in Its Diversity OR Life and Physical Sciences | - One three-credit course in a language other than English (at a higher level in the language of proficiency or an appropriate language in another language) OR in Inter-Cultural Competency <br> - One course in World Cultures and Global Issues OR U.S. in Its Diversity <br> - One course in Life and Physical Sciences | - One three-credit course in a language other than English (at a higher level in the language of proficiency or an appropriate language in another language) OR in Inter-Cultural Competency <br> - One course in Creative Expression OR World Cultures and Global Issues OR U.S. in Its Diversity OR Individual and Society <br> - One course in World Cultures and Global Issues OR U.S. in Its Diversity <br> - One course in Life and Physical Sciences |
| Not proficient in a language other than English | - One three-credit course in a language other than English <br> - One course in World Cultures and Global Issues OR U.S. in Its Diversity OR Life and Physical Sciences | - One three-credit course in a language other than English <br> - One course in World Cultures and Global Issues OR U.S. in Its Diversity <br> - One course in Life and Physical Sciences | - Two three-credit courses in a language other than English <br> - One course in World Cultures and Global Issues OR U.S. in Its Diversity <br> - One course in Life and Physical Sciences |

## Other Guidelines

No more than two courses with the same four-letter department code may be used to fulfill "College Option" requirements. Courses in languages other than English do not count toward this limit.

Additional classes may be added to the LOTE and ICC lists by approval of the General Education Committee and Faculty Council.

## Inter-Cultural Competency Courses

- AFST 3247 Literature of the African Diaspora
- AFST 3349 Caribbeanization of North America
- ANTH 1100 Culture and Society
- ANTH 1300 People and Language
- ARTD 3124 Foundations of Islamic Art
- ARTD 3169. Global Contemporary Art
- CASD 1619 Intercultural Communication
- CLAS 3030. Black Classicism
- CLAS 3113: English Professional Language: Its Greek and Latin Tools
- CLAS 3209 After Alexander: A Confluence of Cultures
- CLAS 3245 Comparative Identity Politics: The Ancient Mediterranean and the Modern World (also satisfies Pathways Flexible Core World Cultures and Global Issues requirement)
- ITAL 2510 The Italian Cultural Heritage
- JUST 1025 Jewish Diaspora
- LING 3029/ANTH 3390/ENGL 3524 Sociolinguistics
- MLAN 2150 Intercultural Literacy and Competence
- MLAN 4500: Critical Theories in Translation Studies (effective spring 2020)
- MUSC 3101 Music in Global America (also satisfies Pathways Flexible Core U.S. Experience in Its Diversity requirement)
- PRLS 2105 New York Latin@ Culture and the Arts
- PRLS 3105 Puerto Rican and Latin@ Cultural Formations (also satisfies Pathways Flexible Core World Cultures and Global Issues requirement)


## Gateway courses into majors

Faculty committees representing several popular transfer majors at CUNY have designated a minimum of three common and transferable courses that will be required of all students in those majors. Students anticipating majors in these fields can begin their course work at any CUNY college with the assurance that if they transfer to another CUNY college, their prior course work will count toward their continued pursuit of that major.

## How credits transfer

By creating a general education framework that applies to all CUNY undergraduates, and by establishing gateway courses into several popular majors, the Pathways initiative significantly improves the ease and efficiency of student transfer between CUNY colleges. Courses taken for general education credit, major credit, and elective credit are guaranteed to transfer. Students who transfer from associate programs to bachelor's programs will be required to complete from six to 12 College Option credits, depending on how many credits they had at the time of transfer and whether they transferred with an associate degree. Students who transfer from one baccalaureate college to another will transfer any College Option credits they have already taken at another CUNY college. In the case of transfers from nonCUNY colleges, Brooklyn College will decide whether any courses taken at the original college fulfill the College Option requirements.

## Continuing students

Students who entered CUNY prior to fall 2013 have the choice to "opt-in" to the Pathways requirements or to follow the general education requirements in effect at the time of their matriculation at Brooklyn College. Continuing students are encouraged to seek the guidance of an adviser or other on-campus resource to help them make informed decisions in choosing one of these two options.

Students who became matriculated at Brooklyn College prior to fall 2013 and who choose not to "opt-in" to Pathways should consult the 2012-13 Bulletin or another prior Bulletin applicable to them regarding their general education requirements. Students who wish to complete the Core Curriculum requirements stated in prior Bulletins should note that the following CORC courses will be offered only as their Pathways equivalents starting with fall 2013:

- CORC 1110 Classical Cultures = CLAS 1110 Classical Cultures
- CORC 1120 Introduction to Art = ARTD 1010 Art: Its History and Meaning
- CORC 1130 Music: Its Language, History, and Culture = MUSC 1300 Music: Its Language, History, and Culture
- CORC 1210 Knowledge, Reality, and Values = PHIL 2101 Introduction to the Problems of Philosophy
- CORC 1220 Shaping of the Modern World = HIST 1101 [3005] The Shaping of the Modern World
- CORC 1230 People, Power, and Politics = POLS 1230 People, Power, and Politics
- CORC 1311 Thinking Mathematically = MATH 1311 Thinking Mathematically
- CORC 1321 Biology for Today's World = BIOL 1010 Biology: The Study of Life
- CORC 1322 Science in Modern Life - Chemistry = CHEM 1007 Chemistry in Modern Life
- CORC 1331 Physics: The Simple Laws That Govern the Universe = PHYS 1005 (formerly 1331) The Simple Laws That Govern the Universe
- CORC 1332 Geology: The Science of Our World = EESC 1010 The Dynamic Earth

Beginning in fall 2017, courses with the prefix CORC are no longer offered. Continuing students needing former CORC courses numbered 3101-3399 may take the newly created departmental courses based on them, as listed in the following table:

| CORC 3101 | ENGL 2001 | Literature, Ethnicity, and <br> Immigration |
| :--- | :--- | :--- |
| CORC 3102 | ENGL 2002 | Ideas of Character in the <br> Western Literary Tradition |
| CORC 3103 | ENGL 2003 | Italian American Literature <br> and Film |
| CORC 3104 | CLAS 2104 |  |
| CORC 3105 | ENGL 2004 | Literature and Film |
| CORC 3106 | ENGL 2006 | Philosophical Issues in Literature |
| CORC 3107 | ENGL 2007 | The Emergence of the Modern <br> The Quest for Ethnic, |
| CORC 3108 | ENGL 2008 | Thltural, and National <br> Cult <br> Identities in Literature |
| CORC 3109 | CLAS 2109 | The Self and Society <br> Literatures of the |
| CORC 3110 | AFST 3247 | African Diaspora <br> Classical Jewish Texts: Moving |
| CORC 3111 | JUST 2545 | Toward Modernity |


| CORC 3112 | MLAN 2012 | The Animal Self |
| :---: | :---: | :---: |
| CORC 3113 | CLAS 2113 | The Monster Within |
| CORC 3114 | CLAS 2114 | The Road to Science Fiction |
| CORC 3115 | MLAN 2015 | Con, Cop, and Mark: <br> Representations of Criminality and Authority |
| CORC 3117 | CLAS 2117 | From Utopia to Dystopia |
| CORC 3203 | PRLS 3203 | Latino/a Diasporas in the United States |
| CORC 3204 | SPAN 2204 | The Global Spanish-Speaking Community |
| CORC 3205 | JUST 3025 | The Jewish Diaspora |
| CORC 3206 | ARTD 1035 | The Development of the Silk Road |
| CORC 3207 | AFST 3349 | The Caribbeanization of North America |
| CORC 3208 | ANTH 1105 | Comparative Studies in Cultures and Transformation |
| CORC 3209 | CLAS 3209 | After Alexander: A Confluence of Cultures |
| CORC 3211 | AFST 3135 | Black Political Identity in a Transnational Context |
| CORC 3213 | MUSC 3101 | Music in Global America |
| CORC 3301 | PHYS 1070 | Cosmology |
| CORC 3302 | PHYS 1080 | Energy Use and Climate Change |
| CORC 3303 | CISC 1003 | Exploring Robotics |
| CORC 3306 | ANTH 2216 | Scientific Revolutions |
| CORC 3307 | ANTH 1205 | Studies in Forensic Science |
|  | CHEM 1037 | Introduction to Forensic Science |
| CORC 3308 | PHYS 1040 | The Making of the Atomic Bomb |
| CORC 3309 | EESC 1080/ <br> PHYS 1085 | Climate Change-Torn Between Myth and Fact |
| CORC 3311 | EESC 1050 | Society and the Ocean |
| CORC 3312 | MATH 1801 | Mathematics of Non-Western Civilizations |
| CORC 3314 | HNSC 3314 | Human Encounters with Death and Bereavement |
| CORC 3316 | EESC 1060 | Exploring Issues in Sustainable Water Resources Management |
| CORC 3320 | PHYS 1090 | Space-Time, Gravity, and the Quantum |

## Readmitted students

For Pathways policy with regard to readmitted students, see the section "Degree Requirements" in the chapter "Academic Regulations and Procedures" in this Bulletin.

## International students

Students with international degrees may have to demonstrate English language proficiency via TOEFL or via the CUNY basic skills writing and reading tests, and may be required to take ESL and/or English courses as appropriate.

## For additional information

Students who have questions about Pathways should consult a counselor in the Center for Academic Advisement and Student Success (CAASS), 3207 Boylan Hall. Transfer students are advised to consult with the Transfer Student Services Center, 306 West Quad Center.

## William E. Macaulay Honors College students

Students must complete the four seminars of the Honors College, which will satisfy four of the five Pathways Flexible Common Core categories. World Cultures and Global Issues is not satisfied with the seminars.

## Returning and readmitted students

Students who take a leave of absence and are then readmitted to the college must complete the Pathways requirements at Brooklyn College. If they have taken courses at another institution after matriculation at Brooklyn College, and feel that certain of these courses may apply toward Pathways, they must file a request to use these with the Center for Academic Advisement and Student Success. Readmitted students who earned 80 credits or more at Brooklyn College prior to 1983 may graduate under the current Pathways requirements or the degree requirements stated in the 1979-81 Undergraduate Bulletin.

For Pathways policy with regard to readmitted students, see the section "Degree Requirements" in the chapter "Academic Regulations and Procedures" in this Bulletin.

| Pathways Category |  | Macaulay Course |
| :--- | :--- | :--- |
| - U.S. Experience in Its Diversity | $=$ | MCHC 1002 Peopling of New York City |
| - Creative Expression | $=$ | MCHC 1001 Arts in New York |
| - Individual and Society | $=$ | MCHC 2002 Shaping the Future of New York City |
| - Scientific World | $=$ | MCHC 2001 Science and Technology in New York City |

## Accounting

Department office: 202 Whitehead Hall
Phone: 718.951.5152
Full-time Faculty
Professors: Grayson, Kass-Shraibman, Tinkelman
Associate Professors: Fischer, Gerstein, Paul
Assistant Professors: Crossman, Lachman, Liu, Lord, Vlady, Xie
Lecturers: Langer, Lefkowitz
The student-centered accounting programs within the AACSB-accredited Murray Koppelman School of Business at Brooklyn College place emphasis on the importance of analytic skills, communication skills and professional ethics in today's business environment.

There are three tracks in accounting: two for students who are interested in taking the certified public accountancy (C.P.A.) examination and one for students who are interested in an accounting major but do not intend to become a C.P.A. The accounting program trains students for entry-level and long-term professional careers in public, private, and government accounting and business as well as for graduate school.

The departments of Accounting, Economics, Finance, and Business Management work closely with the Brooklyn College Magner Center for Career Development and Internships. Grants from the Ewing Marion Kauffman Foundation and the Citigroup Foundation have allowed the departments to develop internships at small businesses throughout New York City for students interested in entrepreneurship.

## B.S. degree program in accounting HEGIS code 0502; SED program code 01990

This program can be used in conjunction with the MS in Accounting to qualify for certification of the 150 credits required to become a certified public accountant (CPA) in New York. The two programs together are state certified ( 120 undergraduate credits +30 graduate credits). Students who graduate from the BS in Accounting program with an overall GPA of at least 3.0 will be able to apply for the Brooklyn College MS in Accounting Program. Please speak to an Accounting Program advisor to learn about the requirements to take the CPA examination. You do not need to complete 150 credits to take the CPA exam; however, you do have to complete certain courses and 120 credits. You will need the 150 credits plus one year of work experience under a CPA to become licensed as a CPA in New York State. Students who are interested in a state-certified program consisting of 150 undergraduate credits should consider the BS in Public Accounting and Business Management. See the checklist for this program on the website.

Department requirements ( $73-75$ credits)
All of the following: Accounting 2001, 3011, 3021, 3041, 3051, 3101, 3201, 4001, 4011, 4201, 4501W; Economics 2100 or Business 2100; Economics 2200 or Business 2200; Business 3400 or Economics 3400 or Mathematics 2501 or Mathematics 3501; Business 3100; Business 3200; [Business 3310] or Finance 3310; Economics 3320 or Business 3320; [Business 3330] or Finance 3330; Business 3430 or Computer and Information Science 2531.

Students must also take one accounting elective, from among the following courses:
Permissible accounting electives include: ACCT 4502; ACCT 3360; ACCT 4101; ACCT 5009; ACCT 5011; ACCT 5200, ACCT 5201, ACCT 5021; ACCT 7109x; ACCT 7120x. Note that to register for graduate courses (ACCT 7109x and ACCT 7120x), with permission, undergraduate students must have a GPA of 3.0 or better.

Because proficiency in the use of spreadsheets is extremely important in the accounting profession, Computer and Information Science 1050 is highly recommended. In addition, because employers are increasingly looking for employees to have skills in data analytics and data visualization, BUSN 3421 or CISC 2590 is highly recommended.

Both of the following: Philosophy 3314 and Communication Arts, Sciences, and Disorders 2623.
Students majoring in accounting must achieve a grade of $C$ or better in all courses starting with an accounting prefix. No accounting course may be taken more than three times by an accounting major. Students taking a specific accounting course three times without achieving a grade of $C$ or better (this includes INC, W, WN, WU, WF, and ABS grades), may not take that course again and will not be permitted to major in accounting at Brooklyn College.

Writing-Intensive Requirement: Students are required to take at least one writing-intensive course (W course).

## B.S. degree program in internal accounting HEGIS code 0502; SED program code 92277

The B.S. in Internal Accounting is a 120-credit program providing students with the accounting skills needed for jobs in business or government. It does not provide all the courses needed to qualify for licensure as a CPA in New York State. New York State currently requires applicants for licensure to have 150 credits of education, including 33 credits in accounting and tax, and a total of 69 credits in business subjects. There are three more appropriate paths for students who intend to pursue CPA licensure, and plan to take 150 credits. The first is to major in the 120credit B.S. in Accounting, and then complete 30 credits in the Brooklyn College M.S. in Accounting program. The second is to major in the 150 credit B.S. in Public Accounting and Business Management. Both of these options are approved by the New York State Education Department. The third is to major in the B.S. in Accounting and then obtain a master's degree other than the Brooklyn College M.S. in Accounting, containing at least 30 credits. Students taking this option will have to obtain approval with state authorities that their program meets licensure requirements.

## Department requirements (64-66 credits)

All of the following: Computer and Information Science 1050; Economics 2100 or Business 2100; Economics 2200 or Business 2200; Economics 3400 or Business 3400 or Mathematics 2501 or Mathematics 3501; [Business 3310] or Finance 3310; Business 3320 or Economics 3320; Business 3100; Business 3200; [Business 3330] or Finance 3330; Business 3430 or Computer and Information Science 2531.

All of the following with a grade of C or better: Accounting 2001, 3011, 3021, 3038 or 3041, 3051, 3101, 3201, 4501W.
Students must also take one accounting elective, from among the following courses.
Permissible accounting electives include: ACCT 4502; ACCT 3360; ACCT 4001; ACCT 4011; ACCT 4101; ACCT 4201; ACCT 5009; ACCT 5011; ACCT 5021; ACCT 5200, ACCT 5201; ACCT 7109X; ACCT 7120X. Note that to register for graduate courses (ACCT 7109X and ACCT 7120X), with permission, students must have a GPA of 3.0 or better.

Both of the following: Philosophy 3314 and Communication Arts, Sciences, and Disorders 2623.
In addition, because employers are increasingly looking for employees to have skills in data analytics and data visualization, BUSN 3421 or CISC 2590 is highly recommended.

Students majoring in accounting must achieve a grade of $C$ or better in all courses starting with an Accounting prefix. No accounting course may be taken more than three times by an accounting major. Students taking a specific accounting course three times without achieving a grade of $C$ or better (this includes INC, W, WN, WU, WF, and ABS grades), may not take that course again and will not be permitted to major in accounting at Brooklyn College.

Writing-Intensive Requirement: Students are required to take at least one writing-intensive course (W course).

## B.S. degree program in public accounting and business management HEGIS code 0502; SED program code 35423

Program title change from public accounting and business, management and finance to public accounting and business management awaiting approval by New York State Education Department.

This 150-credit undergraduate program is designed to allow students to meet the requirements of New York State for licensure as a CPA, while also obtaining additional exposure to business management. New York State currently requires candidates for licensure to have a total of 150 credits, including 33 credits in accounting and tax (including financial accounting and reporting, cost or managerial accounting, taxation, and auditing and attestation services) as well as 36 additional credits in business.

In addition to this program, students who are interested in accounting careers should consider the B.S. in Internal Accounting, the B.S. in Accounting, and a combination of the B.S. in Accounting and the M.S. in Accounting.

Program requirements (85-87 credits)
All of the following: Accounting 2001; 3011; 3021; 3041; 3051; 3101; 3201; 4001; 4011; 4101; 4201; 4501W; 4502, or 7108X; Computer and Information Sciences 1050; Business 3100; Business 3200; [Business 3310] or Finance 3310; Business 3400 or Economics 3400 or Mathematics 2501 or 3501; Business 3430 or Computer and Information Science 2531; Business 4200W or Business 4300W or Finance 4300W; Business 2100 or Economics 2100; Business 2200 or Economics 2200; Business 3421 or Computer and Information Science 2590 or Business 3410 or Economics 3410 or Mathematics 1201; Business 3320 or Economics 3320; [Business 3330] or Finance 3330.

Both of the following: Philosophy 3314 and Communication Arts, Sciences, and Disorders 2623.

Students must take additional courses to complete the 150-credit requirement.
Students are urged to take all Brooklyn College core courses in their first four years, so as to retain the option of later changing paths to obtain a 120 credit B.S. in accounting and a M.S. in accounting.

Highly recommended elective: Accounting 3360 or Business 3360. Students with a GPA of 3.0 or better may also take graduate courses, such as courses in financial statement analysis or controllership, in their fourth or fifth years, with permission.

The program allows a choice between data analytics (Business 3421 or Computer and Information Science 2590) and fundamental mathematical tools of economics, including calculus (Business 3410 or Economics 3410 or Mathematics 3410. Data analytics is in demand in many business fields, while calculus is required for certain Finance courses, and is very helpful to students planning advanced study in economics and finance, or doctoral study.

Students must achieve a grade of $C$ or better in each of the required Accounting courses. No Accounting course may be taken more than three times by a student in this major. Students taking a specific Accounting course three times without achieving a grade of C or better (this includes $I N C, W, W N, W U, W F$, and $A B S$ grades), may not take that course again and will not be permitted to complete this major or any other Accounting major at Brooklyn College.

Writing-Intensive Requirement: Students are required to take at least one writing-intensive course (W course).

## Certificate of achievement in accounting

## HEGIS code 0502; SED program code 82572

Undergraduate students who wish to enroll in this program must have received a high school diploma or the equivalent and must successfully complete the University Skills Assessment Tests as described in the chapter "Academic Regulations and Procedures."

Students with baccalaureate degrees are eligible to enroll in the certificate program. For more information, contact the department.
Program requirements (26-28 credits)
The certificate of achievement in accounting program consists of eight courses: Economics 2100 or Business 2100; Business 3200; [Business 3310] or Finance 3310 or Economics 3332; Accounting 2001, 3011, 3041; and two courses chosen from Accounting 3001, 3051, 3101, or 3201. Students who have received transfer credits from other colleges must complete at least 20 of the 26 to 28 credits at Brooklyn College.

Students must apply to the Office of the Registrar for their certificates upon completion of program requirements. The certificate of achievement in accounting will be issued upon the completion of the program with a grade of C - or better in each course.

## Certificate program in non-profit fiscal management HEGIS code 5004.00; SED program code 33584

## Matriculation Requirements

Criteria for admission to the program for non-degree applicants include a high school diploma or the equivalent and successful completion of the University Skills Assessment Tests. Students matriculating in any degree program offered by the Departments of Accounting, Economics, Finance, and Business Management, as well as post-baccalaureate students, are eligible to complete the requirements for the certificate program.

Certificate Requirements ( 24 credits)
For students enrolled only to complete the certificate ("non-degree" students), certain prerequisites can be waived. To earn the certificate, students must complete the course requirements with a GPA of 2.00 or higher.

Students must complete all of the following courses: Accounting 2001, 3051, 3370, 3371; Computer and Information Science 1050; Business 2000, 3270.

Student must complete one of the following three-credit courses:
Accounting 3201;
Business 3010, 3210, 3220, 3230, 3430, or 3240;
Computer and Information Science 2820W;
Philosophy 3314.

## Minor in Accounting

Department Requirements
Students majoring in economics or in business, management, and finance are eligible for this minor.
A minimum of 13 credits as follows:
Both Accounting 3101, and 3201.
Two of the following: Accounting 3011, 3041, 3051, 4201.
A grade of C - or higher in each of the four courses offered in the minor is required.
A minimum of three courses must be completed at Brooklyn College.

## Courses

## Accounting

## ACCT 2001 Introductory Accounting

4 hours; 4 credits
Introduction to the concepts and principles of accounting. Techniques of data accumulation. Nature and interpretation of financial statements. Corporate accounting. (Not open to students who have completed Economics 71.01 or 71.1.) Fall and spring terms.

## ACCT 3001 Introduction to Managerial Accounting

## 3 hours; 3 credits

Accounting systems and controls. Cost accounting for manufacturers. Uses of accounting data. Analysis of changes in financial position. (Not open to students who have completed Economics 71.02 or 71.2.)

Prerequisite: Accounting 2001 [1], or Economics 71.01 or 71.1.

## ACCT 3011 Intermediate Financial Accounting I

3 hours; 3 credits
Detailed consideration of the accounting principles and valuation of current assets, operational assets, intangibles, and cash flows.
Concepts of future and present value and analytical review of financial statements. Emphasis placed on pronouncements of the Financial Accounting Standards Board. (Not open to students who have completed Economics 71.03 or 71.3.) Fall and spring terms.

Prerequisite: Accounting 2001 or equivalent.

## ACCT 3021 Intermediate Financial Accounting II

3 hours; 3 credits
Detailed consideration of long-term investments, liabilities, and stockholders' equity. The statement of cash flows. Accounting for income taxes and changes in accounting. Value of accounting research in solving complex accounting and reporting problems. Other related topics (Not open to students who have completed Economics 71.05 or 71.3.) Fall and spring terms. .

Prerequisites: Accounting 3011 [3], or Economics 71.03 and Math 1006 or Math 1021, or placement into Mathematics 1011, 1012, 1026, 1201, 1206, or any Mathematics course numbered 2000 or higher.

## ACCT 3038 Cost Accounting

3 hours; 3 credits
The theories and methods of accounting for manufacturing costs with the emphasis placed on control, planning, and decision making. Historical and predetermined cost accumulation. Costs for special purposes. Cost concepts, problems, and applications. (Not open to students who have completed Economics 71.04 or 71.5.) Fall and spring terms.

Prerequisite: Accounting 2001 or equivalent.

## ACCT 3039 Advanced Managerial Accounting

## 3 hours; 3 credits

Quantitative analysis for decision making in manufacturing. Topics in capital budgeting, inventory control, and linear programming. Decision models under uncertainty. Cost behavior patterns and cost allocations. The computer as a tool. (Not open to students who have completed Economics 71.09 or 71.5 .) Fall and spring terms.

Prerequisite: Economics 3400 [30.2] or Business 3400 [30.2]; and Accounting 3038 [4] or Economics 71.04 with a grade of C- or higher.

## ACCT 3041 Cost and Managerial Accounting for Strategic Decision Making

## 4 hours; 4 credits

Strategies for cost accumulation with emphasis on control, planning, and decision making. Management decision making under uncertainty. (Not open to students who have completed Accounting 3038 or equivalent.)

Prerequisites: Economics 3400 or Business 3400; and Accounting 3011 or equivalent, and Math 1006 or Math 1021, or placement into Mathematics 1011, 1012, 1026, 1201, 1206, or any Mathematics course numbered 2000 or higher. Students are expected to have proficiency in spreadsheet analysis for business (e.g., MS Excel) before taking this course; for students without this skill set, Computer and Information Science 1050 is highly recommended.

ACCT 3370 Issues in Accounting and Auditing for NonProfits I
3 Hours; 3 Credits
Fiscal management issues as they relate to non-profit entities.
Topics will include understanding budgeting, financial management,
accounting, tax, and reporting requirements associated with a nonprofit organization. Also included are modules about the audit and attestation functions as they relate to non-profits.

Prerequisite: Accounting 3051 [21].

## ACCT 3371 Issues in Accounting and Auditing for Non- <br> Profits II

3 Hours; 3 Credits
Continuation of the study of fiscal management issues as they relate to non-profit entities. Audit and attestation functions as they relate to non-profits, privacy issues, responsibility of the CFO and the Board, internal controls, and hot topics in non-profits.

Prerequisite: Accounting 3051 [21] and 3370 [51].

## ACCT 3409 Introduction to Auditing

3 hours; 3 credits
Internal auditing. Control systems. Auditing programs and techniques. Adequacy of evidence. (Not open to students who have completed Economics 71.06 or 71.6 .) Fall and spring terms.

Prerequisite: Accounting 3011 [3], or Economics 71.03 or 71.3.

## ACCT 4001 Advanced Financial Accounting

3 hours; 3 credits
Significant issues relating to theory and problems of accounting topics including leases, pensions, and earnings per share. Foreign currency transactions and partnership accounting. (Not open to students who have completed Economics 71.07 or 71.7.)

Prerequisite: Accounting 3021 [5] or Economics 71.05

## ACCT 4011 Consolidated and Not-for-Profit Entities

3 hours; 3 credits
Theory and problems of consolidated statements and not-for-profit entities. (Not open to students who have completed Economics 71.08 or 71.4.) Fall and spring terms.

Prerequisite: Accounting 3021 [5], or Economics 71.05 or 71.3.

## ACCT 4499 Auditing in the Public Environment

3 hours; 3 credits
The attest function. Independent public accounting: principles and procedures. The code of professional ethics. Detailed consideration of Statements on Auditing Standards. (Not open to students who have completed Economics 71.10 or 71.6 .) Fall and spring terms.

Prerequisite: Economics 3400 [30.2] or Business 3400 [30.2]; and grades of C or higher in Accounting 3021 [5] or Economics 71.05, and in Accounting 3409 [6] or Economics 71.06.
Prerequisite or corequisite: Accounting 4001 [10] or Economics 71.07.

## ACCT 4501W Auditing Concepts and Accounting Research

4 hours; 4 credits
Theory, concepts, and procedures utilized in the audit process, including the code of professional ethics, legal liability, evidence, and verification of accounts. How to conduct accounting research. Course material supplemented with specific applications using cases and group decision making. Writing-intensive course. (Not open to students who have completed Accounting 3409 [6] (or 13.)

Prerequisite: English 1012 [2]; Economics 3400 [30.2] or Business

3400 [30.2]; and Accounting 3021 [5] or Economics 71.05 and Accounting 3051 [21].

## ACCT 4502 Advanced Topics in Auditing

3 hours; 3 credits
Procedures for auditing of business processes. Government audits. Internal audits. Non-audit services. Audit sampling. An introduction to the use of information technology and data analytics in auditing.

Prerequisite: Accounting 4501W or approved equivalent.

## Information systems and control

## ACCT 3051 Accounting Information Systems

3 hours; 3 credits
This course covers conceptual issues in the design and use of accounting information systems and also includes applied instruction in use of a widely used accounting system. Conceptual topics include flowcharting, relational database concepts, systems control and auditing, and applications of these to design systems for the revenue and expenditure accounting cycles. Applied instruction includes information systems for revenues, expenditures, inventory, and general ledgers.

Prerequisite: Accounting 2001, or equivalent. Students are expected to have proficiency in spreadsheet analysis for business (e.g., MS Excel) before taking this course; for students without this skill set, Computer and Information Science 1050 is highly recommended.

## Taxation

## ACCT 3101 Income Taxation

4 hours; 4 credits
Principles and problems associated with the federal income-tax laws. Methods of tax research. Broad implications and consequences of the tax system with brief coverage of other tax laws and jurisdictions. (Not open to students who have completed Economics 70.5.) Fall and spring terms.

Prerequisite: Accounting 2001 [1], or Economics 71.01 or 71.1.

## ACCT 4101 Taxation of Business Enterprises

3 hours; 3 credits
A survey course outlining the basic tax law affecting business enterprises. Corporate income tax from organization of the corporate entity, capital structure, corporate distributions, the income process, redemptions, liquidations, and reorganizations; small business corporations (Sub Ch. S); and partnership taxation. This course is designed to provide theoretical and practical experience with tie-ins to applicable tax forms. The case study method will be used where applicable. A class project or research paper will be required. (Not open to students who have completed Economics 70.6.) Fall and spring terms.

Prerequisite: Accounting 3101 [30] or Economics 70.5, and Accounting 3011 [3] or Economics 71.03; or their equivalent.

## Business law

## ACCT 3201 Business Law I

3 hours; 3 credits
Legal theory, legal and deductive reasoning, constitutional law,
administrative law, the court system, civil and criminal procedures, alternative dispute resolution, criminal law and the concepts of tort and strict liability. Common law contract theory, the Uniform Commercial Code, basic elements of a contract, remedies, statute of frauds and third party rights. Secured transactions, personal property and insurance law. (Not open to students who have completed Economics 50.5.)

## ACCT 3360 Fraudulent Reporting and Forensic Financial Analysis

3 hours; 3 credits
The tools of financial statement analysis and skills that can be used to detect fraudulent and manipulative financial statements; review of actual fraudulent financial statements issued to investors; discussion of recent legislation and its impact on the accounting profession; reforms that would actually protect investors. (This course is the same as Business 3360.)

Prerequisite: Sophomore status.

## ACCT 4201 Business Law II

3 hours; 3 credits
Systematic analysis of legal concepts and principles applied to ownership, control, and management of natural resources (real property); delegating authority and responsibility (agency); structure and functions of business enterprises (partnerships, corporations, and holding companies); creditors' rights, rehabilitation of failing firms (creditors' compositions and bankruptcy); substitutes for money (negotiable instruments); and elements of providing wealth and/or income during life and after death (trusts and wills). (Not open to students who have completed Economics 50.6.) Fall and spring terms.

Prerequisite: Accounting 3201 [40] or Economics 50.5.

## Internships and seminars

## ACCT 5009 Seminar in Accounting

3 hours; 3 credits
Basic postulates of accounting and income measurement. Accounting aspects of business control and decision making. Application of accounting in special areas including those subject to administrative control. Written and oral reports. Course description may be obtained in the department office before registration. (Accounting 5009 [84.1] is not open to students who have completed Economics 93.6. Accounting 5011 [84.2] is not open to students who have completed Economics 93.7.)

Prerequisite: Accounting 3021 [5], or Economics 71.05 or 71.3; and Accounting 3038 [4], or Economics 71.04 or 71.5.

## ACCT 5011 Seminar in Accounting

3 hours; 3 credits
Basic postulates of accounting and income measurement. Accounting aspects of business control and decision making. Application of accounting in special areas including those subject to administrative control. Written and oral reports. Course description may be obtained in the department office before registration. (Accounting 5009 [84.1] is not open to students who have completed Economics 93.6. Accounting 5011 [84.2] is not open to students who have completed Economics 93.7.)

Prerequisite: Accounting 3021 [5], or Economics 71.05 or 71.3; and Accounting 3038 [4], or Economics 71.04 or 71.5.

## ACCT 5021 Special Topics

2 hours; 2 credits
Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take this course twice, but may not repeat topics.

Prerequisite: permission of the department chairperson.

## ACCT 5200 Accounting Internship

9 hours field work; 3 credits
An off-campus internship supervised and approved by a faculty member and will require written assignments and a final report.

Prerequisite: At least 10 credits of undergraduate courses in accounting and upper sophomore status and permission of the instructor.

## ACCT 5201 Accounting Internship 2

9 hours field work; 3 credits
This off-campus internship will be supervised by a faculty member and will require written assignments and a final report. As a permission-only class, all internships must be approved by the faculty member teaching the internship course.

Prerequisite: Accounting 5200; upper sophomore status and at least 13 credits of undergraduate courses in accounting.

The following inactive course(s) will only be offered if there is sufficient demand: ACCT 2002 Survey of Accounting

## Africana Studies

Department office: 3105 James Hall
Phone: 718.951.5597

## Full-time Faculty

Professors: Cunningham, Day
Associate Professors: Byam, Cumberbatch
Assistant Professor: Fraser

The Africana Studies Department offers a multidisciplinary curriculum devoted to the study of people of African descent in Africa, the Caribbean, and the United States. The courses focus on the histories, cultures, politics, and societies of Africa and its diaspora. In addition to its core faculty, the department draws on the expertise of affiliated faculty in other departments of the College. The multidisciplinary nature of Africana studies exposes students to interdisciplinary approaches and to the basic content of many of the traditional liberal arts disciplines.

Students have many options. The department offers a bachelor of arts degree in Africana studies and a bachelor of arts degree in adolescence education for social studies teachers. Each minor requires the completion of 15 credits of courses given by the Department of Africana Studies and other Brooklyn College departments. The department's courses satisfy requirements for majors and minors in American studies, Caribbean studies, Children and Youth studies, Global studies, and Women's and Gender studies. The department also offers a study-abroad seminar, which provides an in-depth experience in a selected country of the African diaspora in cooperation with a host institution in that country. Summer seminars have taken place in Barbados, Brazil, Cuba, Ghana, Haiti, Jamaica, Panama, and Trinidad and Tobago.

Our graduates are well equipped for the twenty-first century workplace or for graduate study at universities and professional schools that seek broad intellectual preparation.

## Department recommendation

Students should consult a department counselor for help in planning a course of study. Majors are advised to include a methods course among the eighteen credits of advanced electives in another department or program offered for the completion of the major. Majors may satisfy their writing across the curriculum requirement with Africana Studies 5403 W or a writing-intensive course in another department.

## B.A. degree program in Africana studies HEGIS code 2211; SED program code 02112

Department requirements ( $45-47$ credits)
Two courses chosen from Africana Studies 1001 through 1099.
Twelve credits chosen from one of the groups a), b), or c):
a) History and political science: 3100 through 3199.
b) Literature, culture, and the arts: 3200 through 3299 .
c) Society and the economy: 3300 through 4399.

At least two courses from groups other than the one chosen above.
One seminar or independent study course chosen from Africana Studies 4405 through 5404 or one writing intensive course from another department or program.

Eighteen credits of advanced courses offered by any other single department or program plus any prerequisite of those courses.
The department chair, with the approval of the chair of the department's undergraduate curriculum committee, may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

Department recommendation

Students should consult a department counselor for help in planning a course of study. Majors are advised to include a methods course among the eighteen credits of advanced electives in another department or program offered for the completion of the major.

## B.A. degree program in adolescence education: social studies teacher HEGIS code 2201.01; SED program code 26754

Adolescence education (grades 7-12) programs are writing intensive.
Program requirements
Students who wish to pursue a bachelor of arts degree in Secondary Education for social studies teacher must complete a major in one of the following: Africana studies, American studies, anthropology, economics, history, political science, Puerto Rican and Latino studies, or sociology.

Study must include within the major, or in addition to courses in the major, study in economics, government, and at least 21 credits in the history and geography of the United States and the world, including Secondary Education 3584. Students preparing to become social studies teachers must fulfill the economics and government requirements by taking at least one course (3 credits) from among: History 3345, 3410, 3420, 3424, $3430,3441,3442,3450,3457$, or a course in Political Science numbered between 3101 and 3160; and at least one course ( 3 credits) from among: History 3332, 3470, 3472, 3512 or Economics 2002, 2100, 2200, 3102, 3152, or 3202.

The following pedagogical courses in the Department of Secondary Education: Secondary Education 2001, 2002, 3401, 3402, 4408, 3456, 4482 (total of 28 credits):

Secondary Education 2001, 2002, 3401, 3402. This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.

Secondary Education 3456 may be started after completing Secondary Education 2001 and 2002.

Student teaching: Secondary Education 4401, 4408, and 4482.
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department. Degree programs in adolescence education and include a major in an appropriate department of the college and in the case of social studies may also include an approved selection of interdepartmental courses.

Completion of an adolescence education program as part of a major in English, one of the appropriate social sciences, mathematics, or one of the sciences qualifies students for New York State initial certification in adolescence education for grades 7 through 12.

Students qualifying for the initial certification in adolescence education may obtain an extension to teach English, social studies, mathematics, a modern language, or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

Students must complete 26 credits in the Department of Secondary Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

Students must have a B- in both Secondary Education 2001 and 2002, New York City Department of Education Fingerprint clearance, and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

To take Secondary Education 4401, 4404 and 4482, students must earn a B- or higher in Secondary Education 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of the program.

Students must earn a B- or higher in Secondary Education 4401, 4404 and 4482 and a GPA of 2.75 or higher in their major.

## Departmental Minor(s)

## Minor in African American Studies

Department Requirements
A program of 15 credits, nine of which must be advanced electives in Africana studies. Each course must be completed with a grade of C or
higher. Students must complete 1 and 2 below.

1. Africana Studies 3120 or 3121 or 3130 .
2. Twelve additional credits selected from Africana Studies 3120, 3121, 3138, 3130, 3135, 3230, 3210, 3260; Africana Studies 3125 or Political Science 3151; Africana Studies 3127 or Political Science 3157 or Women's and Gender Studies 3350; Africana Studies 3127 or Political Science 3157 or Women's and Gender Studies 3350; Africana Studies 3220 or English 3160; Africana Studies 3221 or English 3161; Africana Studies 3236 or Music 2101; Africana Studies 3237, Africana Studies 3233; Africana Studies 3225 or Theater 2501; Africana Studies 3228 or American Studies 3306; Africana Studies 3328 or Sociology 2601; Africana Studies 3265, 3337, 3324, 3330, 3331, 3320, 3344, 3360, 3367, 3335; Africana Studies 3362 or Women's and Gender Studies 3488; Economics 3222; History 3430; Music 20.4; Political Science 3150; Sociology 3204, 2210, 2200.

## Minor in African Studies

Department requirements
A program of 15 credits of advanced electives. Each course must be completed with a grade of C or higher. Students must complete 1 and 2 below.

1. Africana Studies 3101 or History 3560 or Africana Studies 3102 or History 3561.
2. Twelve credits selected from Africana Studies 3101, 3102, 3105, 3107, 3110; Africana Studies 3112 or Political Science 3306; Africana Studies 3138, 3210, 3201, 3205 or Comparative Literature 3619, 3290, Africana Studies 3365 or Political Science 3412; Political Science 3393W; Anthropology 3535; [Art 16.02]; Art 3128 or Art 3134; Africana Studies 3290 (If taken as a Study Abroad to Africa); Africana Studies 4412 (If the venue is Africa), Africana Studies 4301 (Department permission required; If the internship relates to Africa); History 3030, History 3323.

## Minor in Literatures and Cultures of the African Diaspora

## Department Requirements

A program of 16 credits of advanced electives. Each course must be completed with a grade of $C$ or higher. Students must complete 1,2 , and 3 below.

1. Africana Studies 3221 or English 3161.
2. One of the following: Africana Studies 3230, 3210, 3201or Comparative Literature 3632.
3. Nine credits chosen from the following:

Africana Studies 3230, 3210; Africana Studies 3220 or English 3160; Africana Studies 3236 or Music 2101; Africana Studies 3232 or Linguistics 3024; Africana Studies 3233; Africana Studies 3237 or Music 2104; Africana Studies 3225 or Theater 2502; Africana Studies 3201; Africana Studies 3205 or Comparative Literature 3619; Africana Studies 3228 or American Studies 3306; Africana Studies 3215 or American Studies 3709; Africana Studies 3260 or English 3162; Africana Studies 3243 or Caribbean Studies 3000; Africana Studies 3245 or English 3194 or Comparative Literature 3627; Africana Studies 3240 or Comparative Literature 3623 or Puerto Rican and Latino Studies 3315; Africana Studies 3246 or Comparative Literature 3630; Africana Studies 3247; Africana Studies 3265; French 3520; Spanish 3645.

## Interdepartmental Minor(s)

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C- or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Graduate Studies

The Africana Studies Department offers graduate courses for students in other fields. For information, students should consult the department chairperson.

## Courses

§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## AFST 3124 Black-Jewish Activism: Coalition Building in

## America

3 hours; 3 credits
History of American Jewish and African American activism around civil rights and racial justice issues in the twentieth century. This course is the same as American Studies 3124 and Judaic Studies 3124.

## Introductory courses

## AFST 1001 Introduction to Contemporary Africa

3 hours; 3 credits
Historical, cultural, religious, social, educational, and economic background of the African continent. (Not open to students who have completed Africana Studies 0.1.)

## AFST 1020 Introduction to African American Studies

3 hours; 3 credits
Growth and development of social, political, economic, cultural, and religious institutions of the African American community.

## AFST 1025 Introduction to Contemporary African

 American Culture3 hours; 3 credits
Race and representation in contemporary culture. An interdisciplinary examination of African-American culture from the "Black Arts Movement" to the present. Novels, poetry, films, and music as cultural texts; and political discourses as cultural texts. Topics may include: the Black Aesthetic Movement, Malcolm X, Afrocentricity, multiculturalism, body politics, and the intersection of race and gender. (Not open to students who have completed Africana Studies 23.2.)

## AFST 1030 Introduction to Research Studies of African

## Americans

3 hours; 3 credits

Research methods and procedures for study of phenomena characteristic of the Black community. Development of the young Black child. Interviewing techniques, participant observation, historiography, quantitative methods and computer applications.

## AFST 1040 Introduction to the Caribbean

3 hours; 3 credits
Study and analysis of peoples, forces, institutions, and cultures of the Caribbean. African, European, United States, and Western Hemisphere influences on Caribbean development. (Not open to students who have completed Africana Studies 17.)

## History \& political science

## AFST 3101 States, Kingdoms and Trade: Africa to 1800

## 3 hours; 3 credits

Themes in the history of Africa south of the Sahara from earliest times to 1800. Salient themes include Nile Valley civilizations, trans-Saharan trade, early social and economic systems, West African states, especially the Empire of Mali, Islamic influences, state formation, Swahili coastal city states, and Indian Ocean trade. Origins, development, and consequences of the Atlantic slave trade. This course is the same as History 3560.

Prerequisite: one of the following: Africana Studies 1001, Core Studies 4 or 9, Core Curriculum 1220 [2.2], or History 3005, or permission of the chairperson.

## AFST 3102 Contact, Contest and Independence: Africa Since 1800

3 hours; 3 credits
Themes drawn from all regions of the continent of Africa south of the Sahara from 1800 to the present. The Islamic revolutions, the Zulu Empire and political evolution in South Africa, the rise of legitimate trade, the impact of European missionaries and explorers, imperialism, the colonial state, nationalist independence movements, and post-independence challenges. This course is the same as History 3561.

Prerequisite: one of the following: Africana Studies 1001, Core Studies 4 or 9, Core Curriculum 1220 [2.2], or History 3005, or permission of the chairperson.

## AFST 3105 Africa in Antiquity

## 3 hours; 3 credits

Introduction to history, art, philosophy and religion of the Nile Valley civilizations of Kemet (Egypt), Nubia and Kush. Ancient Ethiopian kingdom of Axum. African links to Greece and Rome.

Prerequisite: one of the following: Africana Studies 1001 [0.12], 1020 [0.2]; Core Studies 1 or 9; Core Curriculum 1110 [1.1] or 1220 [2.2], or Classics 1110 or History 3005.

## AFST 3107 Southern Africa

3 hours; 3 credits
History of people and politics in Southern Africa. Major political, economic and social developments in the 19th and 20th centuries. Focus on South Africa as central to regional economic and political evolution.

Prerequisite: one of the following: Africana Studies 1001 [0.12], or 1020 [0.2]; or Core Studies 3 or 9 or Core Curriculum 1220 [2.2] or History 3005.

## AFST 3110 The African Diaspora

3 hours; 3 credits
Creation and history of the African diaspora. Economic, political, and sociocultural interrelationships of Africa and the African diaspora.

Prerequisite: one of the following: Africana Studies 3110 (0.3), Core Studies 4 or 9.

## AFST 3112 Political Systems of Africa

3 hours; 3 credits
Political developments in the African states. Patterns before and after independence. Development of nationalism. Political integration, institution building, one-party systems, role of the military, and protest movements. Problems of regional and African unity. This course is the same as Political Science 3306.

Prerequisite: Core Studies 3 or Core Curriculum 1230 or any Political Science course in the 1000-level range, or Africana Studies 0.1, 0.11, or 1001.

## AFST 3120 African American History through 1865

3 hours; 3 credits
African Americans from the era of the Atlantic slave trade through the Civil War. Topics include the African origins of African Americans, defining African Americans, the slave trade, free Blacks in antebellum America, role of gender and class, Black family and community, origins of the black church, slavery, resistance and abolitionism. This course is the same as History 3413.

Prerequisite: Core Studies 4 or 9 or Core Curriculum 1220 [2.2] or 3207 , or History 3005, or permission of the chairperson.

## AFST 3121 African American History from 1865

## 3 hours; 3 credits

African Americans since the beginning of the Civil War. Topics include Blacks and Reconstruction, Blacks and Redemption, "The Nadir," emigration and colonization, the Great Migration, Blacks in World Wars I and II, Marcus Garvey, Blacks and the Great

Depression, and the Civil Rights and Black Power movements. (Not open to students who have completed Africana Studies 12.7.) This course is the same as History 3414.

Prerequisite: Core Studies 4 or 9 or Core Curriculum 1220 [2.2] or 3207 , or History 3005 , or permission of the chairperson.

## AFST 3125 The Civil Rights and Black Power Movements

3 hours; 3 credits
Examination of the major themes and debates in the Civil Rights and Black Power movements in the United States from 1950 to 1975. Highlight the discourses among and about African Americans as they relate to the creation of political and social movements in the quest for racial and economic justice. This course is the same as Political Science 3151.

Prerequisite: Core Studies 3 or 4 or Core Curriculum 1220 [2.2] or 1230 [2.3], or History 3005, or any Political Science course in the 1000-level range.

## AFST 3127 Women in the Black Freedom Struggle

4 hours; 4 credits
Analysis of the role of women in the black freedom struggle concentrating on the period from 1940-1980. Focus on women activists, theorists, and women-led organizing efforts that helped to define and orient the black freedom struggle. Examine interlocking issues of gender, sexuality, class, and race in postwar America and the development of the modern civil rights movement. This course is the same as Political Science 3157 and Women's and Gender Studies 3350.

Prerequisite: Political Science *1001[1.51], 1002[1.7], 1003, 1004, 1005, or 1006 or Core Curriculum 1230[2.3]; or Women's and Gender Studies 1001 or Africana Studies 1020.

## AFST 3130 The Struggle for Liberation

3 hours; 3 credits
Analysis of Black protest and liberation movements from the slave revolts to recent urban rebellions. Immediate underlying causes of specific events. Such major trends as the civil rights movement, Black nationalism, Pan-Africanism, and the Third World movement.

Prerequisite: English 1010

## AFST 3135 Black Political Identity in a Transnational Context

3 hours; 3 credits
Foundational discourses of civil rights, protests and anticolonial struggles in the United States, Africa and the Caribbean between 1900-1960. Global intersections of the social, intellectual, and cultural transformations of African American, Afro-Caribbean and African politics between 1900-1960. Examinations of transnational dialogues on black consciousnesses. (Not open to students who have completed Core Curriculum 3211.) 2017-2018: Satisfies Pathways College Option requirement. Starting fall 2018 satisfies Pathways Flexible Core World Cultures and Global Issues requirement.

Corequisite: English 1010

## AFST 3138 The Black Diaspora in New York

3 Hours; 3 Credits
The emergence of an African diasporic community in downstate New York (Manhattan, Brooklyn, and Long Island) from early Dutch
settlement through the 21st century. Topics to be covered include slavery, the African burial ground, black churches, the underground railroad, anti-slavery activity, free black communities, black politics in New York, civil rights movement, and African and Caribbean immigration. Changing definitions of black identity. Historic sites and material culture as sources for local history will be discussed. Not open to students who have taken Africana Studies 60.1 in the Spring 1998 semester.

Prerequisite: English1010

## AFST 3140 Caribbean Societies in Perspective

3 hours; 3 credits
Emergence of Caribbean societies during the era of indentured servants in the islands. Imported institutions and their changing character in the new environment.

## AFST 3145 Caribbean Political Systems

3 hours; 3 credits
Comparative approach to the government and politics of the contemporary Caribbean. Major states in the Caribbean: Cuba, Haiti, Dominican Republic, the Commonwealth Caribbean; and selected members of other territories. The political economy of these societies and the growth of mass movements. Foreign policies of various Caribbean states. This course is the same as Political Science 3305.

Prerequisite: English 1010

## AFST 3147 Haitian Heritage

3 hours; 3 credits
Creation and development of the Haitian experience as shaped by the African connections. Analysis of the societal forces impinging on Haiti as the first Black independent republic in the New World.

Prerequisite: one of the following: Africana Studies 1040 [0.5], 17, 3140 [17.3], 3145 [17.4], or permission of the chairperson.

## AFST 3190 Special Topics in History and Politics

3 hours; 3 credits
Study of selected topics in the history and politics of the Africana world. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: English 1012 [2] or sophomore status or permission of the chairperson.

## Literature, culture, and the arts

## AFST 3201 African Oral Literatures

4 hours; 4 credits
The course explores the oral tradition in Africa. It gives specific attention to its interpretations, its compositions, and its transformation. It introduces the student to poetry, prose, epics, folktales, sagas storytelling, folk drama, drum language praise and freedom songs, contemporary styles of oral literature and the performers who shape these forms. This course in the same as Comparative Literature 3632.

Prerequisites: English 1010 [1]

Survey of twentieth-century fiction, drama, poetry of sub-Saharan Africa. Works by such authors as Achebe, Ekwensi, Emecheta, Ngugi, Oyono, Laye, Dadie, Clark, Sembene, Senghor, Soyinka. This course is the same as Comparative Literature 3619.

Prerequisite: English 1010 [1] or 1.7.

## AFST 3210 African Religion and Culture in the New World

3 hours; 3 credits
African religious and philosophical beliefs as they have shaped cultural practices, language, social organization, material culture, music, visual arts, and religion of African people in the diaspora. Considers reinterpreted African cultural practices in African American, Caribbean, and Latin American societies. Historical and contemporary patterns of creolization. (Not open to students who have completed Africana Studies 14.)

## AFST 3215 Performing Blackness

## 3 hours; 3 credits

Inventing identity through black performance. The appropriation and performance of race towards widely divergent ends within and outside of African American culture. Self empowerment through racial stereotyping. Performance as a principal medium of cross cultural imagination and self definition. The "subject" in opposition to the "other." Examination of performance structures emerging from mimicry and appropriation. Performance styles include: the exotic shows of nineteenth century Europe, the blackface minstrel theater, Carnival in the Americas, popular culture. This course is the same as American Studies 3709.

## AFST 3220 African American Literature to 1930

4 hours; 4 credits
Literature from the colonial period through the Harlem Renaissance. Slave narratives, rhetoric of abolition, formal and vernacular aesthetics. Such writers as Phillis Wheatley, David Walker, Frederick Douglass, Harriet Jacobs, Booker T. Washington, Paul L. Dunbar, Charles W. Chesnutt, James Weldon Johnson, W.E.B. Du Bois, Countee Cullen, Jean Toomer, Claude McKay, Sterling Brown, Zora Neale Hurston, Langston Hughes. This course is the same as English 3160.

Prerequisite: one of the following: English 1010 [1] or 1.7.

## AFST 3221 Modern African American Literature

4 hours; 4 credits
Literature from 1930 to the present. Naturalism and protest, the Black Aesthetic, women's literature. Such writers as Richard Wright, Ralph Ellison, Gwendolyn Brooks, Robert Hayden, James Baldwin, Amiri Baraka, Audre Lorde, Alice Walker, Toni Morrison. This course is the same as English 3161.

Prerequisite: English 1010 [1] or 1.7.

## AFST 3225 Black Theater

3 hours; 3 credits
Lectures, studies, and workshops in Black theater. Liaison with professional and community theater. This course is the same as English 3169 and Theater 2502.

Race and American political and literary culture from the American Revolution to urban modernism. The South as a paradigm of American culture, constructions of "race," tensions between democratic ideals and elaborate race and class distinctions. Readings from Thomas Jefferson, slave narratives, Herman Melville, Uncle Tom's Cabin, Mark Twain, Uncle Remus, Charles Chesnutt, and others. Cultural legacies and entanglements of minstrelsy, the blues, and jazz. This course is the same as American Studies 3306.

## AFST 3230 African American Folklore

3 hours; 3 credits
African American oral tradition and African American culture. Survival of the African culture. Oral history, spirituals, folktales, blues, toasts, dozens, etc. Uses of the oral tradition in literature. This course is the same as English 3158.

Prerequisite: English 1010 [1] or 1.7.

## AFST 3232 African American English

4 hours; 4 credits
Introduction to the historical development and linguistic structure of African American English presented through the analysis of its underlying linguistic structure; social, cultural and educational considerations of its use; comparison of the major theories of African American English development, including its relationship to other dialects of American English and Caribbean creole languages. This course is the same as LING 3024.

Prerequisites: English 1010 [1].

## AFST 3233 African American Art

3 hours; 3 credits
Historical survey of the contributions of Black art to American culture. Study of the Black experience through works of art. This course is part of the joint program in elementary education with a specialization in African American studies and is open to all students.

## AFST 3236 African American Music

3 hours; 3 credits
African American music from its African roots to the present. Synthesis of tradition and distinct African elements in American musical culture. This course is the same as Music 2101.

## AFST 3237 History of Jazz

3 hours; 3 credits
Origin, early development, and history of jazz to the present. Required reading and listening. This course is the same as Music 2104.

Prerequisite: Core Studies 2.2 or Core Curriculum 1130 [1.3] or Music 1300 or permission of the chairperson.

## AFST 3240 Caribbean Literature

4 hours; 4 credits
Black culture and writings in the Caribbean. Reflections on alienation and independence. Literary liberation movements, Negrism, Indigenism, and Negritude as the first step towards emancipation from a European cultural vision. Writers from the English-, French-, and Spanish-speaking countries will be examined.

All readings will be in English. This course is the same as Puerto Rican and Latino Studies 3315W and Comparative Literature 3623. (Not open to students who have completed Puerto Rican and Latino Studies [54].)

Prerequisite: English 1010 [1].

## AFST 3243 Caribbean Carnival: History, Performance, Resistance

3 hours; 3 credits
Introduction to the political and performative aspects of Caribbean carnival. Includes a review of literature in performance: race, gender, sexuality, Caribbean music, masquerade and dance. This course is the same as Caribbean Studies 3000.

## AFST 3245 Introduction to Postcolonial Literature and Theory

4 hours; 4 credits
Literary works and theoretical paradigms relating to the culture of European imperialism and its aftermath. Diversity of works from many parts of the formerly colonized world to introduce the global significance of postcolonialism. Topics include: race and representation, Orientalism and the production of knowledge, Empire and exoticism, gender and nationalism, and multiculturalism and diasporic identities. This course is the same as English 3194 and Comparative Literature 3627.

Prerequisite: English 1012 [2] or 2.7.

## AFST 3246 Caribbean Sexualities

4 hours; 4 credits
Sex and sexuality in the Caribbean and its diaspora; exploration of how sexuality intersects with and diverges from culture and nationalism, notions of gender, race, and ethnicity. Social science and literary texts explore a range of experiences from the nineteenth to the twenty-first centuries, including heterosexuality, interracial relationships, homosexuality, love, violence, and desire; critical and theoretical texts examine the structures of gender and sexual relations, and relationships between sex and race. This course is the same as Caribbean Studies 3118, Comparative Literature 3620, and Women's and Gender Studies 3118.

Prerequisite: English 1010

## AFST 3247 Literature of the African Diaspora

3 hours; 3 credits
Prose, poetry, drama, and film by black writers in Africa, the Americas, and Europe. Engagements with Western literary traditions and traditional oral literatures, folklore and music. Commonalities in style and theme. Major literary movements. Gender, nationality and transnationalism as constructed and interrogated boundaries, identities, and affiliations. (Not open to students who have completed Core Curriculum 3110.) 2017-2018 and 2018-2019 Satisfies Pathways College Option requirement. Starting Fall 2019 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

Prerequisite: English 1010 or permission of the department and junior standing.

## AFST 3260 Black Women's Fiction

4 hours; 4 credits
Black women novelists, short story writers, and essayists. Crosscultural comparisons with African and Caribbean novelists.

Readings of selected essays in feminist criticism. This course is the same as English 3162 and Women's Studies 3117.

Prerequisite: English 1010 [1] or 1.7.

## AFST 3265 (Re)presenting Black Men

3 hours; 3 credits
African American men, manhood, and masculinities in American and African American culture. Examination of literary, folk, popular, and political texts by men and women, whites and blacks. Starting Fall 2019 satisfies Flexible Core US Experience in its Diversity requirement.

Prerequisite: English 1010 [1] or 1.7.

## AFST 3290 Special Topics in Literature, Culture, and the

 Arts3 hours; 3 credits
Study of selected topics in the literature, culture, and the arts of the Africana world. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: English 1012 [2] or sophomore status or permission of the chairperson.

## Society and the economy

## AFST 3320 The Black Family

3 hours; 3 credits
The Black family as a social unit in the experience of Black Americans from slavery to the present. Comparison with African family patterns past and present. (Not open to students who have completed Afro-American Studies 3206 [20.1].)

Prerequisite: English 1010

## AFST 3324 The Black Urban Experience

3 hours; 3 credits
An interdisciplinary study of African Americans and urban life. Drawing on the methodological approaches of history, literature, and folklore primarily, although not exclusively, this course will examine the African American experience in United States cities in the 19th and 20th centuries. Where appropriate, comparisons will be made with non-United States cities such as Rio de Janeiro, Johannesburg, or London. Topics chosen from: urban slavery, free blacks in Northern cities, race riots, "great migration", Caribbean migration, urban economics, urban politics, the urban novel, the black family in the city, the blues, contemporary urban folklore.

Prerequisite: English 1010

## AFST 3328 Race and Ethnicity

3 hours; 3 credits
Sociological approaches to the study of racial and ethnic relations. Historical and contemporary constructions of identity, assimilation, stratification, and interaction between groups. This course is the same as Sociology 2601.

Prerequisite: Core Curriculum 1230 with a grade of B - or higher or Core Studies 3 with a grade of B- or higher, or Sociology *1101 or permission of the chairperson.

## AFST 3330 Blacks and the Law

3 hours; 3 credits

Examination of the relationships between the American judicial system and the socioeconomic status of Blacks. The role of law in the systematic subordination of Black rights. The use of law to ease the burden of racism.

Prerequisite: English 1010 or Africana Studies 1020

## AFST 3331 Blacks in the American Criminal Justice System

3 hours; 3 credits
Exploration of the relationship between African Americans and the criminal justice system. Sociological theory and methods of collecting and understanding information. Assessment of the political, social, and economic institutions of American society as they frame race, crime, and punishment. Ways that the American criminal justice system has operated both to maintain and ameliorate a racially oppressive society. This course is the same as Sociology 2502.

## AFST 3335 The Black Child and the Urban Education System

3 hours; 3 credits
Study and evaluation of school curricula from preschool through high school in terms of their historical background and contribution to the development of Black children. Finding and writing bibliographical materials relevant to the curricula.

## AFST 3337 Black Entrepreneurship in America

## 3 hours; 3 credits

History and development of African American business enterprise and entrepreneurs from Booker T. Washington and the National Negro Business League to the present. Topics include political philosophy of "black capitalism"; small and large businesses and the Black community; the impact of governmental programs on business development; case studies of successful African American businesses. (Not open to students who have completed Africana Studies 34.)

Prerequisite: English 1010

## AFST 3339 Community Studies

## 3 hours; 3 credits

Goals, structures, and administration of community development programs and poverty programs past and present. Field trips to day care centers, youth programs, and adult learning centers. Practice in program design. (Not open to students who have completed Afro-American Studies 30.)

## AFST 3344 Caribbean Communities in North America

## 3 hours; 3 credits

Analysis of the factors responsible for the movement of Caribbean peoples to mainland North America; achievements, frustrations, and contributions of Caribbean communities to the host country; linkages between Caribbean-Americans and the Caribbean.

Prerequisite: one of the following: Africana Studies 1040, 17, 3140, 3145, or Core Studies 3, 4, 9, or Core Curriculum 1220, 1230, 3207, or History 3005.

## AFST 3349 The Caribbeanization of North America

3 hours; 3 credits
The formation of Caribbean societies and their impact on the

United States. Migration to the United States, its selection process and settlement patterns. The transformation of immigrants in the United States and their transformation of American society. (Not open to students who have completed Core Curriculum 3207.) 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement. Starting Fall 2019 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

Prerequisite: English 1010 or permission of the department and junior standing.

## AFST 3350 Climate Justice and the Caribbean

3 hours, 3 credits
Introduction to the physical and environmental characteristics of the Caribbean and the issues challenging these settings and concepts. Survey of theories of climate justice emerging from these concerns. Focus on the relationship of Caribbean history and development to the regional issues, policies and practices that impact the environment. Study of contemporary environmental justice initiatives. This course is the same as Caribbean Studies 3130, Puerto Rican and Latino Studies 3130, and Anthropology 3145.

Prerequisite: Sophomore, Junior or Senior Standing

## AFST 3360 The Black Woman in America

3 hours; 3 credits
Interpretation and critical evaluation of the history, role, and image of the Black woman in America; emphasis on the burdens of racism, sexism, the economy, the Black "matriarch," health care, feminism and womanism, and contemporary issues. This course is the same as Women's and Gender Studies 3446.

Prerequisite: Africana Studies 1020 or 3260, Core Studies 3 or 9 or Core Curriculum 1230 or 3207 [20.07], Women's and Gender Studies 1001; or permission of chairperson.

## AFST 3362 Race, Gender and Inequality

3 hours; 3 credits
Historical constructions of race and gender; difference as it contributes to structural and institutional inequalities; ideological debates among marginalized groups within nation states, legislatures, schools, neighborhoods, prisons, marketplaces, social and political organizations and government institutions; the intersection of race, ethnicity, gender, sexuality and class in social movements, grassroots organizations, political parties and civic associations. This course is the same as Women's and Gender Studies 3488.

Prerequisites: English 1010

## AFST 3364 Writing on African Women and Feminism

4 hours, 4 credits
Critical examination of major issues on African women and feminism. Commonalities of experiences through the exercise of patriarchy and injustices privileging and oppressing some people based on their gender. Critiques of feminism that have emerged from African women scholars, as a hierarchical structure that privileged western thought and experiences. Consequences of debate to gender relations on the African continent. Focus on developing students' writing skills. Writing-intensive course. This course is the same as Political Science 3393W and Women's and Gender Studies 3349W.

Prerequisites: English *1012 [2] and one of the following: Political Science *1001[1.51], 1002[1.7], 1003, 1004, 1005, or 1006, or Core Curriculum 1230[2.3] or Women's and Gender Studies 1001 or Africana Studies 1001.

## AFST 3365 African Women and Feminism

3 hours; 3 credits
Women's power, activism, and inequality on the basis of gender in the African continent. Explorations of gender-based inequality and the way African women exercise formal power. African women scholars' and activists' theoretical and practical analyses of feminism and the consequences of such analyses on gender relations in the continent. Theoretical readings and case studies. Course may have a national, regional, or continental focus. This course is the same as Political Science 3412 and Women's and Gender Studies 3447.

Prerequisite: Core Studies 3 or Core Curriculum 1230 or Core Studies 9, or any Political Science course in the 1000-level range, or Africana Studies 1001, or Women's and Gender Studies 10.7 or 1001, or English 1010 or equivalent, or permission of department.

## AFST 3367 Black Men in the United States

3 hours; 3 credits
Black men in the United States, their relationship to the family, black women, and each other. Social, economic, cultural contexts. Critical examination of the impact of racism, public policy, and cultural norms. Explorations of models for social success and failure.

Prerequisite: English 1010

## AFST 3390 Special Topics in Society and the Economy

3 hours; 3 credits
Study of selected topics in the society and economy of the Africana world. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: English 1012 [2] or sophomore status or permission of the chairperson.

## AFST 4301 Internship in Africana Studies

9 hours field work plus conferences and independent work; 3 credits
Field experience in professional and community organizations in preparation for careers in such areas as law, government, the arts, business, teaching, and community service. Individual and group conferences with faculty mentor. Directed readings in a variety of fields in the related disciplines of Africana Studies such as sociology, history, or political science that relate to the field experience. Preparation and presentation of a critical report of the experience.

Prerequisite: A minimum of 9 credits in courses in Africana Studies and permission of the chairperson.

## Seminars

## AFST 4405 Seminar in Humanities

3 hours; 3 credits
Study of a topic in Africana studies related to the humanities. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: completion of an approved program of advanced courses and permission of the chairperson.

## AFST 4410 Seminar in Social Sciences

3 hours; 3 credits
Study of a topic in Africana Studies related to the social sciences. Students may take this course twice, but may not repeat topics.

Prerequisite: completion of an approved program of advanced courses and permission of the chairperson.

## AFST 4412 Summer Seminar

3 hours; 3 credits
Lectures, research, and study in selected historical, political, economic, and social aspects of life in a selected country or in a region of the United States. Lectures by Brooklyn College and hostcountry scholars, in cooperation with a university in Africa, the Caribbean, South America, or the United States may be supplemented by field work and library and empirical research. Course may not be taken more than once. Consult department for locale of a specific offering.

Prerequisite: Africana Studies 1001, or permission of the chairperson.

## AFST 5403W Independent Research and Writing

Minimum of nine hours conference and independent work; 3 credits
Independent research project and reading of advanced material on an approved topic supervised by a faculty member. Project culminates in a full-length research paper based on primary and/or secondary sources. Writing-intensive course.

Prerequisite: completion of an approved program of advanced Africana Studies Department courses and permission of the instructor and the chairperson; English *1012 [2].

## Honors course

## AFST 5404 Independent Study

Minimum of 9 hours conference and independent work§; 3 credits Reading of advanced material supervised by a faculty member. Written report or final examination.

Prerequisite: completion of an approved program of advanced Africana Studies Department courses and permission of the instructor and the chairperson.

The following inactive course(s) will only be offered if there is sufficient demand:

## AFST 3340 Caribbean Economics

AFST 3370 Foundations of Africana Research Methods

## American Studies

## Department office: 3415 Boylan Hall

Phone: 718.951.5000×3648
American studies is an interdisciplinary field that explores the American experience through the study of history, literature, and the arts. Drawing on faculty members from various departments who are versed in the theories and methods of literary criticism, historiography, anthropology, folklore, musicology, art history, and ethnic and gender studies, the Brooklyn College American studies program investigates the history and culture of the United States. Courses vary from those probing such crucial historical periods as the Frontier era, the Depression, and the 1960s, to those focused on the study of such expressive genres as immigrant literature, folklore, popular culture, and musical performance.

The program offers a bachelor of arts degree in American studies, a bachelor of arts degree in adolescence education for social studies teachers, a minor in American studies, a minor in American music and culture, and a concentration for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades 1-6).

The program embraces a diverse interdisciplinary approach. We assume that the American studies student is interested not simply in the literature of the United States, but in how that literature relates to American music, art, film, history, and religion and in how these influences collectively reflect and shape our national attitudes and values. The American studies student will explore the multifarious strands of American culture and will examine the forces of race, ethnicity, class, and gender, which form the student's own identity and contribute to his or her place in the larger mosaic of American society.

Graduates of the program work in a variety of professions including education, journalism, law, arts administration, and public policy.

## B.A. degree program in American studies HEGIS code 0313; SED program code 01978

Program requirements (39-42 credits)
American Studies 1001 or 1010.
Five of the following: American Studies 3302, 3206, 3212, 3306, 3307, 3102, 3702, 3704, 3104, 3706, 3902, 3404, 3106, 3107W, 3108, 3402, 3304, 3310, 3406, 3708, 3709, 4002, 5003.

Two of the following: History 3323, 3420, 3430, 3440, 3441, 3442, 3418, 3455, 3410, 3475, 3478, 3479, 3480, 3485, 4200.
Two of the following: English 3166, 3151, 3152, 3153, 3154, 3163, 4105, 4107.
Either a) or b):
a) American Arts and Letters: three of the following:

Africana Studies 3215, 3220, 3221, 3230; Art 3164; English 2402, 3164; Film 2124; Music 2101, 2104, 4940, 4941; Television, Radio \& Emerging Media 1165; Puerto Rican and Latino Studies 4640; Theater 3504, 2502; Women's and Gender Studies 3120; or other courses consistent with this track approved by the program director.
b) American Society: three of the following:

Africana Studies 3120, 3121, 3125; Anthropology 3130, 3135; Judaic Studies 3047, 3485; Political Science 3121, 3142, 3150, 3153, 3154, 3155, 3404, 3440; Puerto Rican and Latino Studies 1001, 3215, 3220, 3320W, 3325, 4645; Sociology 1102, 2601, 2602, 3206, 3607; Women's and Gender Studies 3340, 3238 or other courses consistent with this track approved by the program director.

## B.A. degree program in adolescence education: social studies teacher HEGIS code 2201.01; SED program code 26754

Adolescence education (grades 7-12) programs are writing intensive.
Program requirements

Students who wish to pursue a bachelor of arts degree in Secondary Education for social studies teacher must complete a major in one of the following: Africana studies, American studies, anthropology, economics, history, political science, Puerto Rican and Latino studies, or sociology.

Study must include within the major, or in addition to courses in the major, study in economics, government, and at least 21 credits in the history and geography of the United States and the world, including Secondary Education 3584. Students preparing to become social studies teachers must fulfill the economics and government requirements by taking at least one course ( 3 credits) from among: History 3345, 3410, 3420, 3424, 3430, $3441,3442,3450,3457$, or a course in Political Science numbered between 3101 and 3160 ; and at least one course ( 3 credits) from among: History 3332, 3470, 3472, 3512 or Economics 2002, 2100, 2200, 3102, 3152, or 3202.

The following pedagogical courses in the Department of Secondary Education: Secondary Education 2001, 2002, 3401, 3402, 4408, 3456, 4482 (total of 28 credits):

Secondary Education 2001, 2002, 3401, 3402. This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.

Secondary Education 3456 may be started after completing Secondary Education 2001 and 2002.
Student teaching: Secondary Education 4401, 4408, and 4482.
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department. Degree programs in adolescence education and include a major in an appropriate department of the college and in the case of social studies may also include an approved selection of interdepartmental courses.

Completion of an adolescence education program as part of a major in English, one of the appropriate social sciences, mathematics, or one of the sciences qualifies students for New York State initial certification in adolescence education for grades 7 through 12.

Students qualifying for the initial certification in adolescence education may obtain an extension to teach English, social studies, mathematics, a modern language, or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

Students must complete 26 credits in the Department of Secondary Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

Students must have a B- in both Secondary Education 2001 and 2002, New York City Department of Education Fingerprint clearance, and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

To take Secondary Education 4401, 4404 and 4482, students must earn a B- or higher in Secondary Education 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of the program.

Students must earn a B- or higher in Secondary Education 4401, 4404 and 4482 and a GPA of 2.75 or higher in their major.

## Departmental Minor(s)

## Minor in American Music and Culture

## Department Requirements

Fifteen credits in advanced electives completed with a grade of C or higher, as follows:
American Studies 1001 or 1010.
Four of the following: American Studies 3702/Music 2103, American Studies 3704/Music 2102; American Studies 3706 or Music 2106; American Studies 3708 or Music 2107; Music 3101; Music 2101/Africana Studies 3236, Music 2104/Africana Studies 3237, Music 4430, 4431, 4940, 4941; Puerto Rican and Latino Studies 3125; additional special topics course or elective by permission of program director.

## Minor in American Studies

Department Requirements
American Studies 1001 or 1010.
One of the following: American Studies 3206, 3102, 3212, 3108, or another American Studies course approved by the program director. One of the following: American Studies 3306, 3702, 3706, 3302, 3304, 3406, or another American Studies course approved by the program director.
Two of the following: any American studies advanced electives.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## American Studies

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in American studies must complete at least 30 credits in the Program in American Studies with a grade of C or higher in each course. Students must meet with a program advisor to declare their intention to complete this sequence.

Concentration requirements:
American Studies 1001 or 1010.
Two of the following courses: American Studies 3206, 3102, 3212, 3108.
Two of the following courses: American Studies 3306, 3702, 3704, 3706, 3404, 3302, 3304, 3406.
One of the following courses: American Studies 3902, 4002.
Two of the following: History 3323, 3420, 3440, 3441, 3442, 3418, 3455, 3410, 3480, 3485, 4200.
Two of the following: English 3157, 3166, 60.1, 3151, 3152, 3153, 3163.

## Courses

## AMST 1001 Introduction to the American Experience

3 hours; 3 credits
Introduction to interdisciplinary approaches to American experience, identity, and culture. The American Dream as it is constructed by political realities and racial inequalities; immigration and ethnicity in national life and labor; mass and popular cultures; the global and transnational dimensions of American society. Introduction to the methodologies of American studies and to the process of connecting disciplines in order to understand how American national identity has been formed.

## AMST 1010 American Identities

3 hours, 3 credits
Examination of diverse American identities and the social and cultural histories that have shaped these identities. Exploration of the ways identities have been formed by race, gender, ethnicity, sexuality, class and other factors of difference, as well as the ways individuals and groups challenge or transcend such differences. Students will examine their own and others' identities, and the processes by which identities are made and re-made. Starting Spring 2018 Satisfies Pathways Flexible Core US Experience in Its Diversity requirement.

3 hours; 3 credits
The nineteenth and twentieth-century American West in history and myth. Emphasis on the development of the frontier myth through literature, dime novels, films, and other forms of popular culture. The relationship between myth and history; the development of the western hero; the role of race, gender, and violence. This course is the same as History 3435. (Not open to students who completed History 3490 [43.9] in spring 1988.)

Prerequisite: Core Curriculum 1220 [2.2], or History 3005, or permission of the program director or chair of the History Department.

## AMST 3104 North American Indians: Traditional and Contemporary

3 hours; 3 credits
Patterns of American Indian cultures north of Mexico; cultural and linguistic diversity; cultural adaptations and developments; contemporary Native Americans. This course is the same as Anthropology 3510.

Prerequisite: American Studies 3102 [20.3]; or Anthropology *1001 [1] or 2.1; or Core Studies 1 or 3 or 9 ; or six credits in social science courses; or permission of the program director.

Development of major American religious traditions, from indigenous practices, through traditions of early America, religious experiences of immigrants to America, and the interface between religious movements and the civil rights struggle, to the present. This course is the same as History 3416.

## AMST 3107W The Politics of Race and Nation

4 hours; 4 credits
Analysis of the politics of race and the struggles of people of color in the United States-including slavery and Reconstruction, the history of Native American conquest and removal, immigration and the changing meanings of whiteness, US imperialism, the liberation struggles of the 1960s, mass incarceration and post-9/11 racial politics. Focus on developing students' critical reading and analytical writing skills and on engaging with the issues of the day and their historical contexts in substantive, thorough form. Reading and writing-intensive course. (This course is the same as Political Science 3191W.)

Prerequisite: English 1012 and one of the following: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or permission of department.

## AMST 3108 American Dreams and Realities

4 hours; 4 credits
Interdisciplinary exploration of the dreams, myths, realities, and illusions of inclusion that have guided the American experience. Background and historical amnesia about indigenous displacements, settler colonialism, the after-lives of Atlantic world slavery, and the nation's founding ideals, documents, and classbased distinctions; capitalism, war, empire, and the realities of immigrant America; historical exclusions and the struggle for racial, ethnic, and gender inclusions in the economic, political, social, and cultural life of the United States; capitalist competition, white privilege, the myths of meritocracy and the "self-made" American, and the realities of the working poor; psychological consequences of "failing" in American society; status consciousness/anxiety and the overworked, over-extended, and sleep-deprived American. Students will complete a semester-long, collaborative research project focused on the everyday lives of ordinary Americans via archives both digital and physical, field work involving sites of history making and memory, and/or the creation of oral history collections. This course is the same as History 3472. (This course is not open to students who completed History 3490 or American Studies 3902 during Fall 2005 or Scholar's Program 50 during Fall 2007.)

## AMST 3124 Black-Jewish Activism: Coalition Building in America

3 hours; 3 credits
History of American Jewish and African American activism around civil rights and racial justice issues in the twentieth century. This course is the same as Africana Studies 3124 and Judaic Studies 3124.

## AMST 3158 Race, Law and the State

3 hours; 3 credits
Analysis of the politics of race and the law-including the role of the law in slavery and Reconstruction, the post-Reconstruction development of the American penal system, the history of Native American conquest and land rights, immigration and the changing definitions of citizenship, the liberation struggles of the 1960s and
the reaction of law enforcement, mass incarceration and post-9/11 racial politics. Focus on developing students' critical reading and analytical writing skills and on engaging with the issues of the day and their historical contexts in substantive, thorough form. Reading and writing-intensive course. This course is the same as POLS 3158.

Prerequisite: Political Science 1001 or 1002 or 1003 or 1004 or 1005 or 1006 or 1007 , or English 1010 or equivalent, or permission of program director.

## AMST 3206 Hard Times: The Great Depression

3 hours; 3 credits
Reexamination of the American Dream. Effect of the national experience of poverty and "failure" of the Puritan ethic. The dust bowl and migration of Okies; rise of proto-fascist factions; bread lines; Hollywood films.

## AMST 3212 Decade in Crisis: The 1960s

3 hours; 3 credits
Counterculture and its challenge to traditional values. The Beat Generation, its poetry, literature, and music. Political papers, autobiographies, documentary film. (Not open to students who have completed American Studies 4002 [71], spring, 1989, or spring, 1991.) Starting Fall 2019 satisfies Flexible Core US Experience in its Diversity requirement.

Prerequisite: sophomore, junior, or senior standing or permission of the program director.

## AMST 3302 Private Lives: American Autobiography

4 hours; 4 credits
Autobiography and its special importance to the process of defining the self in America. Examination of the theme of the New World and the "new" man and the "new" woman. The relation between the private identity and national character as revealed in the autobiographical writings of immigrants, workers, and plainfolk. This course is the same as English 3156.

Prerequisite: English 1012 [2].

## AMST 3304 The Immigrant Experience in Literature, Film, and Photography

4 hours; 4 credits
The experience of immigrant groups as recorded in autobiography, folklore, and fiction. Becoming an American as recorded in photographs and film. Exploring relationships between text and image. This course is the same as English 3165. (Not open to students who have completed American Studies [70].)

Prerequisite: one of the following: English 1010 [1], or 1.2, or 1.7.

## AMST 3306 Reading Race

3 hours; 3 credits
Race and American political and literary culture from the American Revolution to urban modernism. The South as a paradigm of American culture, constructions of "race," tensions between democratic ideals and elaborate race and class distinctions. Readings from Thomas Jefferson, slave narratives, Herman Melville, Uncle Tom's Cabin, Mark Twain, Uncle Remus, Charles Chesnutt, and others. Cultural legacies and entanglements of minstrelsy, the blues, and jazz. This course is the same as Africana Studies 3228.

## AMST 3307 Transnational America

4 hours; 4 credits
Literary works, historical documents, and theoretical paradigms that situate U.S. cultural production in relation to places outside its borders, with particular attention to the Western hemisphere.
Topics include: globalization, first contact between Europe and the Americas, cultural dimensions of U.S. foreign policy, forms of expression arising from diaspora experience, and the reception of U.S. culture abroad. This course is the same as English 3167.

Prerequisite: English 1010

## AMST 3310 Digital Life Stories: Chicana/Latina Testimonio

3 hours; 3 credits
Latina feminist tradition of testimonios, autobiographical narratives, short-stories, poems, and oral histories to reveal the complexity of Chicana/Latina identity. The connection between life experience and new knowledge creation. Theorize Latinidades at the intersection of racism, sexism and heterosexism. Rethink feminism, women, gender and sexuality studies, Latin@, American and cultural studies. Students will create their own digital life stories. This course is the same as Women's and Gender Studies 3152 and Puerto Rican and Latino Studies 2250.

Prerequisite: English 1010 or equivalent.

## AMST 3402 American Folklore

4 hours; 4 credits
Myths, legends, tales, proverbs, riddles, songs, dances, beliefs, rituals, celebrations, and folk art of American folk groups. Ethnic, regional, and occupational folklore. The relationship of oral folk culture to popular expression and written literature. Independent work in collecting folklore. This course is the same as English 3157.

Prerequisite: one of the following: English 1010 [1], or 1.2, or 1.7.

## AMST 3404 New York City Folklore

4 hours; 4 credits
Folklore of the streets and neighborhoods of New York City. The urban environment as a region generating its own folklore and traditions. Customs, language, and symbols of urban life, past and present. Introduction to problems of fieldwork and methods of collecting urban folklore. This course is the same as English 3159.

Prerequisite: sophomore or junior or senior standing.

## AMST 3406 American Popular Culture

3 hours; 3 credits
Introduction to the history and interpretation of American popular arts and culture. Popular music, theater, radio, film, television, and advertising. Popular expressions as shapers and reflectors of American ideas about nationalism, class, gender, ethnicity/race, region, and generation. This course is the same as History 3462.

Prerequisite: one of the following: English 1010 [1], or 1.2, or 1.7.

## AMST 3501 Our Digital Planet: Crowdsourcing and the Cloud

3 hours; 3 credits
Overview of geospatial technologies including Geographic Information Systems (GIS), Global Positioning Systems (GPS), remote sensing; geospatial technology applications in government,
business, research; public participation in activities such as citizen science and crowdsourcing; societal implications of the digital Earth, including issues such as privacy, social justice and equity, data quality, and surveillance. This course is the same as SUST 2201.

## AMST 3502 Mapping Inequalities: Revealing and Combating Racism in America

## 3 hours; 3 credits

Relationship between environment, sustainability, and landscape, focusing specifically on the production of inequality. From segregation to gentrification, from slavery to global capitalism and disaster capitalism, inequality is produced spatially and impacts our ability to build sustainable environments and societies. Understanding the geography of inequality helps illustrate the roots of inequality, as well as possible solutions. This course is the same as SUST 2101.

## AMST 3702 Music of the United States

3 hours; 3 credits
Music in the United States from a historical perspective, including folk, popular, jazz, and concert hall traditions. Emphasis on the interaction of European, African, and various ethnic styles in America. The relationship of music to select movements in American theater, dance, and art. This course is the same as Music 2102.

Prerequisite: Core Studies 2.2 or Core Curriculum 1130 [1.3] or Music 1300 or permission of the director.

## AMST 3704 Music in New York City

2 hours lecture, 3 hours fieldwork; 3 credits
Exploration of music performance in the music institutions and diverse cultural resources of New York City. Students will attend musical performances and carry out field documentation of a local music culture or institution. This course is the same as Music 2103.

Prerequisite: Core Studies 2.2 or Core Curriculum 1130 [1.3] or Music 1300 or permission of the director.

## AMST 3706 American Popular Music and Technology

3 hours; 3 credits
Developments in American popular music traced through an examination of the history of sound technology. The impact of technological mediation on musical aesthetics, with particular emphasis on blues, folk, jazz, rock'n'roll, soul, hip hop, and electronic music. This course is the same as Music 2106. (Not open to students who took American Studies 3902 [60] or Music 3493 [49.3] in spring 2007.)

Prerequisite: Core Studies 2.2 or Core Curriculum 1130 [1.3] or Music 1300 or permission of the director.

## AMST 3708 Performing America: Nation, Identity, and the Arts

4 hours; 4 credits
Explores the ways in which American national identity has been performed and how performance plays a role in citizens' selfconception. Examples drawn from early US drama, nineteenthcentury melodrama and minstrelsy, Broadway musicals, opera, film, television, and digital media as well as performances of self in everyday life. This course is the same as Music 2107.

## AMST 3709 Performing Blackness

3 hours; 3 credits
Inventing identity through black performance. The appropriation and performance of race towards widely divergent ends within and outside of African American culture. Self empowerment through racial stereotyping. Performance as a principal medium of cross cultural imagination and self definition. The "subject" in opposition to the "other." Examination of performance structures emerging from mimicry and appropriation. Performance styles include: the exotic shows of 19th century Europe, the blackface minstrel theater, Carnival in the Americas, popular culture. This course is the same as Africana Studies 3215.

Prerequisite: English 1010

## AMST 3710 Disability in America

3 hours; 3 credits
This course explores how American culture continues to shape and reflect ideas about ability and disability. Topics include: History of disability in the social, political, and environmental fabric of American society; talking about disability in medical ethics; negotiating constructed boundaries, stereotypes, and representations of disability; disability in arts and performance; American disability memoires. Students will be expected to participate in class and group work, do low-risk writing, give presentations, and complete final papers/projects. This course is the same as MUSC 4435 and PHIL 3304.

Prerequisites: ENGL 1010

## AMST 3902 Special Topics in the American Experience

3 hours; 3 credits each term
Exploration of an aspect of American cultural experience. Topics vary from term to term. Course description may be obtained in the program office before registration. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: sophomore or junior or senior standing

## AMST 3904 Special Topics in American Studies

4 hours, 4 credits
Exploration of an aspect of American cultural experience. Topics vary from term to term. Course description may be obtained in the program office before registration. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: sophomore or junior or senior standing or permission of the instructor and the director of the program.

## AMST 4002 Seminar

3 hours; 3 credits
Special problems of interdisciplinary research and writing. Topics vary from term to term. Course descriptions may be obtained in the program office before registration. A student completing the course with distinction is recommended for honors in the program.

Prerequisite: six credits of American studies courses or permission of the instructor and the director of the program.

## AMST 4004 Seminar

4 hours, 4 credits
Special problems of interdisciplinary research and writing. Topics vary from term to term. Course descriptions may be obtained in the
program office before registration. A student completing the course with distinction is recommended for honors in the program.

Prerequisite: Six credits of American studies courses or permission of the instructor and the director of the program.

## AMST 5003W Independent Research

Minimum of 9 hours conference and independent work; 3 credits Independent research supervised by a faculty member on an approved topic. The project must involve research in more than one field that culminates in a full-length research paper based on materials drawn from primary, secondary, and/or field data sources. Writing-intensive course.

Prerequisite: junior or senior standing, English *1012 [2], nine credits of American Studies courses, permission of the program director and of the sponsoring faculty member.

## AMST 5005 Internship

7 hours field work, 1 hour conference; 3 credits
Students work seven hours a week, under supervision, in American Studies-related positions or fields. Final report based on the internship experience. Students may take this course for credit twice.

Prerequisite: At least six credits of American studies courses or permission of the instructor and the program director.

The following inactive course(s) will only be offered if there is sufficient demand:
AMST 5002 Independent Research

## Anthropology

Department office: 3307 James Hall
Phone: 718.951.5507
Full-time Faculty
Professors: Antoniello, Cavanaugh
Associate Professors: Chester, Hejtmanek, Schiller
Assistant Professors: Britt, Chowdhury, Ference, Rahman

Anthropology is the study of people: how we evolved biologically and differ cross-culturally, how we live and interact with one another, and the contexts people build and within which we live our lives. Using a four-field approach - sociocultural anthropology, archaeology, biological anthropology, and linguistic anthropology - the department bridges the social and natural sciences to understand the biological, social, cultural, and linguistic factors contributing to the commonalities and differences of human behavior, past and present. Sociocultural anthropologists seek to collaboratively develop knowledge of the beliefs, ideologies, and organization of societies by participating in and observing the everyday lives of people. Archaeologists look at how people live and lived by studying the things they leave and left behind, both in the deep past but also more recently. Biological anthropologists study how humans evolved and how primates, both living and extinct, inform us about the evolution of human biology, behavior and variation, and about human and non-human primates' place in nature. Linguistic anthropologists study how language use relates to who we are, where we come from, and who we aspire to be. We focus on power: what it is, how it works, why it works, and what power does to people. All four fields emphasize ethical engagements with people and their environments, both past and present, undertaking research that is comparative and holistic, and that complicates categorization of people, whether biological, culturally-constructed, or even those that have emerged through scholarship itself.

The Brooklyn College Department of Anthropology offers a Bachelor of Arts degree in anthropology, a minor in an interdisciplinary minor in law and society, and an interdisciplinary minor in global studies. It also offers a Bachelor of Arts degree in adolescence education for social studies teachers, and a concentration for students in the early childhood education program (birth-grade 2) and the childhood education program (grade 1-6).

The courses of the Department of Anthropology present the richness in human variation and cultural diversity, and offer anthropological perspectives as ways of thinking, methods of problem solving, and models for ongoing learning. Undergraduate majors in our department have ongoing opportunities to do hands-on research in laboratory and fieldwork studies conducted by full-time faculty members, here and abroad.

For many of our students, anthropology becomes a lifelong framework for integrating and organizing knowledge. Graduates are equipped to go on to many different careers, especially those benefiting from an appreciation of diversity and the human experience, ability to do independent research and work in groups, and bridge the social and biological dimensions that define our lives. Our graduates find employment in education, business, nonprofit, and governmental settings that require a background in the diversity of human behavior. Many of our students pursue graduate degrees in anthropology, medicine, law, and public health (to name just a few) to further their career goals. Graduate degrees are available at various CUNY campuses and a doctorate in anthropology is offered by the Graduate Center of the City University of New York.

## B.A. degree program in anthropology HEGIS code 2202; SED program code 02102

Department requirements (36-39 credits)
Three courses chosen from Anthropology 1100 (Culture and Society), 1200 (Human Origins), 1300 (People and Language), or 1400 (Digging the Past).

One field or laboratory course chosen from: Anthropology 3470 (Summer Archaeological Field School (Intensive Program)), 3015
(Anthropology Abroad), 3016 (Fieldwork in Anthropology), 3480 (Intersession Archaeological Field School), 3475 (Archaeological Field School: Site Supervision), 4110 (Summer Ethnographic Field School), 3240 (Osteology), 3440 (Zooarchaeology), 3156 (India Global Health: Ethnography), 3301 Language and Culture, ANTH 3180 Visual Anthropology, ANTH 3190 Anthropology of Media, ANTH 4635 Seminar in Museum Techniques

Anthropology 4601 Anthropological Theory

Anthropology 4000 (Senior Seminar in Anthropology)
Anthropology 4001 (Selected Topics in Anthropology) Co-requisite with Anthropology 4000
Eighteen additional elective credits; 12 credits must be in courses numbered 3000 and above. 6 credits may be in courses numbered 2000 and above.

Honors in Anthropology
GPA of 3.5 or higher in Anthropology. Honors in two courses (with a grade of B or higher): one an upper-level (3000 or above) elective course and the other Senior Seminar (ANTH 4000).

Concentrators should take one of the following courses:
ANTH 3120W for cultural anthropology concentration;
ANTH 3301 for linguistic anthropology concentration;
ANTH 3240 or 3425 for biological anthropology concentration;
ANTH 3420 for archaeology concentration
Majors should consult a department counselor each year in planning their programs.
Students should plan on taking a field or laboratory course ( $3470,3015,3480,3475,4110,3240,3440,3156$ or 4635 ) as soon as possible after finishing the 1100-1400 sequence. Majors should take 4601 Anthropological Theory in the spring of their junior year; 3120W Ethnography or 3245 Research Methods in Anthropology in the fall of their senior year; and the senior seminar (4000) and its co-requisite (4001) in the spring of their senior year.

## B.A. degree program in adolescence education: social studies teacher HEGIS code 2201.01; SED program code 26754

Adolescence education (grades 7-12) programs are writing intensive.

## Program requirements

Students who wish to pursue a bachelor of arts degree in Secondary Education for social studies teacher must complete a major in one of the following: Africana studies, American studies, anthropology, economics, history, political science, Puerto Rican and Latino studies, or sociology.

Study must include within the major, or in addition to courses in the major, study in economics, government, and at least 21 credits in the history and geography of the United States and the world, including Secondary Education 3584. Students preparing to become social studies teachers must fulfill the economics and government requirements by taking at least one course ( 3 credits) from among: History 3345, 3410, 3420, 3424, 3430, $3441,3442,3450,3457$, or a course in Political Science numbered between 3101 and 3160 ; and at least one course ( 3 credits) from among: History 3332, 3470, 3472, 3512 or Economics 2002, 2100, 2200, 3102, 3152, or 3202.

The following pedagogical courses in the Department of Secondary Education: Secondary Education 2001, 2002, 3401, 3402, 4408, 3456, 4482 (total of 28 credits):

Secondary Education 2001, 2002, 3401, 3402. This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.

Secondary Education 3456 may be started after completing Secondary Education 2001 and 2002.
Student teaching: Secondary Education 4401, 4408, and 4482.
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department. Degree programs in adolescence education and include a major in an appropriate department of the college and in the case of social studies may also include an approved selection of interdepartmental courses.

Completion of an adolescence education program as part of a major in English, one of the appropriate social sciences, mathematics, or one of the sciences qualifies students for New York State initial certification in adolescence education for grades 7 through 12.

Students qualifying for the initial certification in adolescence education may obtain an extension to teach English, social studies, mathematics, a modern language, or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

Students must complete 26 credits in the Department of Secondary Education as specified above.

Admission requirements and academic standing

Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

Students must have a B- in both Secondary Education 2001 and 2002, New York City Department of Education Fingerprint clearance, and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

To take Secondary Education 4401, 4404 and 4482, students must earn a B- or higher in Secondary Education 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of the program.

Students must earn a B- or higher in Secondary Education 4401, 4404 and 4482 and a GPA of 2.75 or higher in their major.

## Departmental Minor(s)

## Minor in Anthropology and Archaeology

Department requirements: fifteen credits including at least one introductory course (ANTH 1100, 1200,1300, or 1400) and twelve credits of advanced electives in anthropology with a grade of C or higher in each course. Each advanced elective course must be completed at Brooklyn College.

## Interdepartmental Minor(s)

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C- or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Minor in Law and Society

Department Requirements
Twelve credits chosen from the courses of two or more departments as specified below. Each course must be completed with a grade of C or higher.
Africana Studies 3330, 3331; Anthropology 3160, 3162; Classics 3234; Political Science 3120, 3121, 3130, 3123, 3122, 3240; Sociology 3503, 3504.

Courses in anthropology presented for this minor may not be counted toward the anthropology major.

Courses in political science presented for this minor may not be counted toward the political science major.

Courses in sociology presented for this minor may not be counted toward the sociology major.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Anthropology \& Archaeology

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in anthropology must complete at least 30 credits in the Anthropology Department with a grade of $C$ or higher in each course. Students must meet with a department adviser to declare their intention to complete this sequence.

Concentration requirements: (30 credits)

## Concentration requirements: (30 credits)

Three courses chosen from: Anthropology 1100 (Culture and Society), 1200 (Human Origins), 1300 (People and Language), or 1400 (Digging the Past).

One field or laboratory course chosen from: Anthropology 3015 (Anthropology Abroad), 3470 (Summer Archaeological Field School (Intensive Program)), 3475 (Archaeological Field School: Site Supervision), 3480 (Intersession Archaeological Field School), 4110 (Summer Ethnographic Field School), 3016 (Fieldwork in Anthropology), 3240 (Osteology), 3440 (Zooarchaeology), 3156 (India Global Health: Ethnography), or 3301 (Language and Culture).

An additional 18 credits chosen from anthropology courses numbered 2000 and above.

## Recommendations for prospective graduate students

To facilitate evaluation of prospective graduate students, a seminar or independent studies course in anthropology and archaeology is strongly recommended.

## Courses

*Courses marked with an asterisk ( ${ }^{*}$ ) are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in this department.
+These courses fulfill a general education requirement.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by successful completion of this independent work.

## Introductory courses

## ANTH *+1100 Culture and Society

## 3 hours; 3 credits

Examination of various forms of human cultural diversity and foundational cultural anthropology concepts, such as kinship, religion, gender, political and economic systems with hands-on fieldwork. Not open to students who have completed Anthropology 2100. Starting Fall 2019 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

## ANTH * +1200 Human Origins

3 hours; 3 credits
Human origins and adaptations. Introduction to evolutionary mechanisms and processes, genetics, classification, human anatomy and fossils. Reconstructing human behavior by surveying the lifestyles and ecology of our close primate relatives. Satisfies Pathways Required Core Life and Physical Sciences requirement. (Not open to students who have completed Anthropology 4 or 2200.)

## ANTH * +1300 People and Language

3 hours; 3 credits
Language as a human universal practice. Survey of linguistic anthropological methods and analysis of language data. Linguistic diversity, dialects, social usage, change. Relationships among society, language, and culture. (Not open to students who are enrolled in or have completed Anthropology 2300 or Linguistics 2001.) Starting Fall 2019 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

## ANTH *1400 Digging the Past

3 hours; 3 credits
Introduces the multidisciplinary nature of archaeology; origins of agriculture and the rise of early civilizations; practical experience in aspects of archaeological field methods and analytical techniques; examination of stone, ceramic, and metal artifacts; wood, seed, and pollen, human and non-human bone materials. This course is the same as Classics 3210. (Not open to students who are enrolled in or have completed Anthropology 20 or 2400 or Classics 2.2 or 19
or 3210 or 60. )

## Exploring anthropological issues

## ANTH +1105 Comparative Studies in Cultures and Transformation

## 3 hours; 3 credits

Multidisciplinary exploration of the cultures and history of at least two societies. Thematic emphasis. Themes drawn from issues such as colonization, gender, urbanization, social movements, race and ethnic relations, north/south/east-west dyads, religion, nationalism, geography, encounter, diasporic communities, core-periphery, modernity and modernization, globalization, and transnationalism. A minimum of two world areas chosen from Africa, Asia, the Caribbean, Latin America, the Middle East and the Pacific Islands. Comparison of selected cultural clusters and social themes. (Not open to students who have completed Core Curriculum 3208.) 2017-2018: Satisfies Pathways College Option requirement. Starting Fall 2018 Satisfies Pathways Flexible Core World Cultures and Global Issues requirement.

## ANTH +1205 Studies in Forensic Science

3 hours; 3 credits
Introduction to forensic science, including modern techniques of forensic analysis. Collection and preservation of physical evidence at crime scenes. Authentic criminal cases. (Not open to students who have completed Core Curriculum 3307 or CHEM 1037.) 2017-2018: Satisfies Pathways College Option requirement. 2018-2019 Satisfies Pathways Flexible Core Scientific World requirement and College Option requirement. Starting Fall 2019 satisfies Flexible Core Scientific World requirement. Same as CHEM 1037.

## ANTH 2210 Anthropology of Sex

3 hours; 3 credits
Sexual behavior as a cultural universal. Role and function of sex viewed cross-culturally. Sexual practices in non-Western societies.

## ANTH 2215 Anthropology of Race

## 3 hours; 3 credits

Role of anthropology in scientific revolt against racism, race prejudice, racist theories. Relationship of human biological variation to cultural variation. History of the concept of race. Critical evaluation of contemporary theories. Facts and fallacies of race.

## ANTH 2216 Scientific Revolutions

## 3 hours; 3 credits

The nature and rationale of scientific revolutions. A critical examination of how scientific theories are justified and why scientific theories change. The development of new theories and the rise of modern science. Illustration and examination of theory change. (Not open to students who have completed Core Curriculum 3306.) 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement.

Prerequisite: English 1010 or permission of the department and junior standing.

## Cultural anthropology

## ANTH 2140 Anthropology of Food

3 hours; 3 credits
Eating and food provide some of the most basic ways in which humans define themselves. A cross-cultural consideration of nutrition, food production and food as social practice will help to define the place of food and eating in basic human practice. (Not open to students who completed Anthropology 3010 in Fall, 1999 or Anthropology 3140.)

## ANTH 3120W Ethnography

3 hours lecture, 2 hours lab; 4 credits
Survey of early and contemporary ethnography as a research method and mode of writing. Analysis and application of ethnographic techniques: ethnographic recording, participant observation, and focused interviewing. Analysis of information collected. Includes representative works from various regional specialties, theoretical perspectives, and historical periods. Techniques of fieldwork and analysis. Writing-intensive section.

Prerequisite: Anthropology *1000, or 1100 or 1200 or 1300 or 1400 or permission of the chairperson.

## ANTH 3126 Generation Next: Adolescence and Youth Culture in Cross-Cultural Perspective

3 hours; 3 credits
Critical overview of youth-in-context - how youth actively engage with the world around them, how youth are talked about, how they talk about themselves. Analysis of who youth are from an interdisciplinary, theoretical approach including cultural anthropology, sociology, psychology, psychological anthropology, feminism, gender theory, postcolonial theory, political economy, and critical race theory. Readings include African literature, memoirs, international labor policy research, urban ethnography, theory texts, and journal articles. This course is the same as Children and Youth Studies 3126. Not open to students who have completed Children and Youth Studies 3126.

Prerequisite: Anthropology 1100 or Children and Youth Studies 2100.

## ANTH 3130 Urban and Transnational Anthropology

3 hours; 3 credits
Cross-cultural study of adaption to the urban milieu. Sociocultural influences on urban life, effects of migration experience, social stratification, class structure. Ethnicity and the organization of multiethnic societies. Methods and problems in the analysis of urban systems. (Not open to students who are enrolled in or have completed Anthropology 3135.)

Prerequisite: Anthropology *1000 or 2100 or 1100 or 1300 or 3135 or permission of the chairperson.

## ANTH +3135 The American Urban Experience: Anthropological Perspectives

## 3 hours; 3 credits

Study of the diversity of American urban life and modes of analyzing sociocultural scenes, communities, and urban institutions. Satisfies Pathways Flexible Core US Experience in Its Diversity requirement.

## ANTH 3145 Climate Justice and the Caribbean

## 3 hours, 3 credits

Introduction to the physical and environmental characteristics of the Caribbean and the issues challenging these settings and concepts. Survey of theories of climate justice emerging from these concerns. Focus on the relationship of Caribbean history and development to the regional issues, policies and practices that impact the environment. Study of contemporary environmental justice initiatives. Students may take this course for credit once. This course is the same as CAST 3130, AFST 3350, and PRLS 3130.

Prerequisite: Sophomore, Junior or Senior Standing

## ANTH 3150 Anthropology of Health and Disease

3 hours; 3 credits
Health beliefs and health behaviors of various groups of people; the history of diseases; the training and practices of health specialists; the unrecognized effects on both physical and mental health of sociocultural factors; the relationship between human health and environment.

Prerequisite: Anthropology *1000 or Anthropology 2200 or 1100 or 1200 or 1300 or 1400 or 3135 or Biology *1080 or permission of the chairperson.

## ANTH 3155 Health and Globalization

3 hours; 3 credits
Cross-cultural study of the effects of globalization on the health of contemporary human populations. Assessment of the ways that physiological factors are mediated by cultural and social processes. Problems of social inequality and power on primary determinants of health and health care. International health, human rights and health, AIDS pandemic, health and the environment. This course is the same as Health and Nutrition Sciences 3111.

Prerequisite: Anthropology 1100 or 1200 or 1300 or 1400 or 3135 or Biology 1080 or permission of the chairperson.

## ANTH 3160 Political Anthropology

3 hours; 3 credits
Political and legal institutions in cross-cultural perspective. Problems of political boundaries, allocation of authority, resolution of conflict. Impact of modern nation-states on other societies.

Prerequisite: Anthropology 1100 or 1105 or 1300 or 3135 or permission of the chairperson.

## ANTH 3162 Anthropology of Law and Order

3 hours; 3 credits
The use of force by individuals and governments. Nature of law. Cross-cultural perspectives on crimes, terrorism, and police and military organizations. Case studies from various cultures at band, tribe, chiefdom, and complex industrial levels of organization. (Not open to students who have taken Anthropology 3010 [10] in Fall, 1992, or Spring, 1994.)

Prerequisite: Anthropology 1000 or Anthropology 2100 or 1100 or 1105 or 1300 or 3135 or permission of the department chairperson.

## ANTH 3165 Economic Anthropology: Work, Wealth,

 Culture3 hours; 3 credits
Broad examination of the field of economic anthropology. Explains
and explores approaches to understanding human economic behavior, from production to consumption, including circulation, exchange and redistribution. Special emphasis on topics of income inequality, political economy, unemployment, global capitalism, neoliberalism, and development.

Prerequisite: Anthropology 1100 or 1200 or 1300 or 1400 or permission of the chairperson.

## ANTH 3170 Women: Anthropological Perspectives

3 hours; 3 credits
Cross-cultural analysis of women's lives. Problems of nature and nurture, gender stereotyping and self-images, the position of women in all cultural spheres, and changes over the life cycle. This course is the same as Women's and Gender Studies 3218.

Prerequisite: Anthropology 1000 or 2100 or 1100 or 1105 or 1300 or 3135 or Women's and Gender Studies 1001 or permission of the chairperson

## ANTH 3180 Visual Anthropology

3 hours lecture; 2 hours laboratory; 4 credits
Anthropological study of visual arts in cultural contexts including historical and contemporary use of visual media by anthropologists; conceptions of art and aesthetics in other cultures; various approaches to the study of the arts: functional, psychological, symbolic, structural; theory of ethnographic film; challenges of cross-cultural representation in colonial and post-colonial contexts; concepts of objectivity and realism. Includes lectures and some practical work with visual media. Prerequisite: Anthropology *1000 or 2100 or 1100 or 1200 or 1300 or 1400 or a Pathways required or flexible core course or permission of the chairperson.

Prerequisite: Anthropology *1000 or 2100 or 1100 or 1105 or 1300 or permission of the chairperson.

## ANTH 3185 Anthropology of Religion

3 hours; 3 credits
Study of religions in their cultural contexts; magic and witchcraft as aspects of religion; myths, rituals, and symbols; priests and shamans. Change in religions. Theoretical approaches.

Prerequisite: Anthropology *1000 or 2100 or Anthropology 1100 or 1300 or 1105 or Studies in Religion 3003 or 3005 or permission of the chairperson.

## ANTH 3190 Anthropology of Media

3 hours lecture; 2 hours laboratory; 4 credits
Anthropological approaches to production, reception, circulation, and distribution of various forms of media around the world; topics include public spheres, national communities, cultural imperialism, transnational circuits of production and consumption, virtual worlds, and mediated social movements. Includes lectures and independent ethnographic research on media production and consumption. This course is the same as Television, Radio and Emerging Media 3190.

Prerequisite: Anthropology *1000 or 2100 or 1100 or 1200 or 1300 or 1400 or Television, Radio and Emerging Media 1165 or a Pathways required or flexible core course or permission of the chairperson.

## ANTH 3199 Psychological Anthropology

3 hours; 3 credits

Cross-cultural exploration of the cultural and psychological dimensions of human behavior emphasizing non-literate and traditional behavior. Cultural context of personality formation, cognition, illness and curing, altered states of consciousness. Research techniques, theory, contemporary issues. (Not open to students who have completed Anthropology 56.)

Prerequisite: Anthropology *1001 or 2.1 or 1100 or 1105 or 1300 or Psychology 1000 or permission of the chairperson.

## ANTH 4104W Ethnographic Theory and Methods

3 hours; 3 credits
Major schools of anthropology; their distinctive approaches, concepts, and methods in the context of engaging in fieldwork. Techniques of fieldwork and analysis; ethnographic recording, participant observation, and focused interviewing. Analysis of information collected. Writing-intensive section. (Not open to students who have completed Anthropology 70.3, 71, or 71.3.)

Prerequisite: Anthropology *1000; 2200 or 2300 or 2400 or 1100 or 1200 or 1300 or 1400 ; English *1012; or permission of the chairperson.

## Biological anthropology

## ANTH + 2205 Forensic Anthropology

$3 \mathrm{hrs} ; 3$ credits
The techniques of forensic identification as applied to medicolegal problems. Methods, procedures, and illustrative case studies pertinent to the reconstruction of biological profiles, and cause and manner of death. Hands-on work in the computer lab is required. Satisfies Pathways Flexible Core Scientific World requirement.

## ANTH 3230 Primates

3 hours; 3 credits
Field and lab studies of Prosimians, Old and New World Monkeys, Great Apes. Comparative studies of morphology, ecology, social organization, territoriality, dominance, communication. Assessment of how different primates have acquired their ecological features through evolutionary processes. Appraisal of current research. (Not open to students who have completed Anthropology 25.)

Prerequisite: Anthropology *1000, 1002, 2200, or 1200 or permission of the chairperson.

## ANTH 3235 Primate Evolution: The Fossil Record

3 hours; 3 credits
Survey of the most important and spectacular fossils from all the major groups of nonhuman primates of the last 65 million years. Connections between fossil form and function; how the groups originated and evolved their unique characteristics and behaviors; parallel adaptations in locomotion and diet; special senses of sight and smell.

Prerequisite: Anthropology 1200 or 3230 or permission of department chairperson.

## ANTH 3240 Osteology

2 hours lecture, 2 hours laboratory; 3 credits
Functional aspects of the human skeleton with reference to evolution, race, age, sex. Intensive analysis of skeletal populations. Understanding biological and environmental influences in determining skeletal differences.

Prerequisite: Anthropology 2200 or 1200 or both Physical Education/Kinesiology 3271 and 3275 ; or Health and Nutrition Sciences 2300; or Biology 3081 or permission of the chairperson.

## ANTH 3245W Research Methods in Anthropology

3 hours plus independent laboratory work; 4 credits Hands-on, quantitative course introducing field and laboratory research methods in biological anthropology and archaeology, including methods for capturing and quantifying the morphology of anthropological specimens and artifacts. Students will conduct their own field, laboratory or literature-based research projects to get experience in study design, data collection, analysis and interpretation, and effective communication of research. Case studies and student projects help place these methods in scientific context. Writing intensive section.

Prerequisites: ENGL 1012; Anthropology 1200 or 1400 or 3230 or 3240 or permission of department chair.

## ANTH 3250 Paleoanthropology

3 hours; 3 credits
Mechanisms of evolutionary change, paleontological and archaeological evidence bearing on the phylogenic history of primates and humans, evaluation of the numerous interpretations of that evidence.

Prerequisite: Anthropology 1200 or 3235 or Core Studies 8.1 or Biology 3081 or permission of the chairperson.

## ANTH 3260 Human Variation

2 hours lecture, 2 hours laboratory; 3 credits Range of variation and change due to growth, age, sex, race, constitutional differences. Techniques by which such differences are determined.

Prerequisite: Anthropology 1002 or 2200 or 1200; or Biology 2073; or both Physical Education/Kinesiology 3271 and 3275; or Health and Nutrition Sciences 2300; or permission of the chairperson.

## ANTH +3265 Human Anatomy and Physiology 1

3 hours lecture; 3 hours laboratory; 4.5 credits A foundation in the form and function of the human body. Exploration and development of an understanding of anatomical terminology, basic science foundations, cellular structure and transport, tissues, integumentary system, skeletal system, muscular system and nervous system. This course is the same as Biology 1501, Health and Nutrition Sciences 2302, and Kinesiology 3281. STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: 1) high school chemistry or the equivalent taken within the past five years or satisfactory performance on a chemistry competency test, and 2) high school biology or the equivalent taken within the past five years or satisfactory performance on a biology competency test.
Recommended: College chemistry (introductory/general) and college biology (introductory/general) are recommended before taking this course.

## ANTH +3266 Human Anatomy and Physiology 2

3 hours lecture; 3 hours laboratory; 4.5 credits Introduction to the form and function of the human body.

Exploration and development of an understanding of blood, heart, blood vessels, respiratory system, digestive system, metabolism, urinary system, fluid \& electrolyte balance, reproductive system, immune system and development. This course is the same as Biology 1502, Health and Nutrition Sciences 2303, and Kinesiology 3285. STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: One of the following: Anthropology 3265, Biology 1501, Physical Education and Exercise Science/Kinesiology 3281, or Health and Nutrition Sciences 2302.

## ANTH 3425 Human Evolutionary Anatomy: An Anthropological Approach

3 lecture hours, 4 laboratory hours; 5 credits Affords students the unique opportunity to view both cadaveric material at Mount Sinai School of Medicine (MSSM) or SUNY Downstate and learn about new and powerful technological imaging (CT, MR, laparoscopic viewing) that allow visualizations of the body previously unavailable. Labs and lectures emphasize a system-based introduction to human anatomy and consideration of its evolutionary context; emphasis on visible organs and their relationship to the skeleton; consideration of the skeletal evidence for human anatomical evolution. (Not open to students who have taken Physical Education and Exercise Science/Kinesiollogy 3275.)

Prerequisite or corequisite: any one of the following: Anthropology 1002, 2200, 1200, 3230, 3240, 3250, 3260; or Biology 1001, 1080; or permission of instructor.

## Linguistic anthropology

## ANTH 2320 Texting and Talking

3 hours; 3 credits
The role that language plays in media, and the ways that media impact language use. Cross-cultural comparisons of media use. Print media; television, radio and cinema; new media forms. Case studies from around the world to examine social, political, economic aspects of language and media. Individual and group projects focusing on different topics and types of media.

## ANTH 3301 Language and Culture

3 hours lecture, 2 hours lab; 4 credits
Language as cultural practice. Relation to various aspects of culture and society. Social use of language. Language and identity, language attitudes, language and power, and language and social interaction. Hands-on research methods, through lab-time and independent projects.

Prerequisite: Anthropology 1100 or 1300 or 1105 or 3135 or Linguistics 2001 or permission of the chairperson.

## ANTH 3310 Anthropology of Language, Sex, and Gender

3 hours; 3 credits
Language, as a human universal, is uniquely available for defining, maintaining, and enacting the cultural categories of gender and sexual orientation. This course offers a cross-cultural perspective on the relationships between language and gender, which helps us understand both how we use language in gender-specific ways and how gender is enacted through language practices. This course is the same as Women's Studies 3213.

Prerequisite: Anthropology 2300 or 1300 or Women's Studies 1000

## ANTH 3360 Language Loss: Culture, Politics, and the Self

3 hours, 3 credits
The consequences of major transformations in the use of languages from two perspectives: endangered minority language communities found around the globe and heritage language communities found in the United States. Linguistic processes; cultural consequences of the shift from one language to another; cultural, political and economic processes enabling linguistic shifts.

Prerequisite: Anthropology 1100 or 1105 or 1300 or 3135 or 2300 or permission of the chairperson.

## ANTH 3390 Sociolinguistics

4 hours; 4 credits
The study of language as it is used by various social groups. Language and gender, language and culture. Creole languages, Black English, linguistic change. (This course is the same as English 3524 and Linguistics 3029. Starting Fall 2019 qualifies as an InterCultural Competency (ICC) course for Pathways College Option purposes.

Prerequisite: English 1010, 1.2 or 1.7, and one of the following: Anthropology 2300, Linguistics 2001; or permission of the chairperson.

## ANTH 3392 Historical Linguistics

4 hours; 4 credits
Origin and evolution of language. Dialects, languages, language families. Relationships between languages and language families. Processes involved in language classification. Linguistic change. The comparative method and its use in historical reconstruction. This course is the same as Linguistics 3026.

Prerequisite: Anthropology 2300 or Anthropology 1300 or Linguistics 2001 or permission of the chairperson.

## ANTH 3395 Anthropological Perspectives on Intercultural Communication

3 hours; 3 credits
Concepts of cross-cultural interaction; verbal and nonverbal interaction; the relationship between cultural context and communication; proxemics and pragmatics. Examples drawn from cross-cultural interactions between the United States and Asian, Middle Eastern, Latin American, and other industrialized and nonindustrialized cultures.

Prerequisite: Core Studies 9 or a course in cultural anthropology or permission of the department chairperson.

## Archaeology

## ANTH 2402 Archaeology Laboratory

4 hours; 2 credits
Analysis techniques in archaeology; recording and analysis of artifacts and features from a site in New York. (Students who have completed Anthropology 3470 [70.1] may take this course only with permission of the chairperson.) With the chairperson's permission, students may take this course for credit twice, but may not repeat topics.

## ANTH 2407 Buried Treasures: Tombs, Temples, and Pyramids

3 hours; 3 credits
Survey of the most important archaeological discoveries of the past two centuries. Introduction to world archaeology through the study of famous archaeological monuments and sites. Basic archaeological concepts and techniques.

## ANTH 2408 Near Eastern Archaeology

3 hours; 3 credits
Major archaeological discoveries in the Near East, from the Neolithic through Roman periods. Interpretation of excavations at major sites with reference to Biblical events.

## ANTH 3410 Approaches to Archaeological Theory

3 hours; 3 credits
Historical and current trends in archaeological theory. Methodology and techniques of anthropology, classics, art history, and the physical sciences relevant to archaeological studies. This course is the same as Classics 3211. (Not open to students who have completed Classics 21.)

Prerequisite: one of the following: Anthropology 2400, 1400, 20, Classics 3210, permission of the chairperson

## ANTH 3412 Before History

3 hours; 3 credits.
Survey of prehistoric archaeology; human origins in Africa; Paleolithic hunter/gatherers of the Old and New Worlds; the earliest food-producers; the rise of civilizations in the Near East, Mesoamerica, and South America. (Not open to students who have completed Anthropology 3415 [22.1].)

Prerequisite: Anthropology *1000 or 1002 or 2407 with a grade of B or better, or 1400 or permission of the chairperson.

## ANTH 3415 Archaeology of Africa, Europe and Asia

3 hours; 3 credits
Introductory survey of the development of human culture in the Old World. Study proceeds from the earliest pebble tools through the period of domestication and urbanization to the dawn of written history.

Prerequisite: Anthropology 2400 or Anthropology 1100 or 1200 or 1300 or 1400 or permission of the chairperson.

## ANTH 3420 Urban Archaeology

3 hours; 3 credits
This course will begin at the formation of the first cities in the Middle East, and move on to the Polynesian chiefdoms in the South Pacific and the Viking presence and voyages across the North Atlantic. Historical sites from eighteenth- and nineteenth-century Europe and U.S. will also be examined to trace continuity and change in the character of commercialization and urbanization through time.

Prerequisite: Anthropology *1000 or Anthropology 2400 or Anthropology 1100 or 1400 or 3135 or permission of the chairperson.

## ANTH 3430 People, Nature, and Culture

3 hours; 3 credits
The ways in which people's traits, values, and institutions interact with their environment.

Prerequisite: Anthropology *1000 or 1002 or Anthropology 1100 or 1105 or 1200 or 1400 or permission of the chairperson

## ANTH 3440 Zooarchaeology

2 hours lecture, 2 hours laboratory; 3 credits
Study of animal remains from archaeological sites, methods of recovery, identification, and analysis. Special emphasis placed on natural and social environments, formation processes, subsistence strategies and paleoenvironments.

Prerequisite: one of the following: Anthropology 1200 or 1400 or 3240 or permission of the chairperson.

## ANTH 3445 Introduction to Geographic Information System (GIS)

2 hours lecture; 2 laboratory; 3 credits
Geographic Information System (GIS) as used in environmental management, archaeology, sociological analysis, business marketing, and land use planning. Basic GIS concepts. Hands-on collection, management, and analyses of data to produce information for better decision-making and interpretation. This course is the same as EESC 3750.

## ANTH 3460 Historical Archaeology

3 hours lecture; 2 lab hours; 4 credits
Explores the material world and its impact on society over the last 500 years. Provides an overview of archaeological method and theory as well as current approaches to material culture from the historical period. Special emphasis on topics of colonialism, race, class, gender and labor.

Prerequisite: Anthropology *1000 or 2100 or 1100 or 1400 or permission of the chairperson.

## Fieldwork

## ANTH 3015 Anthropology Abroad

1 hour lecture, 6 hours supervised fieldwork; 3 credits Intensive instruction in field methods and techniques of anthropology; participation in all aspects of anthropological/archaeological fieldwork. May be taken twice if localities or subfields (cultural anthropology, archaeology, linguistic anthropology, or physical anthropology) differ. (Not open to students who have completed Anthropology 3470 [70.1] or who have previously received credit for archaeological fieldwork.)

Prerequisite: Permission of the chairperson.

## ANTH 3016 Fieldwork in Anthropology

1 hour lecture, 6 hours supervised fieldwork; 3 credits Instruction in field methods and techniques of anthropology through participation in all aspects of anthropological/archaeological fieldwork. May be taken twice if localities or sub-fields (cultural anthropology, archaeology linguistic anthropology, or physical anthropology) differ. (Not open to students who have completed Anthropology 70.1 or who have previously received credit for anthropological fieldwork.)

Prerequisite: permission of the chairperson.

## ANTH 3156 India: Global Health Ethnography

3 hours recitation; 3 fieldwork hours; 4 credits

Introduces ethnographic research in India. Fieldsite visits to rural villages and interactions with villagers and health workers. Crosscultural study of the effects of globalization on the health of contemporary human populations. Assessing the ways that physiological factors are mediated by cultural and social processes. Problems of social inequality and power on primary determinants of health and health care. Assess the Jamkhed model of primary health care. This course will be conducted in India.

Prerequisite: Anthropology 1100 or permission of the instructor.

## ANTH +3470 Summer Archaeological Field School (Intensive Program)

3 hours lecture, 6 hours supervised fieldwork; 6 credits Intensive instruction in field methods and techniques of archaeology through participation in every aspect of an excavation; training in archaeological mapping, excavation techniques, and methods of archaeological laboratory analysis. This course is the same as Classics 3212. Students may take this course for credit twice at different sites. No more than 6 credits may be applied to the credits for an anthropology major. STEM variant course Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: Anthropology 2400 or 2401, 1100, 1200, 1300, 1400 or a Pathways required or flexible core course, Classics 3210, Judaic Studies 3012, or a course in archaeological theory and methodology.

## ANTH 3475 Archaeological Field School: Site Supervision

6 hours supervised fieldwork; 3 credits
Techniques and practice of supervision on an archaeological excavation. Students will be responsible for direction of a trench crew and maintenance and checking of documentation during a session of the Summer Archaeological Field School.

Prerequisite: Anthropology 3470 [70.1] or Classics 3212 [29] or equivalent archaeological field experience, and permission of the chairperson.

## ANTH 3480 Intersession Archaeological Field School

1 hour lecture, 6 hours supervised fieldwork; 3 credits Intensive instruction in field methods and techniques of archaeology through participation in all aspects of an excavation; training in archaeological mapping, excavation techniques, and methods of archaeological laboratory analysis. (Not open to students who have completed Anthropology 3470 [70.1] or who have previously received credit for archaeological fieldwork.)

Prerequisite: Anthropology 1100 or 1200 or 1300 or 1400 and permission of the chairperson.

## ANTH 4110 Summer Ethnographic Field School

3 hours lecture, 6 hours supervised fieldwork; 6 credits Instruction and practice in organization of interviews, participant observation, data collection, analysis of data in a field situation. Lectures on methods, techniques, and culture of the area in which the field school is being held.

Prerequisite: Anthropology *1000 or 1100; plus nine credits in Anthropology Department courses numbered 3000 and higher, and permission of the chairperson.

## Peoples and cultures

## ANTH 3510 North American Indians:Traditional and Contemporary

3 hours; 3 credits
Patterns of American Indian cultures north of Mexico; cultural and linguistic diversity; cultural adaptations and developments; contemporary Native Americans. This course is the same as American Studies 3104.

Prerequisite: Anthropology *1000 or 2100 or 1100 or 1200 or 1300 or 1400 , or permission of the chairperson.

## ANTH 3520 Latin America

3 hours; 3 credits
Pre- and post-Conquest peoples and cultures of Central and South America, and the Caribbean; impact of European colonization; Asian \& African influence, post-independence political and economic development; contemporary racial and identity politics; religion and social movements; urbanization and international migration. This course is the same as Puerto Rican and Latino Studies 3210.

Prerequisite: Anthropology *1000 or 2100 or 1100 or 1200 or 1300 or 1400 , or permission of the chairperson.

## ANTH 3530 The Middle East and North Africa

3 hours; 3 credits
Similarities and differences in cultures throughout the area; villagers, nomads, and urban peoples; the role of Islam.

Prerequisite: Anthropology *1000 or 2100 or 1100 or 1200 or 1300 or 1400 , or permission of the chairperson.

## ANTH 3535 Africa South of the Sahara

3 hours; 3 credits
Diversity of African peoples, languages, and cultures; prehistory and historical change; European contacts; the new Africa.

Prerequisite: Anthropology *1001[1] or 1100 [2.1] or 1200 or 1300 or 1400 or permission of the chairperson.

## ANTH 3540 The Pacific

3 hours; 3 credits
Peoples and cultures of the Pacific Islands, New Guinea, and Australia; prehistory, history and influence of geography; culture changes and problems of development.

Prerequisite: Anthropology *1000 or 2100 or 1100 or 1200 or 1300 or 1400 , or permission of the chairperson.

## ANTH 3550 Europe

3 hours; 3 credits
Anthropology of contemporary Europe. Class stratification, the meaning of history, kinship, the nation, ethnicity, and immigration. Social issues such as personal and cultural identities, gender, social change, socioeconomic inequalities.

Prerequisite: Anthropology *1000 or 2100 or 1100 or 1200 or 1300 or 1400 or permission of the chairperson.

## Seminars and internships

ANTH 4000 Senior Seminar in Anthropology
3 hours; 3 credits

Senior seminar; research and completion of a senior thesis on a topic in one of the four sub-fields in anthropology, selected after conferring with advisor. Writing intensive course required for majors.

Prerequisite: Completion of the appropriate introductory (1000 and 2000 level) courses and field course for a major in Anthropology plus at least 12 credits in Anthropology Department courses numbered 3000 and higher, ANTH 3120W Ethnography or ANTH 3245 Research Methods, ANTH 4601 Anthropological Theory, or permission of the chairperson.
Co-requisite: ANTH 4001 Selected Topics in Anthropology.

## ANTH 4001 Selected Topics in Anthropology

1 hour; 1 credit
Lectures and discussions on selected topics in anthropology. Seven, two-hour, sporadically scheduled meetings and a final written report and presentation. Course requirements are available in the Anthropology office before registration. Students should take this course in conjunction with ANTH 4000 Senior Seminar in Anthropology.

Corequisite: ANTH 4000.

## ANTH 4601 Anthropological Theory

3 hours, 3 credits
Reading of significant works. Major schools of anthropology; their distinctive approaches, concepts, and methods. In depth analysis of anthropological theory, key debates and theorists.

Prerequisite: the appropriate introductory course (Anthropology 1000 or 1002 or 2200 or 2300 or 2400 or 1100 or 1200 or 1300 or 1400) plus six credits in Anthropology Department courses numbered 3000 and higher, or permission of the chairperson.

## ANTH 4630 Seminar I

2 hours and independent work; 3 credits Course description may be obtained in the department office before registration. Report or final written examination. Students may not repeat seminar topics completed in Anthropology 4630 [75.1].

Prerequisite: the appropriate introductory course (Anthropology 1000 or 1002 or 2100 or 2200 or 2300 or 2400 or 1100 or 1200 or 1300 or 1400 ) plus nine credits in Anthropology Department courses numbered 3000 and higher, or permission of the chairperson.

## ANTH 4631 Seminar II

2 hours and independent work; 3 credits Course description may be obtained in the department office before registration. Report or final written examination. Students may not repeat seminar topics completed in Anthropology 4630 [75.1].

Prerequisite: the appropriate introductory course (Anthropology 1000 or 1002 or 2100 or 2200 or 2300 or 2400 or 1100 or 1200 or 1300 or 1400 or a Pathways required or flexible core course) plus nine credits in Anthropology courses numbered 3000 and higher, or permission of the chairperson.

## ANTH 4635 Seminar in Museum Techniques

2 hours lecture and 2 hours supervised fieldwork; 3 credits Applied introduction to museology. Practical experience in
cooperation with museums in New York City, in order to learn historical and contemporary overviews of museology. Field experiences will include attending museum exhibitions, meeting with museum professionals, exploring exhibition topics, and cultural mapping of space. Students will complete an object-based project.

Prerequisite: the appropriate introductory course (Anthropology 1000 or 1002 or 2100 or 2200 or 2300 or 2400 or 2401 or 2301 or 2201 or 1100 or 1200 or 1300 or 1400 ) plus six credits in Anthropology Department courses numbered 3000 and higher, or permission of the chairperson.

## ANTH 4650 Preprofessional Internships

9 hours fieldwork; 3 credits Supervised participation in professional activities in cooperation with museums, government agencies, and similar institutions. Specific student programs will vary with each project. Students will arrange for their programs in cooperation with a faculty adviser. In addition to successfully fulfilling the institution's requirements, the student will submit a written report on the internship to the faculty adviser.

Prerequisite: six credits in Anthropology courses numbered 3000 and higher, and permission of the chairperson during the semester prior to registration.

## ANTH 4665 Colloquium in Psychological Anthropology

Minimum of 9 hours conference and independent work§; 3 credits Critical review of recent studies in personality and culture. Appraisal of current research techniques and methodologies. Course description may be obtained in the department office before registration. Report or final written examination.

Prerequisite: completion of an approved program of advanced Anthropology Department courses and permission of the chairperson.

## Honors courses

## ANTH 5660 Independent Research I

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent research supervised by a faculty member. Approved topic. Periodic conferences. Report. Not primarily for department honors.

Prerequisite: completion of an approved program of advanced Anthropology Department courses and permission of the chairperson.

## ANTH 5661 Independent Research II

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent research supervised by a faculty member. Approved topic. Periodic conferences. Report. Not primarily for department honors.

Prerequisite: Anthropology 5660 [83.1], completion of an approved program of advanced Anthropology Department courses, and permission of the chairperson.

## ANTH 5688 Independent Study

Minimum of 9 hours conference and independent work§; 3 credits

Independent study supervised by a faculty member. Approved reading. Periodic conferences. Final written examination.

Prerequisite: completion of an approved program of advanced Anthropology Department courses and permission of the chairperson.

## General anthropology

## ANTH 1005 Readings in Anthropological Studies

## 2 hours; 2 credits

The exploration and comparison of literature drawn from among the four major areas of anthropology: cultural, biological, linguistic, and archeological anthropology.

## ANTH 1006 Researching the Literature in Cultural and Linguistic Anthropology

2 hours; 2 credits
Introduction and examination of research tools to provide familiarization with topics in cultural and linguistic anthropology. Methods to locate, organize, and evaluate sources and then synthesize the material for presentation.

## ANTH 2010 Case Studies in Anthropology

3 hours; 3 credits
The exploration of case studies drawn from among the four major fields of anthropology; cultural, archaeological, biological and linguistic anthropology in order to illustrate major concepts in the field through in-depth study.

## ANTH 3010 Special Topics in Anthropology

3 hours; 3 credits
Subjects of interest in any of the four fields of anthropology that are not treated systematically in the regular curriculum. Topics may include violence, complex societies, archaeology of Mesopotamia. Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: Anthropology 1100 or 1200 or 1300 or 1400 or ANTH 1105 or ANTH 3135 or permission of the chairperson.

## ANTH 3500 Special Topics in Peoples and Cultures of

## Selected Areas

3 hours; 3 credits
Study of culture groups, institutions, historical influences, and effects of outside contact on specific areas within the larger regions described in existing course offerings. Ethnographic and theoretical analyses of culture groups. Cultural adaptations and retentions. Contemporary issues and problems. Selected area will vary each semester. Students may take this course for credit twice, but may not repeat areas.

Prerequisite: Anthropology 1100 or 1200 or 1300 or 1400 or ANTH1105 or ANTH3135 or permission of the chairperson.

## The following inactive course(s) will only be offered if there is sufficient demand:

ANTH 3197 Folklore
ANTH 3198 Animals and Monsters
ANTH 3555 Peoples and Cultures of Japan

## Art

Department office: 5306 Boylan Hall
Phone: 718.951.5181

## Full-time Faculty

Professors: Ball, Carlile, Conelli, Cronin, Hadler, Kiel, Kousser, McCoy, Rand
Associate Professor: Comerford
Assistant Professors: Adams, Otitigbe, Richards, Schwab
Lecturer: Simon

The Brooklyn College Art Department, located in one of the world's most important art centers, draws on a vast community of distinguished and diverse artists and art historians for its faculty and for the many visiting artists, art historians, critics, and curators who supplement our programs. Some of the most famous artists of the last eighty years have taught or lectured in the department. Our students also benefit from class visits to New York City's great museums and noted art galleries.

The department offers a bachelor of arts degree in studio art and in art history, a bachelor of fine arts in studio art, minors in art history and studio art, and a concentration for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades 1-6).

Art and art history teach visual literacy - how to use form expressively, understand the meanings of images, and articulate ideas in both visual and verbal language - preparing students not only for professional careers in art and art history but for a world where communication is increasingly conducted by visual means.
B.A. and B.F.A. students concentrate in their chosen area but take other courses in both studio art and art history. Art history classes cover periods from ancient to contemporary in both western and non-western art. Studio art classes include basic design, drawing, painting, sculpture, printmaking, photography, digital art, and combined media. The studio program has a fine arts rather than a commercial orientation and seeks a balance between the traditional and the new in faculty appointments and course content.

The studios, workrooms, shops, and state-of-the-art digital laboratories are usually available to students when not in use for class. The department features the Meier Bernstein Art Library, which offers print and digital materials. There is an attractive skylit project space for displaying student work.

Many of our graduates teach art history or art in schools and universities. Studio art students have become successful fine artists, commercial artists, illustrators, computer graphics designers, architects, art directors, cartoonists, fashion designers, art restorers, and art therapists. Art history students have pursued careers as professional art historians, art critics, museums curators, art writers, art editors and publishers, gallery managers, and art librarians and archivists, or have worked with other art-related organizations. Many of our graduates have gone on to earn master's and doctoral degrees from leading universities. The department offers information on graduate school admissions and career, job, and internship opportunities in the area's myriad art institutions. Students who wish to pursue graduate studies may apply to the master's and doctoral degree programs offered by or in conjunction with this department.

## B.A. degree program in art HEGIS code 1002; SED program code 02015

The Art major is writing intensive.
Department requirements (41-42 credits)
The department chair, with the approval of the chair of the department's undergraduate curriculum committee, may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

Art 1050 or [Core Studies 2.1] or Core Curriculum 1120 or Art 1010.
Art 2210, 2211, and 3066.
Six additional credits in art history courses.

Twenty-four additional credits in studio art courses chosen from at least four of the following subject areas:
a) Drawing
b) Painting
c) Sculpture
d) Printmaking
e) Photography
f) Digital art

Special topics and honors courses in the above subject areas can count toward the fulfillment of the subject-area requirements with permission of the instructor and the chairperson.

Concentration in digital art ( 15 credits):
15 credits in digital art chosen from the courses below:
Art 2560, 2561, 2562, 2723, 2811, 2812, 2820, 2821, 2822, 3812, and 3814
Special topics and honors courses in digital art can count toward the fulfillment of the subject-area requirements with permission of the instructor and the chairperson.

The digital art concentration credits count towards the studio art course distribution requirement.

## B.A. degree program in art history HEGIS code 1003; SED program code 81408

The Art History major is writing intensive.
Department requirements (33-36 credits)
The department chair, with the approval of the chair of the department's undergraduate curriculum committee, may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

Art 1050 or Core Studies 2.1 or Core Curriculum 1120 or Art 1010 or, with permission of the chairperson, Art 1150.
Art 2210, 3066, and 4190.
Art 2211 or 2310.
Eighteen additional credits in art history courses chosen from at least three of the following subject areas:
a) Ancient and medieval art
b) Early modern European art
c) Modern European and American art
d) Asian, African, and Oceanic art, and indigenous art of the Americas
e) Architecture
f) Special studies

Special topics and honors courses in the above subject areas can count toward the fulfillment of the subject-area requirement with permission of the instructor and the chairperson.

Foreign language requirement for the major:
Completion at the college's course-level 2 (the second semester of a language) of French, German, Italian, or Spanish or passing an examination demonstrating an equivalent proficiency in reading and writing the chosen language. Another language may be substituted with permission of the chairperson.

Exemptions from the foreign language requirement will be granted to students who have completed three years of the language in secondary school or passed the Regents level-3 examination or whose native language is other than English but who in the latter case must pass a Department of Modern Languages and Literatures proficiency examination.

## B.F.A. degree program in art HEGIS code 1002; SED program code 82460

The Art major is writing intensive.
Department requirements ( 68 - 69 credits)
The department chair, with the approval of the chair of the department's undergraduate curriculum committee, may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

Art 1050 or Core Studies 2.1 or Core Curriculum 1120 or Art 1010.
Art 2210, 2211, 3066, 4290, and 4291.
Nine additional credits in art history courses.
Forty-two additional credits in studio art courses subject to the following:

1) At least 21 credits must be completed after admission to the B.F.A. degree program.
2) At least three credits must be chosen from each of the following subject areas:
a) Drawing
b) Painting
c) Sculpture
d) Printmaking
e) Photography
f) Digital art

Special topics and honors courses in the above subject areas can count toward the fulfillment of the subject-area requirement with permission of the instructor and the chairperson.

Exhibition of the student's art work, following approval by the Art Department. (The exhibition will normally be held during the semester preceding graduation.)

## Admission

Admission to the B.F.A. degree program should be obtained prior to the completion of 26 credits in studio art. An art portfolio is required. Consult the Art Department for procedures.

## Departmental Minor(s)

## Minor in Art History

## Department requirements (12 Credits)

Twelve credits in art history courses.
All courses must be completed with a grade of $C$ or higher.
Prerequisite for entry to the minor: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 or Art 1010.

## Minor in Digital Design and Production

Prerequisite for entry to the minor:

1. Art 2210
2. Art 2211 or Art 2561

Required classes for the Minor:
Art 2811 and Art 2212
A minimum of nine additional credits chosen from the following courses with a grade of C - or higher in each course:
Art 2812, Art 2820, Art 2821, Art 3812, Art 3814, Art 2822, Art 2723; Art 2560, Art 2561, Art 2562, Art 2570

## Minor in Studio Art

Department requirements (18 credits):

## Art 2210 and 2211.

Twelve additional credits in studio art courses.
All courses must be completed with a grade of $C$ or higher.
Prerequisite for entry to the minor: Art 1050 or Core Studies 2.1 or Core Curriculum 1120 or Art 1010.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Art

The requirements for the teacher education programs in early childhood are described in the Early Childhood and Art Education section of the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in art must complete 30 credits in the Art Department with a grade of $C$ or higher in each course. Students must meet with a department adviser to declare their intention to complete this sequence.

## Concentration requirements (30 credits)

Art 1050 or [Core Studies 2.1] or Core Curriculum 1120 or Art 1010.
Art 2210 and 2211.
Nine additional credits in art history courses numbered between Art 3000 and 3199.
Fifteen additional credits in studio art courses chosen from the following: Art 2310, 2410, 2510, 2610, 2710, and 2811.

## Recommendation for prospective graduate students

Prospective graduate students interested in art history should consult the deputy chairperson for graduate art history and prospective graduate students interested in studio art should consult the deputy chairperson for graduate studio art.

## Graduate Studies

The Art Department offers the following graduate programs: M.F.A. in art and M.A. in education: art teacher (all grades).
For information about graduate study in art history within CUNY, including M.A., and doctoral programs, students should consult the art history adviser. For information about the studio art and teacher education programs, students should consult the deputy chairperson for graduate studio art. A Graduate Bulletin is available on the college's website.

## Courses

§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## ART HISTORY <br> Introductory courses

## ARTD 1010 Art: Its History and Meaning

3 hours; 3 credits
Introduction to art, emphasizing visual literacy in an historical context. Major works of art and architecture, drawn from a wide range of world cultures and periods from ancient times to the present, will be explored. Texts, readings, and syllabi may vary somewhat among sections. Satisfies Pathways Flexible Core Creative Expression requirement. (Not open to students who are enrolled in or have completed Art 1.1, 1050, 2.3 or 2.4, Core Studies 2.1. or CORC 1120).

## Ancient and medieval art

## ARTD 3002 Art of Egypt and the Ancient Near East

3 hours; 3 credits
Near Eastern art and architecture from 3000 B.C. to the death of Alexander the Great. Emphasis on ancient Egypt under the Pharaohs and the contributions of the Sumerians, Babylonians,

Assyrians, Hittites, and Persians. (Not open to students who have completed Art 12.5.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3006 Aegean and Greek Art

3 hours; 3 credits
Art and architecture of Bronze Age Crete and Mycenae and of historic Greece to the end of the Hellenistic period, with emphasis on great sites and sanctuaries and such artists as Polykeitos, Myron, and Praxiteles. Works of art are examined in the context of Greek myth, literature, and history. (Not open to students who have completed Art 12.1.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3010 Etruscan and Roman Art

3 hours; 3 credits
Art and architecture of the Etruscans and of the Romans through the late Empire. Domestic art and imperial monuments, including the Colosseum, the Pantheon, and the paintings of Pompeii, in their cultural contexts. (Not open to students who have completed Art

## 12.2 or 12.21.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3014 Early Christian and Byzantine Art

3 hours; 3 credits
Exploration of art and architecture of the Byzantine Empire from Constantine's establishment of the capital in the east to the fall to the Ottomans in 1453.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3018 A Clash of Gods: The Emergence of Medieval Art

3 hours; 3 credits
Major developments in Western Europe from the third century through the eleventh. Emphasis on formation of new kinds of sacred art, interaction of classical and barbarian traditions, imagery of political authority, and emergence and evolution of the art of the book.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3022 Romanesque Art

3 hours; 3 credits
Exploration of art and architecture of the Medieval West from 1000-1250.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3024 The Medieval Object: Reliquaries, Vessels, Textiles and Books

3 hours, 3 credits
Focus on reliquaries, liturgical items, books, and secular objects of all kinds, made in a range of materials, examination of items that transgress traditional categories of art.

Prerequisite: Art 1050 or Core Studies 2.1 or Core Curriculum 1120 or Art 1010.

## ARTD 3026 Gothic Art and Architecture

3 hours; 3 credits
Exploration of art and architecture of the Medieval West from 1200-1500.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## Early modern European art

## ARTD 3030 Early Renaissance Art in Italy

3 hours; 3 credits
Art and architecture of Florence, Siena, and the surrounding area from the mid-thirteenth century to the end of the fifteenth century. Consideration of major works of art in relation to the social and religious climate. Major artists: Giotto, Duccio, Masaccio, Brunelleschi, Donatello, Ghiberti, Piero della Francesca, Botticelli. (Not open to students who have completed Art 19.5.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core

Curriculum 1120 [1.2] or Art 1010.

## ARTD 3034 Early Renaissance Art in Northern Europe

3 hours; 3 credits
The New Realism in painting and sculpture and its relationship to devotional practices, political policies, and social life in the Netherlands, France, and Germany from the fourteenth to the fifteenth centuries. Major artists: the Limbourg Brothers, Van Eyck, Van der Goes, Sluter. Major works: theTres Riches Heures, the Ghent Altarpiece, and the Arnolfini Wedding. (Not open to students who have completed Art 19.3 or 19.6.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3038 Later Renaissance Art in Italy

3 hours; 3 credits
Painting and sculpture of sixteenth-century Florence, Rome, and
Venice. Evaluation of such concepts as "High Renaissance" and
"Mannerism" in relation to the broader cultural currents of the period. Major artists: Leonardo da Vinci, Giorgione, Michelangelo, Raphael, Titian. Major works: The Last Supper, the paintings in the Sistine Chapel, and the Vatican "Stanze." (Not open to students who have completed Art 19.7.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3042 Later Renaissance Art in Northern Europe

3 hours; 3 credits
Painting, the graphic arts, and sculpture in the Netherlands, Germany, and France from 1500 to 1600, studied in the context of religious, cultural, and social upheavals and the emergence of secular subjects. Major artists: Bosch, Breugel, Durer, Holbein. (Not open to students who have completed Art 19.6 or 19.8.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3046 Baroque Art in Italy

3 hours; 3 credits
Italian architecture, sculpture, and painting of the late sixteenth century and seventeenth century assessed in relation to the counter-Reformation, a resurgent Catholic Church, and the taste of the courts of France and Spain. Major artists: Caravaggio, the Carracci, Bernini, Borromini, Poussin, and Velasquez. (Not open to students who have completed Art 13.1.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3054 Latin American Art, 1492 to the Present

3 hours; 3 credits
Examination of art and architecture of Latin America from the Conquest to the present.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## Modern European and American art

## ARTD 3058 Neoclassicism and Romanticism

3 hours; 3 credits

European art from about 1750 to 1850. Emergence of landscape painting, the rise of Paris as the international capital of the arts, the influence of the French Revolution, and the relationship between art and literature. Major artists: David, Delacroix, Ingres, Goya, Constable, Turner. (Not open to students who have completed Art 16.2 or 16.4.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3062 Realism, Impressionism, and PostImpressionism

3 hours; 3 credits
Major artists and themes in European art, mainly French, during the second half of the nineteenth century. Art and literature and new optical theories of color and light. Questions of politics, gender, exhibition strategies, urbanism and the landscape. Major artists: Courbet, Manet, Degas, Monet, Cassatt, Morisot, Cezanne, Seurat, Van Gogh, Gauguin. (Not open to students who have completed Art 16.5.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010

## ARTD 3066 Modern Art

3 hours; 3 credits
The art of the first half of the twentieth century, its precedents, and its political and cultural context. The rise of abstraction, the liberation of color, and the interest in the subconscious. Major artistic movements in Europe: Fauvism, Cubism, Futurism, Surrealism. Major artists: Picasso, Matisse, Mondrian, Kandinsky. (Not open to students who have completed Art 15.2.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3071 Modern Sculpture

3 hours; 3 credits
Art of various European and American sculptors from the late nineteenth century to the present. Discussions of race and gender. Major sculptors: Rodin, Brancusi, Hosmer, Lewis, Degas, Matisse, Picasso. (Not open to students who have completed Art 15.4.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3084 History of Photography

3 hours; 3 credits
Survey of the evolution of photography, its development as an independent art form, and its relationship to other arts and sciences. Analysis of the work of significant photographers from Victorian times to the present.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3089 Women in Modern Art

3 hours; 3 credits
Exploration of the changing image and role of women in nineteenth- and twentieth-century art. Major artists: Delaunay, Modersohn-Becker, Kollwitz, Kahlo, O'Keeffe. Issues of gender will be considered. (Not open to students who have completed Art 15.6.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010 or Women's Studies 10.8.

## ARTD 3094 Postwar Art: From World War II to 1989

3 hours; 3 credits
Twentieth-century art from World War II to the fall of the Berlin Wall. Major movements: Abstract Expressionism, Fluxus and performance, Pop Art, Minimalism, Conceptual Art,
Postmodernism. Major artists: Pollock, Rauschenberg, Hesse, Serra, Richter, Warhol, Sherman. Issues of gender, race and politics.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## Asian, African, and Oceanic art, and indigenous art of the Americas

## ARTD 3100 Approaching "Non-Western" Art

3 hours, 3 credits
Examination of the arts of selected cultures that developed outside the spheres of influence of major European civilizations. Investigation of the effect of European imperialism and colonization on Western understanding and interpretation of cultures from these areas.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3105 The Development of the Silk Road

3 hours; 3 credits
An exploration of the art and architecture of the Silk Road from China into Central Asia, with some attention to exports to Europe, from the Han Dynasty (2nd century BCE) until the Mongols (13th century CE). Subjects covered: the history of art, the rise and interaction of Islam and Buddhism, and the economic and diplomatic context that facilitated the development and expansion of the Silk Road, the Silk Road today. (Not open to students who have completed Core Curriculum 3206.) 2017-2018: Satisfies Pathways College Option requirement. Starting Fall 2018 Satisfies Pathways Flexible Core World Cultures and Global Issues requirement.

Prerequisite: ARTD 1010

## ARTD 3108 Art of China

3 hours; 3 credits
Exploration of the art of China from ancient to contemporary times.
Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core
Curriculum 1120 [1.2] or Art 1010.

## ARTD 3124 Foundations of Islamic Art

3 hours; 3 credits
Exploration of the foundations of Islamic art beginning in the Middle East in the seventh century, following the spread of artistic developments through North Africa, Europe, and into Central Asia up to early Ottoman Empire in the sixteenth century. Starting Fall 2019 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

3 hours; 3 credits
Examination of the visual arts and cultures of western Africa, with an emphasis on specific countries and their respective cultures, including Ghana, Nigeria, Benin, and Sierra Leone. The course will include both historical and contemporary art forms, such as masks and masquerades, textiles, wood carvings/sculptures, and architecture. Contemporary works of art will also be discussed, with an emphasis placed on artists who are influenced by historical forms of African art (such as El Anatsui and Yinka Shonibare).

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3134 Subject, Creator, Consumer: Women and

## African Art

3 hours; 3 credits
Examination of the visual arts and cultures of the African continent, with an emphasis on the importance of women as subjects, creators, and consumers of art. Consideration of historical and contemporary art forms, including masks and masquerades, beadwork, pottery, textiles, and contemporary works of art, as well as an exploration of the role of women in various African societies. Starting Spring 2018 Satisfies Pathways Flexible Core World Cultures and Global Issues requirement.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

ARTD 3136 African Fashion, Textiles, and Personal

## Adornment

3 hours; 3 credits
Visual arts and cultures of the African continent, emphasizing historically significant textiles and forms of bodily adornment. Contemporary African fashion designers and the work of African artists inspired by specific forms of African dress.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010

## ARTD 3138 Journey to Wakanda: African Art and Popular

## Culture

3 hours; 3 credits
Exploration of how African cultures and art forms are represented in American popular culture, with an emphasis on the film Black Panther. Students consider if these represetations are culturally sensitive, informed, and appropriate.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010

ARTD 3142 Native American Art of the U.S. and Canada
3 hours; 3 credits
Examination of the visual arts and cultures of native North American cultures from Alaska to Canada and of the Northwest, Southwest, Plains, and Eastern areas of the United States. Consideration of the historical and contemporary contexts of their art in media such as architecture, painting, pottery, sculpture, textiles, and performance.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3148 Pre-Columbian Art of Mesoamerica and the

## Andes

3 hours; 3 credits

Exploration of the art and architecture of the major civilizations, such as the Maya, Aztec, and Inka, that flourished in the regions we now call Latin America from the first millennium BCE through the conquest and colonization by Spain in the sixteenth century. Course includes a brief evaluation of the effect of these indigenous traditions upon art and culture in Latin America from the colonial period to the modern era, including modernists such as Diego Rivera and Frida Kahlo.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3149 The Art and Architecture of New Spain and the

 Andes, 1492-18213 hours, 3 credits
Examination of art and architecture of the former Spanish Viceroyalties of New Spain (Mexico), from 1521-1821, and the Andes, from c. 1534-1820.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3151 The Art of Death and Dying in Mexico

3 hours; 3 credits
Examination of visual culture in Mexico, from 2000 B.C.E. to the present, with a focus on death, dying, and the afterlife.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## Architecture

## ARTD 3159 History of Architecture: Ancient through

## Gothic

3 hours; 3 credits
Exploration of the history of architecture across the Mediterranean and Europe, beginning in Ancient Mesopotamia and Egypt and continuing with Greece, Rome, Byzantium, Islamic Spain, and Western Europe through the thirteenth century.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3160 History of Architecture: Renaissance through

 Nineteenth Century3 hours; 3 credits
Exploration of the history of architecture in Europe and the United States from the Renaissance through the 19th Century

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3161 History of Architecture: Modern through

 Contemporary3 hours; 3 credits
Exploration of the history of architecture across the globe from the turn of the 20th century through contemporary practice. Study of key monuments and theories of the modern age.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3162 History of Urban Design and Planning

3 hours; 3 credits
Exploration of the history of urban design and planning in Europe
and the United States, beginning in the ancient world and continuing through the present day.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3163 Building America: Architecture and Urban Design in the United States

3 hours, 3 credits
American architectural development, from pre-Columbian to the present. Significant building types and styles, prominent architects, and vernacular movements. Approaches to urban design.

Prerequisite: Art 1050 or Core Studies 2.1 or Core Curriculum 1120 or Art 1010.

## ARTD 3164 Architecture and Urban Design in New York City

4 hours; 4 credits
Study of New York City's monuments and infrastructure. Contextualization of the city's built environment within architectural discourse

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## Special studies

## ARTD 3167 Visual Culture Studies

3 hours; 3 credits
Visual culture and design issues from ancient to modern times, culminating in postwar America with such phenomena as Elvis' pink Cadillac and Populuxe designs. Interdisciplinary approach to the study of images across diverse media. Impact of the mass media on contemporary movements such as Pop Art. Influence of race and gender.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 3169 Global Contemporary Art

3 hours, 3 credits
Examination of the development of contemporary art internationally from the post-war era to the present. Consideration of the historical and contemporary contexts of the countries and artists discussed as well as theoretical issues of globalism, diaspora, and hybridity. Artists include but are not limited to: Mona Hatoum, Shahzia Sikander, Walid Raad, Ai Wei Wei, Do Ho Su, Yoko Ono, Santiago Serra, Christoph Schlingensief, Chris Ofili, Helio Oiticic, Lygia Clark, William Kentridge, Ghada Amer and Michal Rovner. Current museum and gallery exhibitions will be discussed. Starting Fall 2019 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

ARTD 3171 Iconoclasm: Mutilating, Burying, and Destroying Images from Antiquity to the Present
3 hours; 3 credits
Examination of the practice of destroying images from c. 1500 B.C. E. to the present, with a focus on religious and politically motivated attacks.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core

Curriculum 1120 [1.2] or Art 1010.

## ARTD 3177 Art Theory and Criticism

3 hours; 3 credits
Through readings, writing, museum visits, class discussion, and student presentations, students learn to interpret and analyze works of art through the different approaches of art history, art criticism, and art theory. Exploration of multiple perspectives on art across cultures and periods, including new materials and definitions of contemporary art. Topics include biography, formal analysis, iconography, social history, gender, race, psychoanalysis, modernism, poststructuralism.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010 and three additional credits in art history courses.

## ARTD 3180 Museum Education: Introduction and Current

 Approaches3 hours; 3 credits
Introduction to the field of museum education, emphasizing accessibility and diversity in relation to educational programming and community outreach. An experiential course allowing students to interact with museum educators from a variety of NYC institutions to learn firsthand their educational techniques and approaches.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010

## ARTD 3187 Summer Archaeological Field School in Israel

3 hours lecture, 6 hours supervised fieldwork; 6 credits Intensive instruction in field methods and techniques of archaeology through participation in every aspect of an excavation; training in archaeological mapping, excavation techniques, and methods of archaeological laboratory analysis. This course is the same as Judaic Studies 4701. (Not open to students who have previously received credit for archaeological fieldwork.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010 or Art [21] or Anthropology 2401 [2.2] or Classics 3210 [26] or Judaic Studies 3012 [12] or a course in archaeological theory and methodology.

## ARTD 3195 Special Topics in Art History

3 hours; 3 credits
Topic is selected by the instructor. Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take this course for credit twice, but may not repeat topics. Students may not earn more than a total of six credits in Art 3195 [70.10].

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 4150 Seminar: Methods in Art History

4 hours; 4 credits
Applicable art historical methodologies will be used for an in-depth study of a topic or an individual artist. Student participation in, and presentation of, research.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010 and three additional credits in art history courses.

## ARTD 4190 Art History Capstone Seminar

4 hours; 4 credits
Research, writing techniques, and methodologies essential to the field of art history. Class requires participation in a student-run daylong symposium at the end of the semester

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010 and declared Art History major. Non-majors with permission.

## ARTD 4920 Internships in the Visual Arts

Minimum of 9 hours conference and independent work§; 3 credits Internships in public service agencies in the arts that expose students to opportunities for careers in art history. Students may take this course for credit up to two times.

Prerequisite: Permission of the chairperson.

## Honors couses in art history

## ARTD 5150 Independent Research in Art History I

Minimum of 9 hours conference and independent work§; 3 credits Independent research, supervised by a faculty member, on an approved topic. Weekly conference. Thesis or report. (Art 5150 [83.10] is not open to students who have completed Art 83.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010 and twelve additional credits in art history courses, including at least three credits in the subject area in which the student proposes to work, and permission of the instructor and the chairperson.

## ARTD 5151 Independent Research in Art History II

Minimum of 9 hours conference and independent work§; 3 credits Independent research, supervised by a faculty member, on an approved topic. Weekly conference. Thesis or report.

Prerequisite: Art 83 or 5150 [83.10] and permission of the instructor and the chairperson.

## STUDIO ART

## Introductory courses

## ARTD 2210 Basic Design, Drawing, and Color

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Introduction to basic studio materials and elements of design, drawing, and color. Analysis of perception and visual expression for the general student and the art major. (Not open to students who have completed Art 20.1 or 21 or 25 .)

Prerequisite or corequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 2211 Three-Dimensional Design and Form Studies

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits Introduction to elements and principles of three-dimensional design used across the fields of art, design, and fashion. Instruction with basic materials, tools and fabrication techniques for the exploration of form and content. Application of research and design thinking to solve creative problems.

Prerequisite or corequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] or Art 1010.

## ARTD 2212 Design Thinking

1 hour recitation, 1 hour lecture, 2 hours laboratory; 3 credits Human-centered, project-based studio course on design creation. Research techniques such as need-finding, user observation, and development of functional design requirements. Brainstorming and ideation strategies to explore solutions and develop prototypes. Methods for product testing and design iteration.

## Drawing

## ARTD 2310 Drawing I

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Representation of forms and pictorial expression in line, value, and texture. Development in perceptual and creative skills with a variety of drawing materials and techniques. (Not open to students who have completed Art 26.)

Prerequisite: ARTD 2210

## ARTD 2311 Drawing II

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 2310 [26.11]. Abstract and figurative expression and composition. (Not open to students who have completed Art 33.6 or 33.7.)

Prerequisite: Art 2310 [26.11] or 26.

## ARTD 2320 Figure Drawing I

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Methods of drawing the human figure with reference to historical and contemporary modes of expression. (Not open to students who have completed Art 34 or 34.3.)

Prerequisite: Art 2310 [26.11] or 26.

## ARTD 2330 Liquid Drawing

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work per week; 3 credits
Liquid Drawing using a variety of water-based mediums, including watercolor, watercolor pencils, gouache, and sumi ink on paper. Investigation of the technical and practical aspects of these mediums. Problems will be based in observation, abstraction and conceptualism. Historical and contemporary examples of the range of artistic applications and engagement with these mediums will be explored.

Prerequisite: Art 2310 [26.11] or 26.

## ARTD 3321 Figure Drawing II

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 2320 [26.21]. Media-expressive interpretation of the human figure using selected drawing materials. (Not open to students who have completed Art 34.4.)

Prerequisite: Art 2320 [26.21] or 34.3.

## ARTD 3350 Artistic Anatomy

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work $\S ; 3$ credits
Study of drawing conventions within the Western figurative tradition. Recommended for students strongly motivated toward structural and aesthetic knowledge of human form. (Not open to students who have completed Art 34.2.)

Prerequisite: Art 2310 [26.11] or 26.

## ARTD 4350 Special Topics in Drawing

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work; 3 credits
Topics vary and reflect the interests of students and faculty. Emphasis on specialized techniques and art media or creative projects not otherwise covered in the regular design curriculum. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: Art 2310 and permission of the instructor

## Painting

## ARTD 2410 Painting I

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Introduction to techniques of oil or acrylic painting. Development in painting expression, composition, and dynamics of color. (Not open to students who have completed Art 40.1 or 42.1.)

## ARTD 2411 Painting II

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 2410 [26.51]. Development of problems and ideas in painting. Analysis of modern and historical masterworks and techniques. (Not open to students who have completed Art 40.2.)

Prerequisite: Art 2410 [26.51] or 40.1.

## ARTD 3412 Painting III

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 2411 [26.52]. Advanced problems and concepts in painting. (Not open to students who have completed Art 40.3.)

Prerequisite: Art 2411 [26.52] or 40.2.

## ARTD 3413 Advanced Painting

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work; 3 credits
Studio course to extend the student's study into the practice and history of painting. Engagement in the diverse and complex media of painting, combining pictorial space on a physical surface. Development of student's personal expression and cultural participation. Development of concepts, images, materials and tools in preparation for the creation of artworks. Students will visit Museums and Galleries as a group and individually. Students may take this course up to 3 times.

Prerequisite: Art 2410

## ARTD 4450 Special Topics in Painting

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work; 3 credits
Topics vary and reflect the interests of students and faculty. Emphasis on specialized techniques and art media or creative projects not otherwise covered in the regular design curriculum. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: Art 2410 and permission of the instructor

## Sculpture

## ARTD 2510 Sculpture I

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work $\$ 3$ credits
Introduction to sculpture practice, history, and theory. Includes assemblage, reductive techniques, additive modeling, casting, and material exploration. (Not open to students who have completed Art 51.1.)

Prerequisite: ARTD 2211

## ARTD 2511 Sculpture II - Installation and Performance

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits Continuation of Art 2510. Research, development, analysis, and critique of self-guided sculptural projects. Emphasis on sculpture in expanded fields of performance and installation.

Prerequisite: Art 2510 [30.11] or 51.1.

## ARTD 2520 Wood Sculpture I

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Sculptural form in wood. Use of hand and machine tools.
Development of craftsmanship and structural ingenuity. (Not open to students who have completed Art 54.1.)

## ARTD 2521 Wood Sculpture II

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 2520 [31.11]. Advanced sculptural techniques and concepts. Creative development of figurative and nonfigurative sculptural form in wood. (Not open to students who have completed Art 54.2.)

Prerequisite: Art 2520 [31.11] or 54.1.

## ARTD 2530 Metal Fabrication and Welding Techniques for Sculpture

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Exploration of form and space using the special characteristics of metal. Use of metal fabrication equipment. Sheetmetal working, oxy-acetylene, and MIG welding, plasma cutting, metal finishing, and assembly.

Prerequisite: ARTD 2211

## ARTD 2531 Advanced Metal Fabrication and Welding Techniques for Sculpture

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 2530. A deeper exploration of form and space using the special characteristics of metal. Use of metal fabrication equipment. Sheetmetal working, oxy-acetylene, and MIG welding, plasma cutting, metal finishing, and assembly.

Prerequisite: Art 2530 [32.11] or 55.1.

## ARTD 2540 Ceramics Sculpture Studio I

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Studio practice in techniques and aesthetics of ceramic form, to include hand building, wheel working, sculpting and drawing in clay, relief, glazing and firing methods.

Prerequisite: ARTD 2211

## ARTD 2541 Ceramics Sculpture Studio II

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 2540. A deeper exploration of ceramics techniques, process, and chemistry including firing and glazing techniques, mold making, casting, tiles, digital image-making in clay, mosaics, and 3D Printing.

Prerequisite: Art 2540 [33.11] or 53.1.

## ARTD 2542 Figure Sculpting

1 hour recitation, 1 hour lecture, 2 hours laboratory; 3 credits Study of the human body and options for representing it in three dimensions in a wide range of media, including papier-mâché, plaster, and fired clay. Direct sculpting in clay from photographs, still lifes, and live models. Introduction to historical and contemporary approaches to figure sculpting from around the world.

Prerequisite: Art 2211 and 2540

## ARTD 2550 Public Art: Interventions, Monuments, and Memorials

1 hour lecture, 1 hour recitation, 2 hours laboratory; 3 credits Introduction to the complexities of developing art for public spaces. Techniques for creating models and prototypes of public artworks. Consideration of temporary interventions, socially engaged practice, public memorials, and monuments. Readings, lectures, and site visits to public artworks.

Prerequisite: Art 2510

## ARTD 2560 Polymedia and Digital Fabrication

1 hour lecture, 1 hour recitation, 2 hours laboratory; 3 credits Introduction to the tools and techniques for digital fabrication, including laser cutting, three-dimensional printing and scanning, electronics programming and prototyping, and computer-aided design and manufacturing CAD/ CAM. Consideration of art projects that incorporate interactive installation, generative art, rapid prototyping, data visualization, and wearable computing. Readings, lectures, and site visits.

## ARTD 2561 Introduction to Interactive Art

1 hour recitation, 1 hour lecture, 2 hours laboratory; 3 credits Creation of graphics, animation, image, and video processing with hardware and sensor-based technologies to create interactive art. History, theory, and practice of interactive art projects

## ARTD 2562 Advanced Interactive Art and Generative Design

1 hour recitation, 1 hour lecture, 2 hours laboratory; 3 credits Exploration of interactive sculpture using iterative design and 3-D modeling tools. Research, development, analysis, and critique of self-guided generative art projects. Digital fabrication, workflow management.

Prerequisite: ARTD 2560 or ARTD 2561

## ARTD 2570 Wearables and Soft Sculpture

1 hour recitation, 1 hour lecture, 2 hours laboratory; 3 credits Textile-construction process using a range of fabrics and materials. Use of traditional hand tools and digital technologies. History of textiles, fiber arts, soft sculpture, and wearables in relation to current social, cultural, and political themes.

Prerequisite: Art 2211, Art 2510

## ARTD 4550 Special Topics in Sculpture

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work; 3 credits
Topics vary and reflect the interests of students and faculty. Emphasis on specialized techniques and art media or creative projects not otherwise covered in the regular design curriculum. Students may take this course for credit twice, but may not repeat topics.

## Printmaking

## ARTD 2610 Printmaking: Relief and Woodcut

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work $\S ; 3$ credits
Creative development of visual form using relief and planographic techniques of monoprint, linoleum, and woodcut. (Not open to students who have completed Art 67.1.)

## ARTD 2611 Printmaking: Lithography

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Creation of images using advanced relief and planographic techniques, including lithography. (Not open to students who have completed Art 67.2.)

## ARTD 2630 Printmaking: Etching I

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work $\S ; 3$ credits
Creative development of visual form using all etching techniques. (Not open to students who have completed Art 66.)

## ARTD 2631 Printmaking: Etching II

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of

4 hours independent work§;3 credits
Continuation of Art 2630 [35.21]. Creative development of etching and engraving concepts. Experimentation in color. Thematic and nonthematic development of ideas. (Not open to students who have completed Art 66.1.)

Prerequisite: Art 2630 [35.21] or 66.

## ARTD 2640 Screenprinting

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work; 3 credits
Screenprinting using water-based inks. Investigation of the use of photo and other stencil resist techniques. Exploration of the use of color, multi-screen techniques, and experimental applications.

## ARTD 2650 Advanced Printmaking

1 hour recitation, 1 hour lecture, 2 hours laboratory; 3 credits Advanced printmaking techniques building upon an area of interest and culminating in a professional portfolio. Creative development of relief, planographic, stenciling and other forms of printmaking. Site visits to printmaking workshops, artist studios, galleries and/or museum collections. Students may take this course up to 3 times.

Prerequisite: Art 2610, 2611, 2630, or 2640.

## ARTD 3640 Edition Printing

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
The techniques of printing an edition of fine art prints for an artist. Students will produce suites of lithographs, etchings, and woodcuts.

Prerequisite: Art 2610 [35.11] or 2630 [35.21] or 66 or 67.1 or permission of the chairperson.

## ARTD 4650 Special Topics in Printmaking

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work; 3 credits
Topics vary and reflect the interests of students and faculty. Emphasis on specialized techniques and art media or creative projects not otherwise covered in the regular design curriculum. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: Art 2610 and permission of the instructor

## Photography

## ARTD 2710 Photography I

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Photography as a creative art. Use of camera. Exposure, developing, and printing. Students must supply their own cameras. (Not open to students who have completed Art 45.1.)

## ARTD 2711 Photography II

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 2710 [45.10]. Further development of visual perception. Advanced training in handling photographic material. Analysis of main trends in contemporary photography. (Not open to students who have completed Art 45.2.)

Prerequisite: Art 2710 [45.10] or 45.1.

## ARTD 2723 Digital Photography

1 hour recitation, 1 hour lecture, 2 hours laboratory; 3 credits Digital photography as creative art. Understanding and using digital cameras. Using Photoshop to edit and enhance digital photographs. Students must supply their own digital cameras.

Prerequisite: Art $2710\{45.10\}$ or 45.1.

## ARTD 3712 Photography III

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits Continuation of Art 2711 [45.20]. Development of a photography project relating to the history of photography and the work of selected master photographers. (Not open to students who have completed Art 45.3.)

Prerequisite: Art 45.2 or 2711 [45.20].

## ARTD 3750 Workshop in the History of Photography

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Survey of the history and evolution of photography. Analysis of the work of significant photographers. (Not open to students who have completed Art 45.6.)

Prerequisite: Art 2710 [45.10] or 45.1.

## ARTD 4750 Special Topics in Photography

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work; 3 credits
Topics vary and reflect the interests of students and faculty. Emphasis on specialized techniques and art media or creative projects not otherwise covered in the regular design curriculum. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: Art 2710 and permission of the instructor

## Digital art

## ARTD 2811 Introduction to Digital Art

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work; 3 credits
Introduction to digital art and design techniques including page layout and illustration. Scanning, manipulation, and printing hardware and software. Exploration of the role of digital techniques in the creative process.

## ARTD 2812 Multimedia and Two-Dimensional Animation

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent computer laboratory work§; 3 credits Introduction to the moving image and use of sound in digital projects. Basics of 2-D animation. Exploration of a variety of tools including digital cameras, video editing and compositing software, and animation software.

Prerequisite: Art 2811 [48.11].

## ARTD 2820 Digital Video

1 hour lecture, 1 hour recitation, 2 hours laboratory; 3 credits Exploration of techniques of digital video art and design including video acquisition, editing, compositing, motion graphics, special effects, and output. Focus on technical as well as cultural aspects of the digital moving image.

Prerequisite: Art 2811 [48.11].

## ARTD 2821 Three-Dimensional Graphics and Animation

1 hour lecture, 1 hour recitation, 2 hours laboratory; 3 credits Emphasis on 3-D modeling and animation techniques. Study of modeling tools, surface properties and textures, illumination and camera techniques for three dimensional graphics with focus on technical as well as aesthetic considerations.

Prerequisite: Art 2811 [48.11].

## ARTD 2822 The Illusion of Life - Character Development and 3D Animation Basics

1 hour recitation, 1 hour lecture, 2 hours laboratory; 3 credits 3D character animation introduction. Foundation principles of character development. Concept sheets and storyboards. Creation of models, texturing, rigging and rendering for 3D time-based media where the illusion of life is desired. Readings, lectures, and demonstrations.

Prerequisite or co-requisite: Art 2821

## ARTD 3812 Internet Art and Design

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent computer laboratory work§; 3 credits Study of interface development and animation for the Internet. Focus on technical and aesthetic considerations of website development. This course is the same as Computer and Information Science *1035. (Not open to students who are taking or have completed Computer and Information Science 3800 [13.2] or 3630 [52].)

Prerequisite: Art 2811 [48.11].

## ARTD 3814 Artistic User Interaction / User Experience (UI/UX) Design

1 hour recitation, 1 hour lecture, 2 hours laboratory; 3 credits Introduction to user interaction design and user experience in the digital sphere. Exploration of the dialogue between a person and a product, system, or service.

Prerequisite: Art 2811 and Art 3812

## ARTD 4850 Special Topics in Digital Art

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work; 3 credits
Topics vary and reflect the interests of students and faculty. Emphasis on specialized techniques and art media or creative projects not otherwise covered in the regular design curriculum. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: Art 2811 and permission of the instructor

## General and combined media

## ARTD 3450 Workshop in New Materials

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of

4 hours independent work§; 3 credits
Creative and technical experimentation with a variety of nontraditional materials for selected workshop projects. (Not open to students who have completed Art 43.)

## ARTD 4290 B.F.A. Capstone Seminar

2 hours lecture, 2 hours studio work; 3 credits
Semester one of a full year instructional and mentoring program to provide students with guided experience in analyzing and writing about their work, portfolio development, exhibition protocols and insights into the world of the professional artist.

Prerequisite: permission of the chairperson.

## ARTD 4291 B.F.A Capstone Seminar II

2 hours lecture, 2 hours studio work; 3 credits Second semester of a full year seminar to provide mentoring and advisement to B.F.A. students completing their last year in the program. Continuation of a structured approach to the execution of the required B.F.A. Thesis Exhibition.

Prerequisite: Art 4290 or permission of the chairperson.

## Independent work and special topics

## ARTD 4264 Internships in Studio Art

Minimum of 9 hours conference and independent work§; 3 credits Internships in artistic vocations and arts organizations that expose students to opportunities for careers in art. Students may take this course for credit up to two times.

Prerequisite: Permission of the chairperson.

## ARTD 4270 Special Topics in Studio Art I

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Topics vary and reflect the interests of students and faculty. Emphasis on specialized techniques and art media or creative projects not otherwise covered in the regular curriculum.

Prerequisite: permission of the chairperson.

## ARTD 4271 Special Topics in Studio Art II

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Topics vary and reflect the interests of students and faculty. Emphasis on specialized techniques and art media or creative projects not otherwise covered in the regular curriculum.

Prerequisite: Art 4270 [70.20].

## ARTD 4950 Special Problems in the Visual Arts I

Minimum of 9 hours conference and independent work§; 3 credits Independent work in a visual arts medium or a project agreed on by the student and the instructor and not covered in the regular curriculum.

Prerequisite: permission of the instructor and the chairperson.

## ARTD 4951 Special Problems in the Visual Arts II

Minimum of 9 hours conference and independent work§; 3 credits Independent work in a visual arts medium or a project agreed on by
the student and the instructor and not covered in the regular curriculum.

Prerequisite: Art 4950 [73.11] and permission of the instructor and the chairperson.

## Honors courses in studio art

## ARTD 5970 Honors Workshop in Creative Art I

Minimum of 9 hours conference and independent work§; 3 credits Individual development through traditional and experimental studio-art media. Students may not earn more than a total of twelve credits in the Art 5970-Art 5973 sequence.

Prerequisite: eighteen credits in courses in studio art, excluding Art 2210, 2211, 2310, and 2311, and including at least six credits in the subject area in which the student proposes to work and permission of the instructor and the chairperson.

## ARTD 5971 Honors Workshop in Creative Art II

Minimum of 9 hours conference and independent work§; 3 credits Individual development through traditional and experimental studio-art media. Students may not earn more than a total of twelve credits in the Art 5970-Art 5973 sequence.

Prerequisite: Art 5970 [86.10] or 86.1 and permission of the instructor and the chairperson.

## ARTD 5972 Honors Workshop in Creative Art III

Minimum of 9 hours conference and independent work§; 3 credits Individual development through traditional and experimental studio-art media. Students may not earn more than a total of twelve credits in the Art 5970-Art 5973 sequence.

Prerequisite: Art 5971 [86.20] or 86.2 and permission of the instructor and the chairperson.

## ARTD 5973 Honors Workshop in Creative Art IV

Minimum of 9 hours conference and independent work§; 3 credits Individual development through traditional and experimental studio-art media. Students may not earn more than a total of twelve credits in the Art 5970-Art 5973 sequence.

Prerequisite: Art 5972 [86.30] or 86.3 and permission of the instructor and the chairperson.

The following inactive course(s) will only be offered if there is sufficient demand:
ARTD 1050 Masterpieces of Western Art
ARTD 1150 Masterpieces of Non-Western Art
ARTD 2801 Visual Communication I
ARTD 3157 American Art from the Colonial Period through the Civil War

## Biology

Department office: 221 Ingersoll Hall Extension
Phone: 718.951.5396

## Full-time Faculty

Professors: Basil, Dunbar, Forlano, Ikui, Lipke, Muth, Polle, Quadri, Tolias
Associate Professors: Biais, He, Saxena, Singh, Wilson
Assistant Professors: Schvarzstein, Staniczenko, Studamire
Lecturers: McEntee, Williams

The Department of Biology at Brooklyn College is a well-respected science department in a traditional liberal arts college. Our faculty members have a wide variety of interests and active careers in laboratory-based research at national and international levels. They are successful in obtaining federal grants for their research programs and in publishing and presenting their findings. Faculty members pursue their research at the College and mentor students in their specialties.

The department offers a bachelor of arts in biology, a bachelor of science in biology, and a bachelor of arts degree in adolescence education for biology teachers as well as a minor in biology.

The department offers opportunities for access and excellence in the biological sciences at the bachelor's, master's, and doctoral degree levels. It provides an exciting, supportive environment in which to hone skills and perform cutting-edge research. Our programs of study equip students with the knowledge and understanding of biological sciences necessary to succeed in our increasingly interdependent, technological world. Each year, approximately 400 undergraduates major in biology. They have a broad range of interests and career plans and are ethnically and culturally diverse, reflecting the demography of Brooklyn.

Armed with a superior science education, our graduates are informed and responsible citizens, committed to science, and prepared to lead their communities into an ever more complex future. Many of our students, including a recent Rhodes scholar, continue their studies in prestigious graduate and professional schools across the country and around the world. Students who wish to pursue graduate studies may apply to the master's and doctoral degree programs offered by or in conjunction with this department.

## B.A. degree program in biology HEGIS code 0401; SED program code 01985

Department requirements (42-55.5 credits)
A student with a grade of D+ or lower in any course applied toward fulfillment of department requirements must repeat the course until the grade of C- or higher is earned, or offer another course of equal or higher rank. Similarly, to enroll in any course students must have completed the appropriate pre-requisite courses with a grade of C- or better. Any substitution of courses must be approved by the chairperson or deputy chair for advising. At least one course taken must be a writing intensive $(W)$ course offered by the Department of Biology. Students who completed Biology 1080 and 1081 before fall 2010 may substitute them for Biology 1001 and 1002 in all degree requirements.

All of the following: Biology 1001, 1002, 3003, 3004, 3006 or 3007W, 3011.
At least 8 credits of the following: Biology 2001, 2002 or 2002W, 2010, 2020 or Psychology 2610, Biology 3020 or Psychology 3610, Biology 3030W, 3083, 4001, 4009 or 4010W or Computer and Information Science 2810W, Biology 4011, 4012, 4013, 4022, 4024W, 4025, 4026, 4027,5000 or 5001 or 5003 W or 5010 or $5014 \mathrm{~W}, 5020$, Chemistry 4581.

One of the following chemistry sequences, a), b), c), or d):
a) Either (Chemistry 1100, (or (both 1050 and 2050), or (1050 and 2060 and 1201), or both 1200 and 1201), and 2500.
b) Either (Chemistry 1100, or (both 1050 and 2050), or (1050 and 2060 and 1201), or both 1200 and 1201), and either 2100, or (both 2200 and 2201), and either 3510, or (both 3511 and 3512).
c) Either (Chemistry 1100, or (both 1050 and 2050), or (1050 and 2060 and 1201), or both 1200 and 1201), either 2100, or (both 2200 and 2201, either 3510, or (both 3511 and 3512), and either 3520, or (both 3521 and 3522).
d) Either (Chemistry 1100, or (both 1050 and 2050), or ( 1050 and 2060 and 1201), or both 1200 and 1201), either 2100, or (both 2200 and 2201), and 2500.

Mathematics 1201 or Psychology 3400.

Department recommendations
Chemistry 3510 (or both 3511 and 3512) and 3520 or (both 3521 and 3522) and Physics 1100 and 2100 are required for some professional programs and are strongly recommended for prospective graduate students in biology. Students who anticipate majoring in biology must see a departmental adviser before the end of the sophomore year in order to plan their programs.

## Additional requirements for a B.A. degree

Candidates for a B.A. degree with a major in biology must complete at least 60 credits in science and mathematics. Candidates for a B.A. degree with a major in biology must complete at least 18 credits in advanced courses in the Biology department or allowed electives in other departments as described above (not including Biology 1001, Chemistry 1100, 1050, 1200, 1201, 2050, 2060, 2100, 2200, 2201 and Mathematics 1201). These 18 credits must be completed with a grade of C-or higher in each course, and 15 or more credits must be completed at Brooklyn College. Specific course requirements for a B.A. degree are described above.

The following courses may be applied toward the 60 credits in science and mathematics:
A) All courses in the departments of biology, chemistry, computer and information science, earth and environmental sciences, mathematics, physics and psychology.
B) Courses marked with a (\#) symbol in the department of health and nutrition sciences.
C) ---Anthropology $1200,3230,3240,3250,3260,3235,3440$.
--- Biology 1010, Chemistry 1007, Physics 1331, Earth and Environmental Sciences 1010.
--- Anthropology and Archaeology 2216, 1205, Chemistry 1037, Computer and Information Science 1003, Earth and Environmental Sciences 1050, 1060, Health and Nutrition Sciences 3314, MATH 1801, Physics 1040, $1070,1080,1085,1090$.
---Economics 3400, 4410, 3410, 4422.
----Philosophy 3203, 3204, 3601.
---Kinesiology 3271, 3275, 4229, 4251.
---Sociology 2701
---MCHC 2001.

## B.S. degree program in biology <br> HEGIS code 0401; SED program code 01984

## Department requirements (56-60.5 credits)

A student with a grade of $D+$ or lower in any course applied toward fulfillment of department requirements must repeat the course until the grade of C- or higher is earned, or offer another course of equal or higher rank. Similarly, to enroll in any course students must have completed the appropriate pre -requisite courses with a grade of C- or better. Any substitution of courses must be approved by the chairperson or deputy chair for advising. At least one course taken must be a writing intensive $(W)$ course offered by the Department of Biology. Students who completed Biology 1080 and 1081 before fall 2010 may substitute them for Biology 1001 and 1002 in all degree requirements.

All of the following: Biology 1001, 1002, 3003, 3004, 3006 or $3007 \mathrm{~W}, 3011$.
At least 12 credits of the following: Biology 2001, 2002 or 2002W, 2010, 2020 or Psychology 2610, Biology 3020 or Psychology 3610, Biology 3030W, 3083, 4001, 4009 or 4010W or Computer and Information Science 2810W, Biology 4011, 4012, 4013, 4022, 4024W, 4025, 4026, 4027,5000 or 5001 or 5003 W or 5010 or $5014 \mathrm{~W}, 5020$, Chemistry 4581.

All of the following:
a) Chem 1100 or both (Chem 1050 and 2050) or (Chem 1200 and 1201) or (Chem 1050 and both Chem 2060 and 1201)
b) Chem 2100 or both Chem 2200 and 2201
c) Chem 3510 or (both Chem 3511 and 3512) and Chem 3520 or (both Chem 3521 and 3522)

Mathematics 1201 or Psychology 3400.

## Department recommendation

Students who anticipate majoring in biology must see a departmental adviser before the end of the sophomore year in order to plan their programs.

Additional requirements for a B.S. degree
Candidates for a B.S. degree with a major in biology must complete at least 60 credits in science and mathematics; 24 of these 60 credits must be completed in advanced courses in the Biology Department or required courses and allowed electives in other departments as described above (not including Biology 1001, Chemistry 1100, 1050, 1200, 1201, 2050, 2060, 2100, 2200, 2201 and Mathematics 1201). These 24 credits must be completed at Brooklyn College with a grade of C - or higher in each course. Specific course requirements for a B.S. degree are described
above.
The following courses may be applied toward the 60 credits in science and mathematics:
A) All courses in the departments of biology, chemistry, computer and information science, earth and environmental sciences, mathematics, physics and psychology.
B) Courses marked with a (\#) symbol in the Department of Health and Nutrition Sciences.
C) ---Anthropology 1200, 3230, 3240, 3250, 3260, 3235, 3440.
---[Core Studies 5, 5.1, 5.2, 7.1, 7.2, 8.1, 8.2].
---[Core Curriculum 1300 through 1399].
----Biology 1010, Chemistry 1007, Physics 1005, Earth and Environmental Sciences 1010.
---[Core Curriculum 3301 through 3399].
---Economics 3400, 4410, 3410, 4422.
---Philosophy 3203, 3204, 3601.
---Kinesiology 3271, 3275, 4229, 4251.
---Sociology 2701.
---MCHC 2001.

## B.A. degree program in adolescence education: biology teacher HEGIS code 0401.01; SED program code 26814

The Department of Secondary Education and the Department of Biology jointly offer a program for students who plan to teach biology in grades 7 through 12. Additional information may be obtained from the Department of Secondary Education or the Department of Biology. Adolescence education (grades 7-12) and special subject programs are writing intensive. Students should consult a counselor as early as possible to plan their program.

This program is writing intensive.
To enroll in any of the following courses--Biology 1002, 2002 or 2002W, and 3004--students must have completed the appropriate pre-or corequisite courses with a grade of C - or better. A student with a grade of $\mathrm{D}+$ or lower in any biology course applied toward fulfillment of department requirements must repeat the course until the grade of C - or higher is earned, or offer another course of equal or higher rank. Any substitution of courses must be approved by the chairperson or deputy chair for advising. At least one course taken must be a writing intensive (W) course offered by the Department of Biology. Students who completed Biology 1080 and 1081 before fall 2010 may substitute them for Biology 1001 and 1002 in all degree requirements.

## Program requirements (71-75.5 credits)

All of the following: Biology 1001, 1002, 3003, 3004, 3006 or 3007W, 3011;
At least 6 credits of the following: Biology 2001, 2002 or 2002W, 2010, 2020 or Psychology 2610, Biology 3020 or Psychology 3610, Biology 3030W, 3083, 4001, 4010W or Computer and Information Science 2810, Biology 4011, 4012, 4013, 4022, Biology 4024W, Biology 4025, Biology 4026, Biology 4027, 5000W or 5001 or 5003 W or 5010 or 5014 W , Biology 5020, Chemistry 4581.

One of the following chemistry sequences, a), b), c), or d):
a) Chemistry 1100 (or both 1050 and 2050) and 2500 .
b) Chemistry 1100 (or both 1050 and 2050), and 2100, and 3510 (or both 3511 and 3512).
c) Chemistry 1100 (or both 1050 and 2050), 2100, 3510 (or both 3511 and 3512), and 3520 (or both 3521 and 3522 ).
d) Chemistry 1100 (or both 1050 and 2050), and 2100 and 2500 .

One of the following courses in Physics: Physics 1100, or 1111, or 1112, or 1150, or 1331 or [Core Curriculum 1331].
Three credits in Geology or Earth and Environmental Science.
Mathematics 1201 or Psychology 3400.
Students who anticipate majoring in biology teaching must see a departmental adviser in both the biology and education departments before the end of their freshman year in order to plan their programs.

Students must complete 26 credits in the Department of Secondary Education as specified below.
a) Secondary Education 2001, 2002, 3401, 3402 and 3456 . These courses may be started in the lower-sophomore term, or upper-sophomore term.
b) Secondary Education 4480. This course may be taken in the junior year.
c) Secondary Education $4481,4482,4483$, and 4484 in the senior year. Students must have successfully completed Secondary Education 4480 before taking any of these courses.

The two student teaching field courses, Secondary Education 4482 and 4484 , may be taken in the same semester.
Secondary Education 4404 is course equivalent to all of Secondary Education 4480, 4481, and 4482.
Secondary Education 4410 is course equivalent to all of Secondary Education 4480, 4483, and 4484.
Degree programs in Secondary Education include a major in an appropriate department of the college.
Completion of an adolescence education program as part of a major one of the sciences qualifies students for New York State initial certification in adolescence education in that science content area for grades 7 through 12.

Students qualifying for the initial certification in adolescence science education may obtain an extension to teach the sciences in grades 5 and 6 by taking Secondary Education 3454.

## Admission requirements and academic standing

Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take: Secondary Education 2001 or 2002;

Students must have a B- in both Secondary Education 2001 and 2002 and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

Students who wish to register for student teaching seminar and field placement will need to file an application with the science education program head for permission. See program office for details.

To take Secondary Education 4480, students must have an overall GPA of 2.75 or higher and have the permission of the Secondary Education science education program head, department chair, or deputy;

To take Secondary Education 4481, 4482, 4483, and/or 4484, students must earn a B+ or higher in Secondary Education 4480, 3401 and 3402, have a GPA of 2.75 or higher in their major, and have the permission of the Secondary Education science education program head, department chair, or deputy.

A student who takes either Secondary Education 4481 and/or 4482 prior to Secondary Education 4483 and/or 4484 must earn a B or better grade in Secondary Education 4481 and/or 4482 before taking either Secondary Education 4483 or 4484.

A student who takes either Secondary Education 4483 and/or 4484 prior to Secondary Education 4481 and/or 4482 must earn a B or better grade in Secondary Education 4483 and/or 4484 before taking either Secondary Education 4481 or 4482.

Additional requirements for a B.A. degree
Candidates for a B.A. degree with a biology teacher major must complete at least 18 credits in advanced courses in the Department of Biology or allowed electives in other departments as described above (not including Biology 1071 and 1072 or Biology 1001). These 18 credits must be completed with a grade of C- or higher in each course, and 15 or more credits must be completed at Brooklyn College. Specific course requirements for a B.A. degree are described above.

## Departmental Minor(s)

## Minor in Biology

## Department Requirements (12 credits)

Both Biology 1001 and 1002 are required for the minor. However, the credits from these courses do not count towards the department requirement of 12 credits to receive a minor.

At least 12 credits of the following: Biology 2001, 2010, 2020 or Psychology 2610, Biology 3003, 3006 or 3007W, 3011, 3020 or Psychology 3610, Biology 3030W, 3083, 4001, 4009 or 4010W or Computer and Information Science 2810W, Biology 4011, 4012, 4013, 4022, Biology 4024W, Biology 4025, Biology 4026, Biology 4027, Biology 5000 or 5001 or 5003W or 5010 or 5014W, Biology 5020, Chemistry 4581.

All 12 credits must be completed at Brooklyn College with a grade of C- or higher. Similarly, to enroll in any course students must have completed the appropriate pre-requisite courses with a grade of C - or better.

## Minor in Neuroscience

Program Requirements (18-21 credits):
Interdisciplinary minor, offered by the departments of Psychology and Biology, requiring 18-21 credits including 12 advanced credits, each completed with a grade of C - or higher. At least nine of the advanced credits must be completed at Brooklyn College.

All courses listed in Group A may be used to satisfy the requirements of both the minor in Neuroscience and the major in Psychology. Only one course from Group B may be used to satisfy the requirements of both the minor in Neuroscience and the major in Psychology. Psychology 3600 and one of the courses from Group B may be used to satisfy the requirements of both the minor in Neuroscience and the minor in Psychology. It is also highly recommended to take Biology 1001 and Biology 1002.

Students who do not major in psychology are strongly encouraged to also take Psychology 3400 or Mathematics 4501.
Both A and B below are required:
A. All of the following:

Psychology 2600 Mind, Brain, and Behavior;
Psychology 2610/Biology 2020 Neurobiology;
Psychology 3600 Behavioral Neuroscience
B. Three of the following:

Psychology 3510 Learning;
Psychology 3610/Biology 3020 Behavioral Neuroendocrinology;
Psychology 3660 Drugs and Behavior;
Psychology 3670 Comparative Psychology;
Psychology 3680 Human Neuropsychology;
Psychology 3695 Advanced Special Topics in Behavioral Neuroscience
Note that the prerequisite for Psychology 2600 is one of the following: Psychology 1000 or Health and Nutrition Sciences 2300 or Kinesiology 3271. Therefore, students who otherwise would not take any of these courses will have to complete 21 credits for the minor. Both Biology 2020 and Biology 3020 can count toward both the minor in neuroscience and major in biology.

## Interdepartmental Minor(s)

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C- or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Recommendation for prospective graduate students

Many graduate programs in biology require reading competence in two of the following languages: French, German, Russian.
Prospective graduate students who studied one of the languages for two years in high school should study another of these languages through course 2 in college.
Proficiency in a computer language may be substituted for one of the foreign languages.

## Undergraduate research participation

The department encourages students to participate in research programs with faculty members, without credit. This work may begin as early as feasible and continue throughout the student's academic program. Qualified students may enroll in Biology Department courses numbered 5001, 5002, 5010 through 5013.

## Department honors

To be eligible for graduation with honors in biology, a student should have an average of 3.50 or higher in biology courses and complete a Biology Department course numbered 5010 through 5013 with distinction.

## Graduate Studies

The Biology Department offers master of arts degree programs in biology and biology teacher (grades 7 through 12).
Some courses may be creditable toward the CUNY doctoral degree. For information, students should consult the department's deputy for graduate studies.

## Courses

*Courses marked with an asterisk (*) are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in this department.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## BIOL *1001 General Biology 1

3 hours lecture, 3 hours laboratory; 4.5 credits
Systems, ecological and evolutionary biology. Integration of plant and animal form and function with biological concepts and theories of evolution, genetics, development, homeostasis, ecologybiodiversity, bioenergetics and bio-informatics. (Not open to students who have completed, with a grade of C - or higher, the following course or courses: Biology *1080 [3], or both Biology 1072 [29] and Biology *1071 [34.1]). STEM variant course Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite or Corequisite: Math 1006 or Chemistry 1100 or 1050 or 1040 or 1200

## BIOL 1002 General Biology 2

3 hours lecture, 3 hours laboratory; 4.5 credits
Cellular and molecular biology. Specific molecular process
occurring in and around cells of evolutionarily diverse organisms.
Biological concepts and theories of evolution, genetics, development, homeostasis, ecology-biodiversity, bioenergetics and bio-informatics. (Not open to students who have completed with a grade of C- or higher, the following course or courses: both Biology *2073 [17] and 2074 [17.1], or 1081 [4].). STEM variant course Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: Biology 1001 with a grade of C- or higher.

## BIOL 1010 Biology: The Study of Life

2 hours lecture, 2 hours lab, 3 Credits
Biology in today's world for non-science majors. Role of biology in
people's lives. Physical structure, properties, and principles that apply to all living things. Integration of biological science into daily events. The molecules found in living organisms. Cell structure, molecular biology and evolution. Satisfies Pathways Required Core Life and Physical Sciences requirement. (Not open to students who are enrolled in or have completed any course in biology or who have completed Core Studies 8.1 or CORC 1321).

## BIOL 1501 Human Anatomy and Physiology 1

3 hours lecture; 3 hours laboratory; 4.5 credits A foundation in the form and function of the human body. Exploration and development of an understanding of anatomical terminology, basic science foundations, cellular structure and transport, tissues, integumentary system, skeletal system, muscular system and nervous system. This course is the same as Anthropology 3265, Health and Nutrition Sciences 2302, and Physical Education and Exercise Science/Kinesiology 3281. STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: 1) high school chemistry or the equivalent taken within the past five years or satisfactory performance on a chemistry competency test, and 2) high school biology or the equivalent taken within the past five years or satisfactory performance on a biology competency test.
Recommended: College chemistry (introductory/general) and college biology (introductory/general) are recommended before taking this course

3 hours lecture; 3 hours laboratory; 4.5 credits Introduction to the form and function of the human body. Exploration and development of an understanding of blood, heart, blood vessels, respiratory system, digestive system, metabolism, urinary system, fluid \& electrolyte balance, reproductive system, immune system and development. This course is the same as Anthropology 3266, Health and Nutrition Sciences 2303, and Physical Education and Exercise Science/Kinesiology 3285. STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: One of the following: Anthropology 3265, Biology 1501, Health and Nutrition Sciences 2302, or Physical Education and Exercise Science/Kinesiology 3281.

## BIOL 2001 Organismic Biology II, Zoology

3 hours; 3 credits
Key concepts in the structure and development of animals with special reference to those species used as models in contemporary developmental biology.

Prerequisite: Biology 1001 and Biology 1002.

## BIOL 2002 Animal Form and Function Laboratory

4 hours; 2 credits
Dissection and microscopic examination of the structure and development of animals.

Prerequisite: Biology 1001 and Biology 1002.
Corequisite: Biology 2001.

## BIOL 2002W Animal Form and Function Laboratory

## 5 hours; 3 credits

Dissection and microscopic examination of the structure and development of animals. Introduction to major ideas of evolution and changes in animal body plans. Emphasis on current experimental techniques to measure animal behavior, including critical scientific literature review, field observations of animal behavior, multiple working-hypotheses generation, testing of mutually exclusive predictions using modern ethological techniques (ethogram construction and time-budget analysis), and simple statistical analysis of behavioral data. Emphasis is on how ecological variation and selection impacts animal behavior and on measuring and analyzing animal behavior in a rigorous way. Literature review, weekly writings, a field animal-behavior project, a group presentation and a major research paper will be required. Writing intensive course. (Not open to students who have completed Biology 2002.)

Prerequisite: English 1012, Biology 1001 and Biology 1002. Prerequisite or Co-requisite: Biology 2001.

## BIOL 2010 Advanced Cell and Molecular Biology

3 hours; 3 credits
Introduction to the biology of the cell with emphasis on molecular aspects of biology. Ultrastructures, molecular composition, functions of the cell. Emphasis on cellular energetics, information storage and transfer, protein synthesis, growth, reproduction, and functional integration of cellular organelles and inclusions.

Prerequisite: Biology 1001, Biology 1002 and Chemistry 2100.

## BIOL 2020 Neurobiology

3 hours; 3 credits

Introduction to the structure and function of the nervous system at molecular, cellular, systems, and behavioral levels emphasizing animal models. Electrical and chemical signaling of nerve cells, neuroanatomy, neurochemistry, motor and sensory systems, neural plasticity, and current methodologies in neuroscience research. This course is the same as Psychology 2610

Prerequisite or corequisite: Biology 1001 and 1002; or Psychology 1000 and one of the following: Psychology 2600, 3600 or Biology 1001; or permission from the instructor

## BIOL 3003 Microbiology

3 hours; 3 credits
Microbiology as a science, structure and function of microbes, microbial interrelationships, microbial metabolism, mechanisms of recombination, and microbes as agents of disease.

Prerequisite: Biology 1001 and Biology 1002

## BIOL 3004 Microbiology Laboratory

4 hours; 2 credits
Techniques for isolation, cultivation, and characterization of bacteria and the use of microbes as experimental organisms.

Prerequisite: Biology 1001, and Biology 1002
Prerequisite or corequisite: Biology 3003.

## BIOL 3005 Microbiology Laboratory for Health Sciences

4 hours; 2 credits
Study of bacteria, molds, and yeasts in relation to human welfare. (Does not count towards the major in biology.)

Prerequisite: Biology 1001, Biology 1002 and permission of the chairperson of Biology or Health and Nutrition.
Prerequisite or corequisite: Biology 3003

## BIOL 3006 Evolution

3 hours; 3 credits
Introduction to major ideas and models of evolution; emphasis on genetic mechanisms, natural selection, and other processes in explaining structures and functions of individuals and populations; current ideas to account for the biodiversification of life on earth. (Not open to students who have completed Biology 3007W [38.1 W] or Biology 4080 [50].)

Prerequisite: Biology 1001, Biology 1002, Biology 3011

## BIOL 3007W Evolution

## 3 hours; 3 credits

Introduction to major ideas and models of evolution; emphasis on genetic mechanisms, natural selection, and other processes in explaining structures and functions of individuals and populations; current ideas to account for the biodiversification of life on earth. Weekly writings, a group presentation and a major paper will be required. Writing intensive course. (Not open to students who have completed Biology 3006 [38] or 4080.)

Prerequisite: Biology 1001, Biology 1002 and 3011; English 1012.

## BIOL 3011 Genetics

## 3 hours; 3 credits

Principles and problems of heredity, including gene transmission, mutation, recombination, and function. (Not open to students who have completed Biology 2080.)

Prerequisite: Biology 1001 and Biology 1002 and Biology 3003

## BIOL 3020 Behavioral Neuroendocrinology

3 hours; 3 credits
Introduction to the effects of hormones on brain and behavior. Includes a review of methodologies in behavioral endocrinology, sexual differentiation of the brain and behavior, and the role of hormones in social behavior, cognition, learning and memory, stress and mental health disorders throughout lifespan development. This course is the same as Psychology 3610.

Prerequisites: Psychology 1000 or both Biology 1001 and 1002; and Psychology 2600 or Biology 2020.

## BIOL 3030W Scientific Writing

## 3 hours; 3 credits

Introduction to four types of scientific writing: (a) research summary and research abstract, (b) report for the lay public, (c) research paper, and (d) review of research papers. Analysis of experimental data from the biology scientific literature or unpublished data. This course is writing intensive.

Prerequisites: Biology 1001 and 1002 and English 1012.

## BIOL 3083 Principles of Ecology

3 hours, 3 credits
Introduction to the principles of ecology; biology of populations, communities, and ecosystems; basic issues of biodiversity.

Prerequisite: Biology 1001 and Biology 1002 or permission of the instructor.

## BIOL 4001 Field Studies in Botany

1 hour lecture, 4 hours fieldwork and laboratory work; 3 credits Field trips to observe associations in typical plant habitats. Laboratory consideration of the characteristics, evolutionary relationships, and geography of flowering plants. Summer session.

Prerequisite: Biology 1001 and Biology 1002

## BIOL 4009 Macromolecular Structure and Bioinformatics

3 hours; 3 credits
The fundamentals of biological macromolecular structures; an introduction to the computational tools important in determining biological functions.

Prerequisites: Biology 1001, Biology 1002, and permission of the instructor

## BIOL 4010W Macromolecular Structure and Bioinformatics

3 hours, 3 credits
The fundamentals of biological macromolecular structures; an introduction to the computational tools important in determining biological functions. (This course is the same as Computer and Information Science 2810W.) Writing-intensive course.

Prerequisites: English 1012; Biology 1001, Biology 1002, and permission of the instructor

## BIOL 4011 Molecular Biology of Development

3 hours; 3 credits
Experimental and biochemical analysis of development of
echinoderm, molluscan, and amphibian embryos. Biochemical analysis is primarily related to the replication, transcription, and translation of nucleic acids. Analysis of experimental design and interpretation of work in current literature with emphasis on experimental designs for future work.

Prerequisite: Biology 1001, and Biology 1002.

## BIOL 4012 Medical Microbiology

3 hours; 3 credits
Microbes as disease agents. Examination of host-microbe interactions, the immune response, nature and mechanisms of infectious diseases, chemotherapy, drug resistance, and epidemiology.

Prerequisite: Biology 1001, 1002 and Biology 3003.

## BIOL 4013 Principles of Immunology

3 hours; 3 credits
The immune system; immunity; innate and adaptive immunity; antigen presentation; cellular and humoral immunity; tolerance; immune system disorders.

Prerequisite: Biology 1001, Biology 1002, and Biology 3003.

## BIOL 4022 Biotechnology of Algae

3 hours; 3 credits
Phylogeny, evolution, habitats, growth cycles, and genetic engineering of algae; biosynthetic pathways of algal products and their metabolic regulation; interdisciplinary topics such as designing bioreactors and nutritional sciences including values of natural products. The economic aspect of patent law and management of companies dealing with algae will be covered.

Prerequisite: Biology 1001, Biology 1002 and Chemistry 1100

## BIOL 4024W Cancer Biology

3 hours, 3 credits
How a tumor cell is formed and progresses. The roles of inherent tumor-suppressor genes in killing cancer cells. Students will get an opportunity to learn molecular mechanisms of a cancer cell and develop an interest in basic or therapeutic cancer research. Writing-intensive course.

Prerequisites and/or co-requisites: English 1012; Biology 1001 and 1002 , and Biology 2010 or 3011.

## BIOL 4025 Molecular Phylogenetics and Evolution

3 hours; 3 credits
Introduction to conceptual foundations of molecular phylogenetics, the application of molecular data to the study of evolutionary relationships; analysis and interpretation of phylogenetic trees in the popular and scientific press; methods for the analysis of molecular data and construction of molecular phylogenies. Classroom lectures, complemented by hands-on practicals with real-world datasets. Weekly assignments, take-home quizzes and paper summary and presentation.

Prerequisite: Biology 1001, 1002 and permission of the instructor

## BIOL 4026 Global Bacterial, Protozoan and Viral killers

3 hours; 3 credits
Global public health threats, global infectious diseases, tuberculosis, malaria and AIDS epidemics, and Mycobacterium
tuberculosis, Plasmodium falciparum, and HIV biology.
Prerequisite: Biology 1001, 1002, and 3003.

## BIOL 4027 The Human Microbiome

3 hours; 3 credits
Human microbiome, holobiont, microbial pathogens, synbiotics, probiotics and prebiotics, drug metabolism and personalized medicine.

Prerequisite: Biology 1001, 1002, and 3003 or permission of instructor.

## BIOL 5000 Independent Library Research

Minimum of 6 hours conference and independent work; 2 credits Independent library research in Biology under the supervision of a Brooklyn College faculty member. Critical review of literature pertaining to a problem or specialized topic in biology culminating in a report written according to department guidelines.

Prerequisite: Biology 1001, 1002 and permission of the sponsoring faculty member and department chairperson.

## BIOL 5001 Laboratory Research I

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent laboratory research under the supervision of a Brooklyn College faculty member, (Not open to students who are enrolled in Biology 5010-5013.)

Prerequisite: Biology 1001 and Biology 1002 and permission of the sponsoring faculty member and department chairperson.

## BIOL 5002 Laboratory Research II

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent laboratory research under the supervision of a Brooklyn College faculty member, (Not open to students who are enrolled in Biology 5010-5014W.)

Prerequisite: Biology 5001 [73.1] and permission of the sponsoring faculty member and department chairperson.

## BIOL 5003W Laboratory Research, writing intensive

Minimum of 9 conference and independent work, 3 credits Writing Intensive Research in Biology under the supervision of a Brooklyn College faculty member, . (Not open to students who are enrolled in Biology 5010-5014W.) Writing Intensive course; Biology majors must complete at least one writing intensive W course in the department.

Prerequisites: English 1012; Biology 1001, 1002, Biology 5001, and permission of the sponsoring faculty member and department chairperson.

## BIOL 5010 Independent Laboratory Research I

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent laboratory research under the supervision of a Brooklyn College faculty member. Weekly conference. Thesis or report.

Prerequisite: Biology 1001, 1002, 5001 and completion of at least two advanced Biology Department electives with a grade of $A$ or $B$
in each; and permission of the instructor and the chairperson.

## BIOL 5011 Independent Laboratory Research II

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent laboratory research under the supervision of a Brooklyn College faculty member, Weekly conference. Thesis or report.

Prerequisite: Biology 5010 [83.1] and permission of the instructor and the chairperson.

## BIOL 5012 Independent Laboratory Research III

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent laboratory research under the supervision of a Brooklyn College faculty member. Weekly conference. Thesis or report.

Prerequisite: Biology 5011 [83.2] and permission of the instructor and the chairperson.

## BIOL 5013 Independent Laboratory Research IV

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent laboratory research under the supervision of a Brooklyn College faculty member. Weekly conference. Thesis or report.

Prerequisite: Biology 5012 [83.3] and permission of the instructor and the chairperson.

## BIOL 5014W Honors Laboratory Research in Biology, writing intensive

Minimum of 9 conference and independent work, 3 credits Writing Intensive Independent Honors Research in Biology under the supervision of a Brooklyn College faculty member, Writing Intensive course; Biology majors must complete at least one writing intensive W course in the department. (Not open to students who are enrolled in Biology 5001, 5002, or 5003W.)

Prerequisites: English 1012; Both Biology 1001 and Biology 1002; Biology 5001 and any two advanced biology courses with grades of B or better and permission of the sponsoring faculty member and department chairperson.

## BIOL 5020 Special Topics

Minimum of 9 hours recitation, conference, and independent work§; 3 credits each term Intensive reading in and group discussion of a special field. Students should consult department bulletin boards for current offerings. A term report or examination may be required. Topics vary and reflect the special interests of students and faculty. May be taken more than once for credit, but topics may not be repeated.

Prerequisite: Biology 1001 and Biology 1002 and the specific prerequisites for the special topic being offered

## Kinesiology courses

## KINS 4760 Internship in Exercise Science

9 hours; 3 credits
Practical experiences in planning, organizing, assessing, and implementing exercise science programs in various settings.

Internship may extend beyond one term. This would require that students complete 300 hours of internship activities

Prerequisites: completion of all required course work and/or permission of undergraduate deputy or chair.

The following inactive course(s) will only be offered if there is sufficient demand:
BIOL 3084 Evolution

## Business Management

Department office: 218 A Whitehead Hall
Phone: 718.951.5154

## Full-time Faculty

Professors: Bell, Clarke, Connell, Davidoff, Fogel, Friedman, Hu, Lopez-Pumarejo, Queneau, Stone
Associate Professors: Amoo, Birnbaum, Chiu, Hampton-Sosa, Hirakubo, Langbert, Lewis, Lynch, Manlow, Raghupathi
Assistant Professors: Pham, Rifkin
Lecturer: Bassell

The AACSB-accredited business programs within the Murray Koppelman School of Business at Brooklyn College produce wellrounded graduates who think critically and creatively to solve problems and possess marketable skills. Its faculty members, who publish in many areas of interest to the business world, work closely with students, and afford them valuable research opportunities.

Students may pursue either a bachelor of science in business management, or a bachelor of business administration (BBA) with nine different concentrations in either business economics, business for health professions, business law and real estate, consumer and organizational behavior, e-business, international business, leadership and human resource management, management, or marketing. Business for health professions is a unique program targeted to physicians, dentists, therapists, and those planning to pursue graduate degrees in the health professions.

The business program has pioneered several joint programs with other College departments. Business students may pursue a program in accounting, philosophy, film (marketing), environmental sciences (management), or Puerto Rican and Latino studies. Modern language majors in French, Italian, Russian, and Spanish may take a joint program in language and business. In conjunction with the Department of Computer and Information Science, the business program also offers a bachelor of science in information systems. Graduates go on to pursue careers in information technology management or related fields, and work in businesses or governmental organizations.

The Department of Business Management works closely with the Magner Career Center to offer internship and employment opportunities to students as well as equip them with the skills and knowledge necessary to fulfill their career aspirations. Graduates with professional degrees such as business typically earn significantly more than other graduates. In the corporate world, the business degree becomes even more valuable when earned as an AACSB-accredited program at such a renowned liberal arts school as Brooklyn College.

## B.B.A. degree program in business administration HEGIS code 0506; SED program code 30604

Concentration in Critical and Ethical Thinking awaiting New York State Education Department approval as of spring 2021.

## Department requirements (56-64 credits)

A. Business Core ( $44-46$ credits)

Students must complete all of the following:
Accounting 2001 and 3201, Computer and Information Science 1050 or Computer and Information Science 1110 or Computer and Information Science 1115, Business 2100 or Economics 2100, Business 2200 or Economics 2200, Business 3400 or Economics 3400 or Mathematics 2501 or 3501 or Psychology 3400, Business 3410 or Economics 3410 or Business 3421 or Computer and Information Science 2590 or Mathematics 1201, Business 3430 or Computer and Information Science 2531, Business 3100, Business 3200, [Business 3310] or Finance 3310, Business 3170, Business 4101W or 4200W, Philosophy 3314.
B. Concentration (12-18 credits)

Students must complete a minimum of 12 credits in one of the following twelve concentrations:

Required Courses (12 credits): Economics 3102, Economics 3202, Economics 4400W, and Economics 3320 or Business 3320.
Elective Courses (a minimum of 6 credits): [Business 3330] or Finance 3330, [Business 3340] or Finance 3340, Business 3350, Business 3373, [Business 3377] or Finance 3377, Economics 3212, Economics 3232, Economics 3254, Economics 3342, Economics 3352, Economics 3362.

Business 3170 is not required for students in this track and the Business Core is thus reduced by 3 credits. Students in this track are required to take Business 3410 or Economics 3410 or Mathematics 1201 as part of the Business Core. Business 3421 or Computer and Information Science 2590 may not be taken.

Business for Health Professions
REQUIRED COURSES ( 15 credits): Any 15 credits from any combination of the following courses:
Any Biology or Chemistry courses except for courses in the CUNY Pathways core curriculum, Health and Nutrition Sciences 2111, 2120, 2300, 2301, 3160, 3210, Kinesiology 3271, 3275, 3281, 3285, 4251, Psychology 2600, 3180, 3600, 3680.

Business 3170 is not required for students in this track and the Business Core is thus reduced by 3 credits.

Business Law and Real Estate
REQUIRED COURSES (15-16 credits): Accounting 4201, Business 2300 or Business 3221, Business 3220, Business 3350, and Business 3360 or Accounting 3360 or Business 3182 or Philosophy 3740 or Accounting 3101.

Consumer and Organizational Behavior
Required Courses (15 credits): Business 3140, Business 3210 or Psychology 3171, Business 3220, Business 3240 or Psychology 3172, Business 3251 or Business 3252.

Business 3170 is not required for students in this track and the Business Core is thus reduced by 3 credits.

Critical and Ethical Thinking

Required Courses (3 credits): Business 3251 or Philosophy 3335
Elective Courses (12 credits):
Any 2 of the following Philosophy courses: Philosophy 3203, Philosophy 3204, Philosophy 3210, Philosophy 3231, Philosophy 3232, Philosophy 3410.

Any 2 of the following Philosophy courses: Philosophy 3306, Philosophy 3308, Philosophy 3309, Philosophy 3310, Philosophy 3316, Philosophy 3720, Philosophy 3726, Philosophy 3740.

Diversity and Inclusion in Business
Required Courses ( 6 credits): Business 3221 and Business 3210 or Business 3240
Elective Courses (12 credits): Any courses from any combination of the following courses (must take courses from at least three different areas):

* Africana Studies
* Judaic Studies
* Puerto Rican \& Latino Studies
*Women's and Gender Studies.
CUNY Pathways Curriculum courses may not be used as electives towards the concentration. With the permission of the Business Management Department, appropriate courses offered in other departments such as History, Modern Languages, Sociology, or Philosophy may be allowed to fulfill the requirements of the concentration.

E-Business
REQUIRED COURSES (9 credits): Business 3110 or Computer and Information Science 1597 or Television, Radio and Emerging Media 3537;

Business 3120 or Computer and Information Science 1530; Business 3420 or Computer and Information Science 1590.
Any two of the following (6 credits): Business 3140; Business 3220; Business 3432 or Computer and Information Science 2532; Business 3440 or Computer and Information Science 1595; Business 4202W or Computer and Information Science 1580W.

A student specializing in this track may modify the Business Core above and may take Computer and Information Science 2820W or Philosophy 3318W in lieu of Philosophy 3314. Students may also substitute Computer and Information Sciences 1600 for Business 3170.

Entrepreneurial Management
Required Courses (12 credits): Business 3220, Business 3230, Business 3235, and Business 3260.
Elective Courses (a minimum of 3 credits): Business 3140, Business 3210, Business 3251, Business 3373 or Business 3421, Africana Studies 3337.

International Business
REQUIRED COURSES (9 credits): Business 3140, Business 3150 or Puerto Rican and Latino Studies 4515, Business 3175 or Business 3178 or [Business 3377] or Finance 3377.

ELECTIVE COURSES (a minimum of 3 credits): Africana Studies 3140; Business 3171; Business 3178; Business 3245; Business 3250 or Women's Studies 3345; Economics 3352, 3362; Sociology 2601; Political Science 3242; Puerto Rican and Latino Studies 4505; Anthropology 3520 or Puerto Rican and Latino Studies 3210.

Leadership and Human Resource Management
REQUIRED COURSES (17 credits): Business 3240 or Psychology 3172, Business 3024 or Business 3245 or Business 3250 or Women's Studies 3345 , Business 3251 or Philosophy 3335 or Business 3252, Business 3220, Business 3210 or Psychology 3171 or Economics 3212, or Business 3221, Business 3260.

Management
REQUIRED COURSES (12 credits): Business 3240 or Psychology 3172; Business 3210 or Psychology 3171; Business 3220; 3230.
ELECTIVE COURSES (a minimum of 2 credits): Africana Studies 3337; Business 2010; Business 3023; Business 3221, Business 3420 or Computer and Information Science 1590; Business 3250 or Women's Studies 3345; Business 3251 or Philosophy 3335; Business 3252; Business 3260; Business 3440 or Computer and Information Science 1595; Business 3180; Business 4202W or Computer and Information Science 1580W; Economics 3212; Economics 3242; Sociology 3607.

## Marketing

REQUIRED COURSES (12 credits): Business 3130 or Television, Radio and Emerging Media 2517, Business 3140, Business 3125 or Business 3150 or Puerto Rican and Latino Studies 4515 or Business 3160 or Business 3180, Business 4100W.

ELECTIVE COURSES (a minimum of 3 credits): Business 3120 or Computer and Information Science 1530; Business 3110 or Computer and Information Science 1597 or Television, Radio and Emerging Media 3537; Sociology 2800; Television, Radio and Emerging Media 1165, 2519; Business 3175.

With permission of the Deputy Chairperson of the Department of Business Management, the student may substitute an appropriate course to replace one of the above courses for any of the BBA concentrations.

The Business Core requirement of "Computer and Information Science 1050 or Computer and Information Science 1110 or Computer and Information Science 1115" may be waived by the department for B.B.A. students who can demonstrate sufficiently advanced computer proficiency in spreadsheet analysis.

Writing-Intensive Requirement: Students are required to take at least one writing-intensive course (W course).
Residence Requirement: At least 21 credits of the above courses, including at least one required capstone seminar course, must be completed at Brooklyn College.

## B.S. degree program in business management HEGIS code 0506; SED program code 85067

Admission to Program
In order to declare a major in this program, a student must have completed at least 32 credits at Brooklyn College with a grade point average of 2.20 or better. Students who enter Brooklyn College after earning at least 28 credits elsewhere, may declare a major in this program after earning at least 15 credits at Brooklyn College with a grade point average of 2.20 or better.

Department requirements (48-53 credits)
Majors must complete the following course requirements:
Business Core:
All of the following: Economics 2100 or Business 2100; Economics 2200 or Business 2200; Economics 3410 or Business 3410 or Business 3421 or Computer and Information Science 2590 or Mathematics 1201; Business 3400 or Economics 3400 or Mathematics 2501 or Mathematics 3501 or Psychology 3400; Business 3430 or Computer and Information Science 2531; Business 3200; Business 3100; Accounting 2001; Accounting 3201; FINC 3310; Philosophy 3314; Computer and Information Science 1050 or Computer and Information Science 1110 or Computer and Information Science 1115..

Business Electives:
Three additional electives in business not used to satisfy the Business Core or Capstone Seminar requirement.
To satisfy the requirement of two additional electives, students may take:
(a) any three courses with a business prefix.
(b) one or two courses with a different prefix if crosslisted with a business course (for example, Computer and Information Science 1590 which is crosslisted with Business 3410).
(c) The following courses may also be used to satisfy the business electives requirement:

Accounting 3001, 3041, 3051, 3101, 4201, Computer and Information Science 3820, Economics 3202, 3342, 3352, 3362, Mathematics 2601, Psychology 3171.

Capstone Seminar:
One of the following seminars: Business 4000W, or Business 4100W, or Business 4101W, or Business 4200W, or Business 4202W or Computer and Information Science 1580W, or [Business 4300W] or Finance 4300W.

Writing-Intensive Requirement:
Students are required to take at least one writing-intensive course (W course).
Residence requirement:
At least 21 credits of the above courses, including the required capstone seminar course, must be completed at Brooklyn College.
Index requirement:
Attainment of a grade point average of 2.00 in all courses taken to satisfy department requirements. This does not mean that a student must earn a grade of C or better in every single course; it is the overall grade point average in the major that matters.

## B.S. degree program in information systems <br> HEGIS code 0702; SED program code 32153

This interdepartmental program is described in the "Computer and Information Science" section of the Bulletin

## B.S. degree program in public accounting and business management HEGIS code 0502; SED program code 35423

Program title change from public accounting and business, management and finance to public accounting and business management awaiting approval by New York State Education Department.

This 150-credit undergraduate program is designed to allow students to meet the requirements of New York State for licensure as a CPA, while also obtaining additional exposure to business management. New York State currently requires candidates for licensure to have a total of 150 credits, including 33 credits in accounting and tax (including financial accounting and reporting, cost or managerial accounting, taxation, and auditing and attestation services) as well as 36 additional credits in business.

In addition to this program, students who are interested in accounting careers should consider the B.S. in Internal Accounting, the B.S. in Accounting, and a combination of the B.S. in Accounting and the M.S. in Accounting.

Program requirements (85-87 credits)
All of the following: Accounting 2001; 3011; 3021; 3041; 3051; 3101; 3201; 4001; 4011; 4101; 4201; 4501W; 4502, or 7108X; Computer and Information Sciences 1050; Business 3100; Business 3200; [Business 3310] or Finance 3310; Business 3400 or Economics 3400 or Mathematics 2501 or 3501; Business 3430 or Computer and Information Science 2531; Business 4200W or Business 4300 W or Finance 4300 W; Business 2100 or Economics 2100; Business 2200 or Economics 2200; Business 3421 or Computer and Information Science 2590 or Business 3410 or Economics 3410 or Mathematics 1201; Business 3320 or Economics 3320; [Business 3330] or Finance 3330.

Both of the following: Philosophy 3314 and Communication Arts, Sciences, and Disorders 2623.
Students must take additional courses to complete the 150-credit requirement.
Students are urged to take all Brooklyn College core courses in their first four years, so as to retain the option of later changing paths to obtain a 120 credit B.S. in accounting and a M.S. in accounting.

Highly recommended elective: Accounting 3360 or Business 3360. Students with a GPA of 3.0 or better may also take graduate courses, such as courses in financial statement analysis or controllership, in their fourth or fifth years, with permission.

The program allows a choice between data analytics (Business 3421 or Computer and Information Science 2590) and fundamental mathematical tools of economics, including calculus (Business 3410 or Economics 3410 or Mathematics 3410. Data analytics is in demand in many business fields, while calculus is required for certain Finance courses, and is very helpful to students planning advanced study in economics and finance, or doctoral study.

Students must achieve a grade of $C$ or better in each of the required Accounting courses. No Accounting course may be taken more than three times by a student in this major. Students taking a specific Accounting course three times without achieving a grade of C or better (this includes INC, W, WN, WU, WF, and ABS grades), may not take that course again and will not be permitted to complete this major or any other Accounting major at Brooklyn College.

Writing-Intensive Requirement: Students are required to take at least one writing-intensive course (W course).

## Departmental Minor(s)

## Minor in Business Law

## Department Requirements

A grade of C - or higher in each of the six courses offered in the minor.
All of the following: Accounting 2001, Accounting 3201, Accounting 4201, Business 3220, [Business 3310] or Finance 3310 or Business 2300, and Business 3350.

Recommended courses: Philosophy 3314, Philosophy 3740, and Accounting 3360 or Business 3360.

## Minor in Corporate Social Responsibility

An interdepartmental minor, offered by the Department of Business Management and the Department of Philosophy.
All of the following: Business 3245 or Business 3250 or Women's and Gender Studies 3345; Business 3251 or Philosophy 3335; Philosophy 3314; Philosophy 3307 or Philosophy 3309 or Philosophy 3310.

Any two of the following: Accounting 3201, Business 3210, Business 3220, Classics 3233, Economics 3252, Business 3020 or Judaic Studies 3205; Philosophy 3310, Philosophy 3315 or Communication 3200, Philosophy 3318W or Computer and Information Science 2820W, Philosophy 3307, Philosophy 3309.

Each course may be used to satisfy only one requirement.
A grade of C - or higher is required in each of the six courses offered for the minor.

## Minor in Marketing

This minor is not open to students who are pursuing the BBA with a concentration in marketing.

Department Requirements
A grade of $C$ or higher in each of the six courses offered in the minor.
All of the following:

1) Business 3120 or Computer and Information Science 1530; Business 3100; Business 3140; Business 3170; and Television, Radio \& Emerging Media 2517 or Business 3130.
2) One course chosen from the following: Business 3175, Business 4100W, Sociology 2800, or Television, Radio \& Emerging Media 2519.

## Minor in Organizational Behavior

All of the following: Business 3200, Business 3210, Business 3220, Business 3251 or Business 3252, Business 3260 or Psychology 3171

## Minor in Small Business Management and Urban Entrepreneurship <br> All of the following: Accounting 2001; Business 3240 or 3200; Business 3100; Business 3230; Business 3150; [Business 3310] or Finance 3310.

## Courses

§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## BUSN 2000 Business and Finance in the Contemporary World

3 hours; 3 credits
Introduction to business and business organizations. Special emphasis on entrepreneurship. Survey of management, leadership, human resource management, operations management, quality control, marketing, economics, finance, personal finance, financial institutions, the securities markets, accounting, technology management, social responsibility, and international business. Of interest to students who are undecided about their major and want to explore the different areas of business as well as for those who are not majoring in business and want a basic background in business principles.

## BUSN 2010 Professional Development and Success

2 hours; 2 credits
The development of professional skills necessary for career success. Focus on skills sought by employers and required for facilitating transition into the working world. Discussions on the following topics: verbal and written communications, impression management, corporate culture, leadership, developing and delivering presentations, and interpersonal skills.

Prerequisite: sophomore or higher standing.

## BUSN 2100 Elementary Macroeconomics

## 4 hours; 4 credits

Contemporary economic analysis of the operation of the United States economy. Role of markets and the determination of the overall level of economic activity. Dynamic process of growth, inflation, and international trade. (This course is the same as Economics 2100.)

Prerequisite: Satisfying the college readiness requirement in mathematics by a passing score on the CUNY Mathematics Skills Assessment Test or an exemption from taking the CUNY

Mathematics Skills Assessment Test. Alternatively, students who have passed the equivalent of Mathematics 1011 (pre-calculus) or higher can register for the class.

## BUSN 2200 Elementary Microeconomics

3 hours; 3 credits
Basic laws and principles of economic science. Value, price, and distribution. Preparation for more comprehensive studies involving application of the tools of analysis to economic problems. (This course is the same as Economics 2200.)

Prerequisite: Satisfying the college readiness requirement in mathematics by a passing score on the CUNY Mathematics Skills Assessment Test or an exemption from taking the CUNY Mathematics Skills Assessment Test. Alternatively, students who have passed the equivalent of Mathematics 1011 (pre-calculus) or higher can register for the class.

## BUSN 2300 Personal Finance

3 hours; 3 credits
Fundamentals of personal finance. Covers budgeting and cash-flow management, credit use, planned borrowing, taxes, managing major expenditures such as automobiles and housing, retirement planning and estate planning, higher education planning, property and liability insurance, health care planning, life insurance planning, and investments, (stocks, bonds, mutual funds, commodities).

## BUSN 3010 Business and Corporate Writing

## 3 hours; 3 credits

Writing and written communication skills needed in business, finance, government, and public relations. How to outline, research, write, edit and rewrite business documents. Assignments include writing corporate letters, memos, brochures, reports and other documents. Students will also share in simulated boardroom corporate communications decision making, as selected documents are reviewed and rewritten by the class. This course is the same as

Television, Radio and Emerging Media 2660.
Prerequisite: English 1010 [1].

## BUSN 3020 Business Practices and the Jewish Tradition

## 3 hours; 3 credits

Using the classical sources of the Jewish tradition, this course will examine subjects dealing with running a business in accordance with Jewish law and values. Topics covered include compassion for the poor, concern for the stranger, racism, employer-employee relations, pricing, honesty in business, water, environmentalism, and moral leadership. (This course is the same as Judaic Studies 3205.)

Prerequisite: Judaic Studies 3012 [12] or 3013 [13] or permission of the chairperson.

## BUSN 3021 Making a Living: Jews, Business, and Professions from Antiquity up to the Modern Period

3 hours; 3 credits
An overview of the Jewish experience in business from the biblical period to contemporary times. Analysis of the historically and culturally varied Jewish communities around the globe and how their surroundings influenced their choices of earning a living. This course is the same as Judaic Studies 3206.

## BUSN 3023 Business and Government

3 hours; 3 credits
Timely topics relevant to the relationship of business and government including the historical development of the role of business in society and the non-market environment within which businesses must be managed. Current issues such as the Wall Street bailout, regulation of and lobbying by Wall Street and banking, and business's social policy concerns.

Prerequisite: Sophomore status or permission of the department.

## BUSN 3024 Labor Relations in a Free Society

## 3 hours; 3 credits

This course is an introduction to and overview of the business and social implications of organized labor. Alternative perspectives on labor unions will be contrasted and applied. The course takes a comparative approach. Current issues respecting public sector unionism will be discussed.

Prerequisite: Sophomore status or permission of department

## BUSN 3100 Principles of Marketing

## 3 hours; 3 credits

An overall view of the field of marketing and the theory of consumer and enterprise demand. Emphasis is given to consumer behavior, advertising, social responsibility, marketing strategies, market potential, product planning and development, market research, pricing, sales promotion, channels of distribution and government regulation. (Not open to students who have completed Economics 3001 [50.2].)

## BUSN 3110 New Media and Business

3 hours; 3 credits
The history, theory, and practice of new media in today's networked society and how this affects the profit and not-for-profit sectors; the implications of the convergence of technology and
convergence of disciplines; Internet marketing; and the societal implications of the new connectedness. The latest research on the impact of second generation web-based media such as social networking, blogs, wikis, and virtual communities will be examined. This course will focus on how the new media is being used and/or should be used by the corporate world. This course is the same as Television, Radio and Emerging Media 3537 and Computer and Information Science 1597.

Prerequisite: Sophomore status or permission of the chairperson.

## BUSN 3120 Electronic Commerce

3 hours; 3 credits
How the Internet can be used to conduct business. Topics covered include: Internet hardware and software, tools and technologies for creating a Web site, characteristics of successful Web sites, new technologies, the future of the Internet, Web communication strategies, security issues, legal and ethical issues, Internet information services, data mining, and global E-commerce. Case studies of successful E-commerce businesses will be examined. This course is the same as Computer and Information Science *1530.

Prerequisite: Computer and Information Science 1050 or Computer and Information Science 1110 or Computer and Information Science 1115 or any course in computing.

## BUSN 3125 Principles of Selling

3 hours; 3 credits
Overview of the selling process. Identification of the elements of the communication process between buyers and sellers. Examination of the legal and ethical issues of organizations that affect salespeople.

Prerequisite: BUSN 3100

## BUSN 3130 Advertising and Direct Marketing

3 hours; 3 credits
Importance of advertising and direct marketing in the mix of strategies for selling. Determining budgets and objectives. Evaluating strategies. Development of a media plan. Analysis of the creative process. Copy and media testing. Direct response advertising, direct mail, catalogs, mailing lists, cooperative advertising, telemarketing, and lead generation. Group projects and real-life applications. (Not open to students who have completed Economics 50.7.) This course is the same as Television, Radio and Emerging Media 2517.

Prerequisite: Business 3100 [50.2] or Television, Radio and Emerging Media 1165 [6.5].

## BUSN 3140 Consumer Behavior

3 hours; 3 credits
Interdisciplinary approach to understanding consumer motivation and behavior. The relationship of information processing and learning theory on buyer behavior, importance and measurement of images and attitudes, theories of promotion and communication, and models of consumer behavior. Consumerism. Application of theoretical principles to advertising, positioning, segmentation, and product strategies. (Not open to students who have completed Economics 50.3 or Economics 50.9.)

Prerequisite: Business 3100 [50.2].

## BUSN 3150 Ethnic Marketing and Multicultural Business

3 hours; 3 credits
Ethnic marketing in the United States from an interdisciplinary perspective. Strategic value of diversity, segmentation, ethnic market research, utilizing the ethnic media, and marketing to various ethnic groups including African-Americans, Latinos, AsianAmericans, and others. Contribution of ethnic entrepreneurs and ethnic businesses to the economy. Interdisciplinary readings, current general and trade press material, cases, and relevant census data will be used. (This course is the same as Puerto Rican and Latino Studies 4515.)

Prerequisite: Business 3200 [50.1] or 3240 [40.3]; and 3100 [50.2]

## BUSN 3160 Fashion Marketing

3 hours; 3 credits
The business of fashion. Marketing influences on the way products are conceived, produced and sold. Topics include: product development; branding decisions; marketing decisions, media decisions, and retail strategies; global sourcing; ethical considerations; fashion trends; innovations in fashion marketing; and careers in the fashion industry. Real-world examples and case studies.

Prerequisite: Business 3100 [50.2] or sophomore status.

## BUSN 3170 International Business

## 3 hours; 3 credits

An introduction to the international business environment. Topics covered include: issues involved in researching and entering overseas markets, identification and evaluation of opportunities in overseas markets, and problems faced by international business.
Emphasis will be placed on understanding the economic, financial, technological, sociopolitical, and cultural environments in designing international business strategies.

Prerequisite: Economics 2100 [10.1] or Business 3100 [50.2].

## BUSN 3171 Global Logistics

3 hours; 3 credits
Focus on the management of company's activities in a more efficient way as it relates to designing, procuring, manufacturing, distributing, retailing, servicing, and recycling products and services. Topics covered include warehousing alternatives, inventory control, materials handling, transportation, facility location, financial and legal issues, outsourcing and offshoring, and traffic management. Global and ethical implication of these activities.

Prerequisite: Business 3100

## BUSN 3175 Asian Business

## 3 hours; 3 credits

Introduction and overview of the business environment in the AsiaPacific region: China, Japan, Korea, Taiwan, and the ASEAN nations. Researching and entering Asian markets, Asian management theory and practice, the Asian financial crisis, identification and evaluation of risks and opportunities in Asian markets, problems faced by international firms in doing business in Asia. Designing international business in light of historical, economic, technological, political, and socio-cultural environments.

Prerequisite: Economics 2100 or Business 3200 or 3100 . Students majoring in business are recommended to take Business 3170 before taking this class. Juniors and seniors not majoring in
accounting; business, management, and finance; or economics may take this course without any prerequisites.

## BUSN 3178 Country Risk Analysis

3 hours; 3 credits
Geopolitics of business in a range of environments. Applying frameworks for measuring and mitigating risk in emerging market countries where social and political instability affect business leaders and policymakers. Analytical tools and approaches to help students bring critical thinking to their understanding of geopolitics and business.

Prerequisite: Business 3200 and Business 3170, or department permission.

## BUSN 3180 Green Business

3 hours; 3 credits
Introduction to the environmental movement, both historical and up to the present date, and its relationship to business. Course demonstrates that business venture profitability and environmental sensitivity are no longer opposing interests. Topics discussed include: how to use environmental strategy to innovate, create value, and build a competitive advantage; green energy; green building; green transportation; green goods and services; clean technology business models; green business opportunities; and careers.

Prerequisite: Business 3100 [50.2] or sophomore status

## BUSN 3181 Advanced Topics in Green Business

3 hours; 3 credits
The international carbon market and Cap and Trade; Kyoto Protocol, European Union Emissions Trading Scheme and other international carbon trading and carbon tax models; the nascent domestic carbon market; renewable energy, including solar, wind, geothermal installations; corporate environmental compliance at all levels of government; green not-for-profit businesses and NonGovernmental Organizations (NGOs).

Prerequisite: Business 3100 [50.2] or Business 3180 [56]; Economics 2200 [20.1] or Business 2200 [20.1]; or departmental permission.

## BUSN 3182 Green Real Estate

## 3 hours; 3 credits

Course Description: The benefits and components of green buildings, including sustainable site selection; energy and water efficiencies; indoor environmental quality; construction materials and natural resource stewardship; innovation in design; the business implications of sustainable urban planning; as well as the financing and marketing of green real estate projects. Recognized green building and/or renovation standards such as LEED, Energy Star, Passive House and Green Globes.

Prerequisite: Business 3100 [50.2] or Business 3180 [56].

## BUSN 3200 Principles of Management

## 3 hours; 3 credits

Principles of management. Functions of the manager. Organization and operation of American business. Management processes, concepts, and specific problems of production, management, labor relations, marketing, financing, decision making and accounting. Lectures, discussions, and case studies. (Not open to students who have completed Economics 3200 [50.1].)

## BUSN 3210 Organizational Behavior and Diversity <br> Management

3 hours; 3 credits
This course deals with individual and group behavior within organizational systems. Topics covered include: job satisfaction, work motivation, communications, organizational design, organizational culture, organizational change, leadership, team development, interpersonal and intergroup conflict management, diversity and inclusion, total quality management, and social responsibility/ethics. (Not open to students who have completed Economics 3210)

Prerequisite: Business 3200 [50.1]

## BUSN 3220 Negotiation and Conflict Resolution

## 3 hours; 3 credits

Introduction to the field of negotiation, conflict studies, and mediation theory. Nature of conflict, conflict resolution, nature of negotiation, finding negotiation leverage, professional and moral responsibility in negotiation, mediation approaches, trends in the discipline of conflict resolution. Games, simulations, and case studies.

Prerequisite: Sophomore status.

## BUSN 3221 Employment Law for Managers

3 hours; 3 credits
Introduction to employment law: Employee/independent contractor classification, employment discrimination, affirmative action, sexual harassment, the hiring process, employee testing, employee privacy in the workplace, immigration, and terminating employees (for cause, layoffs).

Prerequisite: Accounting 3201

## BUSN 3230 Small Business Management and Minority Entrepreneurship

3 hours; 3 credits
Entrepreneurial processes of new venture creation and small business management. How entrepreneurs start businesses, psychological and economic characteristics of entrepreneurs, obtaining financing, small business marketing and advertising, financial and cash management for a small business, managing a small business, and using the World Wide Web as a profitable business tool. Importance of small business development by minorities. Case studies of successful minority entrepreneurs will be examined.

## BUSN 3235 Small Business Operations and Entrepreneurship

3 hours; 3 credits
This course is targeted to students who are interested in developing their practical knowledge and competence of key processes in small business management including competitive intelligence, competitive analysis, business plans, entrepreneurial finance, venture capital, marketing plans, franchising, international entrepreneurship, creativity for entrepreneurs, social entrepreneurship, ethical issues, and resource requirements.

Prerequisite: sophomore status

3 hours; 3 credits
Managerial labor policies. Factors affecting productive efficiency and morale of workers. Methods and policies of apprenticeship, recruitment, dismissal; criteria of employee selection, wage payment, and work standards. Problems of monotony and work schedules. Welfare policies. This course is the same as Psychology 3172. (Not open to students who have completed Economics 3240 [40.3].)

Prerequisite: Sophomore status or Psychology 2100 [10]

## BUSN 3245 Managing a Global Workforce

3 hours; 3 credits
Making informed human resource decisions in an international context. Concepts and frameworks to better understand why and how human resource issues vary from one country to another. Perspectives on making human resource decisions in the United States.

Prerequisite: Business 3240 [40.3]

## BUSN 3250 Diversity and Inclusion in the Workplace: A Global Perspective

3 hours; 3 credits
Knowledge and skills that will enable students to effectively analyze the interplay between diverse identities and organizational dynamics both in the U.S. and global contexts. The course will: (1) Analyze the evolution of the relationship between sex, gender, other identities, and work around the world; (2) Compare and contrast the labor market and organizational experiences of men and women in the U.S. in a comparative perspective with other countries; and (3) Examine strategies for successfully building diverse and inclusive organizations. Real life examples and cases will be used to illustrate and integrate the studied concepts. This course is the same as Women's and Gender Studies 3345.

Prerequisite: Upper sophomore status or Business 3240 [40.3] or Psychology 3172 [12.7] or Women's and Gender Studies 1001 [12].

## BUSN 3251 Workplace Values and Happiness

3 hours; 3 credits
Issues relating to the integration of virtue and spiritual values such as creativity, integrity, social responsibility, economic justice, and environmental stewardship into the workplace and marketplace. Changing the corporate culture, importance of the mission statement, and leadership styles. Research on happiness and the important role that meaningful work plays in happiness. Real life examples and cases to illustrate concepts and issues. This course is the same as Philosophy 3335.

Prerequisite: Philosophy 3314 [14] or permission of the chairperson.

## BUSN 3252 Stress Management in Workplace Settings

3 hours; 3 credits
Stress management at the job in small and large business settings. Understanding stress, causes of stress, management and prevention of stress. Approaches for acquiring specific techniques for stress management. Areas covered include: causes and management of occupational stress, workplace bullying and stress, stressful aspects of company mergers, stress in the financial sector, and stress among women in management.

## BUSN 3260 Leadership in Organizations

## 3 hours; 3 credits

Current theory and research in effective leadership. Focus on how successful leadership enhances the effectiveness of organizations. How to develop leadership skills, assert authority, achieve power, introduce change, and transform an organization. Special attention to leadership and entrepreneurship in startup firms. Qualities of entrepreneurial leadership. Student self-assessment of leadership skills and styles. Case studies of effective and ineffective leaders.

Prerequisite: sophomore status.

## BUSN 3270 Foundations of Non-Profit Management

## 4 Hours; 4 Credits

Current theory and research in the management of non-profit agencies. Topics will include: program development, marketing, fundraising, law and regulations, governance, and select financial issues. Projects, real life examples, and case studies.

Prerequisite: Accounting 2001 [1]; Business 2000 [20] or Business 3200 [50.1] or Business 3100 [50.2].

## BUSN 3320 Money and Banking

## 3 hours; 3 credits

The nature of money, the monetary system, and monetary standards. Commercial banking operations and noncommercial banking institutions. Relationship of money and banking to prices and economic activity. (This course is the same as Economics 3320.)

Prerequisite: Economics 2100 [10.1].

## BUSN 3350 Real Estate Management

## 3 hours; 3 credits

Essentials of real estate financing and management. Topics covered include: real estate financing, how to value and invest in income producing property, development and sub-division of real estate, co-ops and condominiums, environmental issues, fair housing practice, contracts, leases, landlord/tenant law, real estate brokerage, listing agreements, buyer representation, form of ownership, appraisal, property development, and closing the real estate transaction.

Prerequisite: [Business 3310] or Finance 3310.

## BUSN 3360 Fraudulent Reporting and Forensic Financial Analysis

3 hours; 3 credits
The tools of financial statement analysis and skills that can be used to detect fraudulent and manipulative financial statements; review of actual fraudulent financial statements issued to investors; discussion of recent legislation and its impact on the accounting profession; reforms that would actually protect investors. (This course is the same as Accounting 3360.)

Prerequisite: sophomore status.

## BUSN 3373 Enterprise Risk Management

3 hours; 3 credits
Focus on the various forms of risk that business managers must assess and control to protect the human, physical, intellectual and financial capital of an enterprise. An examination of the sources of risk and the potential consequences firms could experience from
the realization of an array of hazards. An examination of how managers behave during a business crisis and the consequences of this behavior.

Prerequisite: Finance 3310 or [Business 3310] or Economics 3332 [70.8]; Accounting 2001 [1]

## BUSN 3400 Introduction to Economic and Business Statistics

4 hours; 4 credits
Descriptive statistics including measures of central tendency, dispersion, and skewness. Probability and theoretical probability distributions including the binomial function and the normal curve. Sampling, estimation, and test of hypothesis. Simple correlation and regression analysis. Applications from social sciences. This course is the same as Economics 3400. (Not open to students who are enrolled in or have completed any of the following equivalent courses: Sociology 2112; Psychology 3400.) STEM variant course Satisfies Pathways Required Core Math and Quantitative Reasoning requirement.

Prerequisite: Satisfying the college readiness requirement in mathematics by a passing score on the CUNY Mathematics Skills Assessment Test or an exemption from taking the CUNY Mathematics Skills Assessment Test. Alternatively, students who have passed the equivalent of Mathematics 1011 (pre-calculus) or higher can register for the class.

## BUSN 3410 Fundamental Methods of Mathematical Economics I

3 hours; 3 credits
Mathematical tools necessary for advanced study. Application of differential calculus and matrix algebra to economic analysis. Consideration of static, comparative static, and optimization models (This course is the same as Economics 3410. Not open to students who have completed Mathematics 2101 [10.1].)

Prerequisite: Economics 2200 [20.1] or Business 2200 [20.1].

## BUSN 3420 Management Information Systems

3 hours; 3 credits
Management information systems as a business resource for achieving competitive advantage. The major IT applications used in business and how they enable competitiveness. The central role that relational databases and data warehouses play in the business world. How IT has enabled and accelerated the growth of ecommerce. The role of decision support systems and artificial intelligence in business. Overview and impact of IT infrastructure design. System Development Lifecycle, project management, outsourcing, offshoring and its impact on the US economy. Information security, intellectual property rights, copyright and patent law on a national and international level. New trends in technology and their potential impact on industry. Case studies and team project are required. This course is the same as Computer and Information Science 1590. (Not open to students who have completed Computer and Information Science 1590 [9.2].).

Prerequisite: Computer and Information Science *1050 [5.2]; or permission of the chairperson.

## BUSN 3421 Foundations of Business Analytics

3 hours; 3 credits
Introduction to business analytics; kinds of analytics: descriptive/prescriptive/predictive; data mining and big data; data visualization; dashboards for organizational performance
management; data warehouses and data marts; text and web mining; business issues in analytics. Cases, articles, projects and hands-on analytics software use. This course is the same as Computer and Information Science 2590.

Prerequisite: Business 3400, Economics 3400, Mathematics 1501, Psychology 3400, or an equivalent statistics course with a grade of C or better; and Computer and Information Science 1050 or proficiency with spreadsheets.

## BUSN 3425 Business Communication and Data

## Visualization

3 hours; 3 credits
Introduction to data visualization, presentations, and storytelling in business, including writing, data visualizations, and oral presentation. Students learn to convey ideas and information with clarity to targeted audiences. Using standard industry tools, students learn how to explore, analyze, uncover, understand, and present data insights to facilitate data-driven decision making. Students are introduced to effective writing techniques and presentations, graphic design principles, strategies for effective oral presentations, and industry best practices.

Prerequisites: Computer and Information Science 1050, 1110, or 1115; Business 3400, Economics 3400, Psychology 3400, or Sociology 2112; English 1010 and English 1012

## BUSN 3430 Operations Management

3 hours; 3 credits
Study in managerial decision making to solve a wide range of operating management problems. Topics covered include: planning, evaluating, and control of operations; forecasting and inventory management; scheduling; project design and management; resource allocation; queuing models; quality of the work environment; and technological change. Design and implementation of management strategy will be emphasized through computer simulation, problems, and cases. This course is the same as Computer and Information Science 2531. (Not open to students who are enrolled in, or who have completed Mathematics 3606 [73.2] or Economics 31.4.)

Prerequisite: Business 3400 [30.2] or Economics 3400 [30.2].

## BUSN 3432 Information Systems Project Management

3 hours; 3 credits
Information system project definition, management and implementation using automated project management software. Analytical and automated methods for management of project time, resources, cost and risk. Ensuring system quality and usability. This course is the same as Computer and Information Science 2532.

Prerequisite: Computer and Information Science 1590 or Business 3420.

## BUSN 3440 Management of New and Emerging

## Technologies

3 hours; 3 credits
The focus of this course is on the management of work units charged with technical renewal or new applications of technology. The practical problems of people in industry, involving interpersonal relations, groups, leadership, and organizational change, will be viewed in light of the overall strategy of the firm. Issues will range from managing project groups in traditional pyramid organizations, as well as in the newer matrix organizations, to managing the transfer of technology on an international basis.

This course will use the case study approach predominantly, but also will include small group student projects. (This course is the same as Computer and Information Science 1595.) (Not open to students who have completed Economics 50.8.)

Prerequisite: Business 3200 [50.1].

## BUSN 3500 Health Economics and Policy

3 hours; 3 credits
Introduction to health economics and public policy. The roles of physicians, hospitals, government, health insurance companies, pharmaceutical companies, and the newly introduced medical exchanges in the delivery of health care. Topics covered include: characteristics of the health care sector of the economy; cost benefit and effectiveness analysis, justifications for government involvement in health care regulation; how government policies and insurance markets determine the allocation of health care resources; financing of health care services; international comparisons; and policy issues such as universal health insurance. This course is the same as Economics 3500.

Prerequisite: Economics 2200 or Business 2200 or permission of the chairperson.

## BUSN 4400W Advanced Economics and Business Statistics

3 hours; 3 credits
Index number construction. Time series analysis. Chi-square, F, and student's t distributions. Advanced topics in statistical inference. Variance, multiple regression, and correlation analysis. Applications from economics. This course is the same as Economics 4400W. Writing-intensive course.

Prerequisite: English 1012 [2]; Business 3400 [30.2] or Economics 3400 [30.2] or Mathematics 3501 [51.1]; and Economics 3410 [31.1] or its equivalent.

## Seminars

## BUSN 4000W Seminar in Special Topics in Business

3 hours; 3 credits
Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take this course more than once for credit but may not repeat topics. Writing-intensive course. (Not open to students who have completed Economics 80.1.)

Prerequisite: English 1012 [2], senior standing.

## BUSN 4100W Seminar in Marketing Research

## 3 hours; 3 credits

Basic techniques of marketing research, including research design, use of primary and secondary data, questionnaire construction, sample selection, data collection and analysis, report writing, and applications of research to the solution of marketing problems. A group research project involving data collection and analysis is required. Writing-intensive course. (Not open to students who have completed Economics 80.4.)

Prerequisite: English 1012 [2].
Prerequisite or corequisite: Business 3400 [30.2] or Economics 3400 [30.2], or Mathematics *2501 [8.1] or 3501 [51.1]; and Business 3100 [50.2]; and senior standing.

BUSN 4101W Seminar in Strategic Marketing Management

3 hours; 3 credits
Equips students with marketing decision making skills through case study analysis and demonstrates how to develop a strategic marketing plan. Emphasis on the integration of marketing research, market segmentation, targeting, and positioning; and product, pricing, distribution, and promotion strategies. Importance of marketing ethics and corporate social responsibility in decision making. This course is writing-intensive.

Prerequisite: English 1012.
Prerequisite or corequisite: Business 3100 and senior standing.

## BUSN 4200W Seminar in Business Management and Policy

## 3 hours; 3 credits

Analysis and discussion of selected cases in business organization, staffing, supervision, motivation, and compensation of employees; strategic planning, budgeting, controllership, and decision making in the financing, marketing, and production functions of business firms. The students will employ models to develop solutions to common management problems. Writing-intensive course. (Not open to students who have completed Economics 80.1.)

Prerequisite: English 1012 [2].
Prerequisite or corequisite: Business 3200 [50.1] and senior standing.

## BUSN 4202W Seminar in Computer-Assisted Management Games

## 3 hours; 3 credits

Simulation of a business environment providing practice in various management functions such as objective setting, planning, supervising, organizing, controlling, problem solving, and leadership. Emphasis on presentation and communication skills and presenting results and their justification. Includes games involving competition in the marketplace and use of knowledge-based management software for the business executive. The desired course objectives are enhanced negotiating skills, improved personnel observations, and optimized managerial behaviors. Writing-intensive course. (Not open to students who have completed Economics [80.3] or Computer and Information Science 1580W.) This course is the same as Computer and Information Science 1580W.

Prerequisite: English 1012 [2].
Prerequisite or corequisite: Business 3400 [30.2] or Mathematics
*2501 [8.1] or 51.1; and Business 3430 [31.4] or Computer and Information Science 2531 [10.31]; and Business 3200 [50.1] or Economics 50.1; and Computer and Information Science *1050 [5.2] or 1110 [1.5] or 1115 or permission of the chairperson; and senior standing.

## Honors seminars

## BUSN 5000 Independent Research in Business 1

Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Research paper.

Prerequisite: Any Business or Economics class from 3400 [30.2] and higher; an overall GPA of at least 2.85; and departmental permission.

## BUSN 5001 Independent Research in Business 2

Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Approved
topic. Weekly conference. Research paper.
Prerequisite: Any Business or Economics class from 3400 [30.2] and higher; an overall GPA of at least 2.85; and departmental permission.

## BUSN 5100 Internship: Fieldwork 1

9 hours field work; 3 credits
Off-campus internship or independent research project supervised by a faculty member. Final report. (Business 5100 [97.5] is not open to students who have completed Economics 87.5 or 97.5. Business 5101 [97.6] is not open to students who have completed Economics 87.6 or 97.6.)

Prerequisite: Upper sophomore status and departmental permission.

## BUSN 5101 Internship: Fieldwork 2

9 hours field work; 3 credits
Off-campus internship or independent research project supervised by a faculty member. Final report. (Business 5100 [97.5] is not open to students who have completed Economics 87.5 or 97.5. Business 5101 [97.6] is not open to students who have completed Economics 87.6 or 97.6.)

Prerequisite: Upper sophomore status and departmental permission.

## Caribbean Studies

Department office: 3103B James Hall
Phone: 718.951.5597
More than two million people from the Caribbean live in the New York metropolitan area, making Brooklyn College an ideal location for the program in Caribbean Studies. The program draws on the Departments of Africana Studies, English, History, Music, Political Science, Puerto Rican and Latino Studies, Sociology and Spanish to offer a dual major to undergraduates. Students may also work with such science departments as geology or biology. The program examines the great significance of this small region's cultural, economic, and political impact on the world.

As interdisciplinary dual majors, our students enjoy working with scholars and researchers in varied disciplines on the Caribbean region and its diasporas, exploring topics such as plantation slavery and (neo-)colonialism, creolization and identity politics, globalization and migration, folk culture and pop culture. The program is further enriched by visiting lecturers and miniconferences at the College and neighboring colleges.

Visiting Caribbean dignitaries also contribute to our understanding. Caribbean studies students are active in the vibrant Caribbean Students' Union, a Brooklyn College student club that addresses issues affecting the region. The International Caribbean Studies Association is open to our dual majors on a gratis basis. Many participate in association activities, often as panelists in presentations and roundtable discussions. Research opportunities are plentiful and unpaid internships abound at such institutions as the Caribbean Women's Health Organization and the Caribbean Chamber of Commerce and Industry. With the benefit an interdisciplinary education, our graduates go on to pursue a variety of careers and to study medicine and law, among other professions.

## B.A. degree program for Caribbean studies (dual major) HEGIS code 0308; SED program code 82001

Program requirements (18 credits plus a major in any department of the college)

Students must complete parts 1 through 4.

1. Caribbean Studies 1001 and AFST 1040 Introduction to Caribbean Studies
2. Three courses from the courses listed below, plus any prerequisite of the courses.

Caribbean Studies 2300 or Sociology 2300 or Puerto Rican and Latin American Studies 2300
Caribbean Studies 3000 or Africana Studies 3243
Caribbean Studies 3118 or Africana Studies 3246 or Comparative Literature 3620 or Women's and Gender Studies 3118.
Caribbean Studies 3130 or Africana Studies 3350 or Anthropology 3145 or Puerto Rican and Latin American Studies 3130
Africana Studies 3145 or Political Science 3305
Africana Studies 3147
Africana Studies 3240/Comparative Literature 3623/ PRLS 3315W
Puerto Rican and Latino Studies 3315
Africana Studies 3344
History 3515
History 3517
Puerto Rican and Latino Studies 3125
Caribbean Studies 3900
Puerto Rican and Latino Studies 4505
3. One additional course in Caribbean studies chosen either from the courses listed above or approved by the program director. Students may use credits in relevant special topics courses and/or seminars toward satisfying this requirement. Such courses are offered by the Caribbean Studies Program, Departments of Africana Studies, English, History, Music, Political Science, and Puerto Rican and Latino Studies, and Spanish. Some seminars offer opportunities for field study in Caribbean countries. However, students must complete 12 credits in Caribbean studies before enrolling in a seminar.
4. A major in any of the departments of the college. Courses taken to satisfy requirements in the primary major may not be used to satisfy dual major requirements in the Caribbean Studies Program.

## Departmental Minor(s)

## Minor in Caribbean Studies

Department Requirements
A program of twelve credits of advanced electives in Caribbean studies, as defined in the description of the Caribbean Studies, B.A. program, including one seminar. Each course must be completed with a grade of $C$ or higher.

## Courses

## CAST 1001 Major Themes in Caribbean Studies

3 hours; 3 credits
Major factors that have shaped the Caribbean: discovery, slavery, colonialism, imperialism, "foreign" ideologies, and neo-colonialism. Comparative description of plantation societies in the Caribbean.

## CAST 2300 Urban Caribbean Diaspora

3 hours; 3 credits
Introduction to urban issues facing transnational communities; political, economic and sociological analyses of Caribbean Diaspora, with a focus on African descendants, in urban environments; problem-based and place-based approaches; data analysis, group projects. This course is the same as Sociology 2300 and Puerto Rican and Latino Studies 2300.

Prerequisite: Sociology 1101 or Puerto Rican and Latino Studies 1001 or Caribbean Studies 1001.

CAST 3000 Caribbean Carnival: History, Performance, Resistance
3 hours; 3 credits
Introduction to the political and performative aspects of Caribbean carnival. Includes a review of literature in performance: race, gender, sexuality, Caribbean music, masquerade and dance. This course is the same as Africana Studies 3243.

## CAST 3118 Caribbean Sexualities

4 hours; 4 credits
Sex and sexuality in the Caribbean and its diaspora; exploration of how sexuality intersects with and diverges from culture, nationalism, notions of gender, race, and ethnicity. Social science and literary texts explore a range of experiences from the nineteenth to the twenty-first centuries, including heterosexuality, interracial relationships, homosexuality, love, violence, and desire; critical and theoretical texts examine the structures of gender and sexual relations, and relationships between sex and race. This course is the same as Africana Studies 3246, Comparative Literature 3620 and Women's and Gender Studies 3118.

Prerequisite: English 1010
CAST 3130 Climate Justice and the Caribbean
3 hours, 3 credits
Introduction to the physical and environmental characteristics of the Caribbean and the issues challenging these settings and concepts. Survey of theories of climate justice emerging from these concerns. Focus on the relationship of Caribbean history and development to the regional issues, policies and practices that impact the environment. Study of contemporary environmental
justice initiatives. Students may take this course for credit once.
This course is the same as ANTH 3145, AFST 3350 and PRLS 3130.

Prerequisite: Sophomore, Junior or Senior Standing

## CAST 3900 Special Topics in Caribbean Studies

3 hours, 3 credits
Exploration of an aspect of Caribbean Studies. Topics vary from term to term. Course description may be obtained in the program office or online before registration. Students may take this course for credit once.

Prerequisite: Sophomore, Junior, or Senior standing.

## Chemistry

Department office: 359 Ingersoll Hall Extension
Phone: 718.951.5458

## Full-time Faculty

Professors: Ciszkowska, Contel, Davenport, Gibney, Greer, Kobrak, Magliozzo, Murelli
Associate Professors: Dowd, Gallicchio, Gerona-Navarro, Jarzecki, Juszczak, Mieszawska
Assistant Professor: Torrente
Lecturer: Mathias

Chemistry considers the nature of matter, its transformation, and its interaction with energy. The discipline provides the foundation for modern biology and is a cornerstone to such emerging fields as materials science and nanotechnology. The Department of Chemistry offers a bachelor of science degree and a bachelor of arts degree in chemistry as well as a bachelor of arts degree in adolescence education for chemistry teachers. The department also offers a minor in chemistry and a minor in biochemistry. Its faculty members maintain active research programs and mentor promising students who express interest.

The bachelor of science degree is a rigorous program designed to prepare students to work as professional chemists, either upon graduation or after graduate school, and is recommended for those interested in pursuing scientific research. The bachelor of arts degree is less rigorous, and is recommended for students interested in the medical professions. The more flexible course schedule allows for the additional course work and extracurricular activity necessary for admission to professional schools. The B.A. degree is also suited to students who are seeking careers related to chemistry, but who do not wish to pursue advanced study. The requirements for the major for individuals who want to teach high school chemistry are similar to those of the B.A. degree, with supplementary courses in education. The minor in biochemistry provides strong preparation for students who wish to specialize in biochemistry at the master's or doctoral degree level. Internship opportunities in local commercial concerns are available, and interested students should contact the departmental counselor as should those students seeking honors.

A chemistry degree from Brooklyn College prepares students to be in the forefront of scientific and medical research in industry, government, and academia. Our graduates find employment as chemists in many different roles across an enormous range of fields, from government laboratories testing food, air, and water quality to commercial environments. A bachelor's degree in science is a prerequisite for a career in patent law, and can facilitate careers in such other areas as environmental law or in managerial positions, particularly in fields that rely on science and technology. See the department website for information on careers in chemistry. Our students go on to graduate and professional programs nationwide. Students who wish to pursue graduate studies may apply to the master's and doctoral degree programs offered by or in conjunction with this department.

## Courses for reentering students

A student who completed courses in chemistry at Brooklyn College that are no longer offered and who wants to take additional courses in chemistry must consult a department counselor to determine which courses in the present numbering system are equivalent to those for which credit has already been given. Without clearance, credit may be denied.

## Choosing a first course in chemistry

Chemistry 1100 and 1050 are intended for students planning a career in any of the following: the physical, chemical, or biological sciences; engineering; medicine; dentistry; pharmacy; or physical therapy. Students who have taken one year of high school chemistry and who have completed Math 1006 College Algebra (or its equivalent) should take Chemistry 1100. Students who are not prepared for Chemistry 1100 but who have completed Math 1006 or its equivalent should take Chemistry 1050.

Chemistry 1040 is intended for students who plan a career in such health-related fields as occupational therapy, nursing, or nutrition. Students in health and nutrition sciences should consult with their department counselor before choosing a chemistry course.

## American Chemical Society Certification

The American Chemical Society recommends a program of study for students planning a career in chemistry. Chemistry majors who complete the curriculum described for the B.S degree in chemistry and who have taken specific courses may receive American Chemical Society accreditation. Certified graduates are eligible to become members of the society; other chemistry graduates may become associate members of the society and members after three years of professional experience in chemistry. Interested students should consult the department counselor for a list of specific requirements and assistance in planning an appropriate schedule.

## B.A. degree program in chemistry HEGIS code 1905; SED program code 02082

Program requirements (56-70 credits)

One of the following sets of courses:
Chemistry 1200 and 1201;
Chemistry 1050 and 2060 and 1201;
Chemistry 1050 and 2050;
Chemistry 1100;
Students must complete either Chemistry 2100 or both Chemistry 2200 and 2201.

All of the following: Chemistry 2110, 3410 or $3415 \mathrm{~W}, 3510$ or both 3511 and 3512,3520 or both 3521 and 3522, 3900, 4600 or 4610 . At least five credits chosen from the following: Chemistry 2700, 3420, 4530, 4550, 4570, 4571, 4572, 4580, 4581, 4620, 4640, 4720, 4760, 4761 , either 4780 or 4790.

One of the following physics sequences a) or b) or c):
a) Physics 1100 (or Physics 1111 and 1112) and 2100.
b) Physics 1150 and 2150.
c) Physics 1150 and 2100 .

The following mathematics sequence:

* Mathematics 1006 or assignment by the Department of Mathematics to Math 1011, 1012, or 1026;
* Mathematics 1011, 1012, or 1021 and 1026, or assignment by the Department of Mathematics to Math 1201 or 1206;
* Mathematics 1201, or assignment by the Department of Mathematics to Math 1206;
* Math 1206

A minimum of 15 credits in advanced courses in chemistry must be completed at Brooklyn College with a grade of C- or higher in each course.

## B.S. degree program in chemistry <br> HEGIS code 1905; SED program code 02084

## Department requirements (67-79 credits)

One of the following sets of courses:
Chemistry 1200 and 1201;
Chemistry 1050 and 2060 and 1201;
Chemistry 1050 and 2050;
Chemistry 1100;
Students must complete either Chemistry 2100 or both Chemistry 2200 and 2201.
All of the following: Chemistry 2110, 3410 or $3415 \mathrm{~W}, 3510$ or both 3511 and 3512,3520 or both 3521 and $3522,3900,4610,4620$.
At least nine credits chosen from the following: Chemistry 2700, 3420, 4530, 4550,4570, 4571, 4572,4580, 4581, 4640, 4720, 4760, 4761, either 4780 or 4790.

One of the following physics sequences a) or b) or c):
a) Physics 1100 (or Physics 1111 and 1112) and 2100.
b) Physics 1150 and 2150.
c) Physics 1150 and 2100 .

The following mathematics sequence:

* Mathematics 1006 or assignment by the Department of Mathematics to Math 1011, 1012, or 1026;
* Mathematics 1011, 1012, or 1021 and 1026, or assignment by the Department of Mathematics to Math 1201 or 1206;
* Mathematics 1201, or assignment by the Department of Mathematics to Math 1206;
* Math 1206 and 2201

A college-wide minimum of 24 credits in advanced courses in chemistry must be completed at Brooklyn College with a grade of C- or higher in
each course.
Additional requirements for a B.S. degree
Candidates for a B.S. degree with a major in chemistry must complete at least 60 credits in science and mathematics; 24 of these 60 credits must be completed in advanced courses in the Chemistry Department. These 24 credits must be completed at Brooklyn College with a grade of C- or higher in each course. Specific course requirements for a B.S. degree are described above.

The following courses may be applied toward the 60 credits in science and mathematics:
A) All courses in the departments of biology, chemistry, computer and information science, earth and environmental sciences, mathematics, physics and psychology.
B) Courses marked with a number sign (\#) in the Department of Health and Nutrition Sciences.
C) ---Anthropology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470, 4665.
---Core Studies 5, 5.1, 5.2, 7.1, 7.2, 8.1, 8.2.
---Core Curriculum [1300 through 1399.]
---Math 1311, Biology 1010, Chemistry 1007, Physics 1331, Earth and Environmental Sciences 1010.
----Core Curriculum 3301 through 3399
---Economics 3400, 4410, 3410, 4422.
---Philosophy 3203, 3204, 3231, 3232, 3422, 3423, 3601, 3605, 3610.
---Kinesiology 3023, 3271, 3275, 3281, 3285, 4229, 4251.
---Sociology 2701.

## B.A. degree program in adolescence education: chemistry teacher HEGIS code 1905.01; SED program code 26813

This program is not accepting majors effective as of Fall 2019.
The Department of Secondary Education and the Department of Chemistry jointly offer a program for students who plan to teach chemistry in grades 7 through 12. Additional information may be obtained from the Department of Secondary Education or the Department of Chemistry. Adolescence education (grades 7-12) and special subject programs are writing intensive. Students should consult a counselor as early as possible to plan their program. This program is writing intensive.

Program requirements (73-92.5 credits)
All of the following:
Chemistry 1100 or both Chemistry 1050 and 2050.
All of the following: Chemistry 2100, 3410 or 3415W, 3450 or 5450, 4600 or 4610, 5210, Earth and Environmental Sciences 1101 or 1201.
One of the following organic chemistry sequences, a), or b), or c):
a) Chemistry 2500
b) Chemistry 3510 and 3520
c) Chemistry 3511, 3512, 3521 and 3522

One of the following physics sequences, a) or b) or c):
a) Physics 1100 (or Physics 1111 and 1112) and 2100.
b) Physics 1150 and 2150.
c) Physics 1150 and 2100 .

The following biology sequence:
Biology 1001 and Biology 1002
The following mathematics sequence:
Mathematics 1011 or both Mathematics 1021 and 1026 or assignment by the Department of Mathematics to Mathematics 1201.
Mathematics 1201 and 1206

Additional chemistry requirements for a B.A. degree: A minimum of 15 credits in advanced courses in chemistry must be completed at Brooklyn College with a grade of C - or higher in each course. For the purposes of the B.A. degree program in adolescence education: chemistry teacher only, Chemistry 2500 will be considered an advanced course in the Department of Chemistry.

Students must complete 26 credits in the Department of Secondary Education as specified below.
a) Secondary Education 2001, 2002, 3401, 3402 and 3456 courses may be started in the lower-sophomore term, or upper-sophomore term.
b) Secondary Education 4480 . This course may be taken in the junior year.
c) Secondary Education $4481,4482,4483$, and 4484 in the senior year. Students must have successfully completed Secondary Education 4480 before taking any of these courses

The two student teaching field courses, Secondary Education 4482 and 4484 , may be taken in the same semester.
Secondary Education 4404 is course equivalent to all of Secondary Education 4480, 4481, and 4482.
Secondary Education 4410 is course equivalent to all of Secondary Education 4480, 4483, and 4484.
Degree programs in Secondary Education include a major in an appropriate department of the college.
Completion of an adolescence education program as part of a major in one of the sciences qualifies students for New York State initial certification in adolescence education in that science content area for grades 7 through 12.

Students qualifying for the initial certification in adolescence science education may obtain an extension to teach the sciences in grades 5 and 6 by taking Secondary Education 3454.

Admission requirements and academic standing
Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

Students must have a B- in both Secondary Education 2001 and 2002 and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

Students who wish to register for student teaching seminar and field placement will need to file an application with the science education program head for permission. See program office for details.

To take Secondary Education 4480, students must have an overall GPA of 2.75 or higher and the permission of the Secondary Education science education program head, department chair, or deputy;

To take either Secondary Education 4481, 4482, 4483, and/or 4484, students must earn a B+ or higher in Secondary Education 4480, a GPA of 2.75 or higher in their major, and the permission of the Secondary Education science education program head, department chair, or deputy.

A student who takes either Secondary Education 4481 and/or 4482 prior to Secondary Education 4483 and/or 4484 must earn a B or better grade in Secondary Education 4481 and/or 4482 before taking either Secondary Education 4483 or 4484.

A student who takes either Secondary Education 4483 and/or 4484 prior to Secondary Education 4481 and/or 4482 must earn a B or better grade in Secondary Education 4483 and/or 4484 before taking either Secondary Education 4481 or 4482.

## Departmental Minor(s)

## Minor in Biochemistry

## Program requirements ( 32.5 - 37.5 credits)

One of the following sets of courses:
Chemistry 1200 and 1201;
Chemistry 1050 and 2060 and 1201;
Chemistry 1050 and 2050;
Chemistry 1100;
Students must complete either Chemistry 2100 or both Chemistry 2200 and 2201.
The following additional courses must be completed:
Chemistry 3410 or 3415 W or Biology 1002;
Chemistry 3510 or both 3511 and 3512, 3520 or both 3521 and 3522;
Chemistry 4570 or both 4571 and 4572;
Chemistry 4580 or 4581

## Minor in Chemistry

A program of 12 credits of advanced electives in Chemistry each completed with a grade of C-or higher. Each course must be completed at Brooklyn College and must have 3 or more credits. The 2 credit organic chemistry laboratory courses (Chemistry 3512 / Chemistry 3522) may be applied in conjunction with their corresponding lecture courses (Chemistry 3511 / Chemistry 3521).

## Graduate Studies

The Chemistry Department offers master of arts degree programs in chemistry and chemistry teacher (grades 7 through 12). Some courses may be creditable toward the CUNY doctoral degree. For information, students should consult the department's deputy chairperson for graduate studies.

## Courses

*Courses marked with an asterisk (*) are not counted toward the requirement of no fewer than 15 credits in advanced courses for majors in this department for the B.A. degree or 24 credits for the B.S. degree.
§Independent work means not less than three additional hours each week per credit of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

Students with superior records and the recommendation of a department faculty member may apply to the chairperson for permission to register for honors courses (Chemistry 5110 through 5320). Students may not register for more than six credits in honors courses in the department in one term.

Brooklyn College recognizes the importance of reproductive hazard awareness and protection. During laboratory exercises students may be exposed to chemical reagents that may present specific risks to reproductive health, especially to students who are pregnant. Therefore, it is strongly recommended that you do not take the following courses if you are pregnant: Chemistry 1100, 2050, 2100, 2500, 3410, 3415W, 3510, $3512,3520,3522,4620$, and 4760 . If you become pregnant during the semester, please consult your instructor.

## CHEM * 1000 Chemistry and Society

3 hours lecture; 3 credits
Role of chemistry in contemporary life. Topics may include consumer products, foods, drugs, energy sources, and environmental problems. Recommended for nonscience majors. Not open to students who are enrolled in or have completed Core Studies 7.1, Core Curriculum 1322, or any college course in chemistry.

## CHEM *1007 Chemistry in Modern Life: An Introduction for Non-Majors

2 hours lecture, 2 hours laboratory: 3 credits
Study of basic concepts in chemistry and their implications in modern life. This course is not suitable for students majoring in science or interested in the health professions. Satisfies Pathways Required Core Life and Physical Sciences requirement. (Not open to students who are enrolled in or have completed Integrated Science 2, Core Studies 7.1, Core Curriculum 1322 or any college course in chemistry except Chemistry 1050).

## CHEM *1011 Pharmaceutical Research, Development and Approval

3 hours; 3 credits
This course will study the procedure by which medications are developed, tested, and approved for sale. Through selected case studies, we will explore the biochemical basis for drug action and analyze the role of the Food and Drug Administration and the federal government in assuring drug safety. We will also discuss the ethical issues surrounding the pharmaceutical industry, drug development and marketing. Starting Fall 2018 Satisfies Pathways Flexible Core Scientific World requirement.

## CHEM *1012 Chemistry in the Arts and Archaeology

3 hours; 3 credits
General background in basic concepts of chemical structure and activity, with an emphasis on examples from the visual arts and archaeology. Topics include the nature of color; color mixing;
chemical properties, synthesis and use of dyes, pigments, paints, metals, ceramics, glasses and glazes; chemical analysis of archaeological artifacts; the chemistry of art preservation and authentication of art objects; and the chemical hazards in the arts. Starting Spring 2018 Satisfies Pathways Flexible Core Scientific World requirement.

## CHEM *1037 Studies in Forensic Science

3 hours; 3 credits
Introduction to forensic science, including modern techniques of forensic analysis. Collection and preservation of physical evidence at crime scenes. Authentic criminal cases. (Not open to students who have completed Core Curriculum 3307or ANTH 1205.) 20172018: Satisfies Pathways College Option requirement. 2018-2019 Satisfies Pathways Flexible Core Scientific World requirement and College Option requirement. Starting Fall 2019 satisfies Flexible Core Scientific World requirement. Same as ANTH 1205.

## CHEM *1040 General Chemistry for Health-related Professions

1 hour recitation, 3 hours lecture, 3 hours laboratory; 5 credits Principles of chemistry with applications to biological systems and processes. Intended for students in nursing or other health-related fields. (Not open to students who have completed Chemistry *1100 [1] or 2050 [1.2] or Chem 1200 or Chem 1201 or Chem 2060 or the equivalent.) STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: one year of high school algebra.

## CHEM * 1050 General Chemistry IA

3 hours; 3 credits
Introduction to the principles of chemistry with more introductory material than is covered in Chemistry *1100 [1]. Chemistry *1050 [1.1] and *2050 [1.2] (or the combination of Chemistry 1050, 2060, and 1201) constitute a two-term sequence intended for students who are not prepared for Chemistry*1100 [1] or Chemistry 1200. (Not open to students who are enrolled in or who have completed

Chemistry*1100 [1] or Chemistry 1200.) Students seeking to continue to Chemistry 2100 or Chemistry 2200 should check the mathematics pre-requisites for those courses and plan their class schedule accordingly.

Prerequisite: Math 1006 or Math 1021, or placement into Mathematics 1011, 1012, 1026, 1201, 1206, or any Mathematics course numbered 2000 or higher.

## CHEM *1100 General Chemistry I

1 hour recitation, 3 hours lecture, 3 hours laboratory; 5 credits Principles of chemistry. Emphasis on the facts, theories, and laboratory techniques needed for further courses in the sciences. Intended for students planning a career in any of the following: the physical, chemical, or biological sciences; engineering; geology; medicine; dentistry; pharmacy; physical therapy. (Not open to students who are enrolled in or have completed Chemistry *1050 [1.1]) or Chemistry 1200 or Chemistry 1201.) STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences. Students seeking to continue to Chemistry 2100 should check the mathematics pre-requisites for Chemistry 2100 and plan their course schedule accordingly.

Prerequisite: Math 1006 or Math 1021, or placement into Mathematics 1011, 1012, 1026, 1201, 1206, or any Mathematics course numbered 2000 or higher.

## CHEM 1200 General Chemistry I Lecture

3 hours lecture, 1 hour recitation; 3.5 credits
Principles of chemistry. Emphasis on the facts and theories needed for further courses in the sciences. Intended for students planning a career in any of the following: the physical, chemical, or biological sciences; engineering; geology; medicine; dentistry; pharmacy; physical therapy. (Not open to students who are enrolled in or have completed Chemistry 1050 or 1100). STEM variant course Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: Math 1006 or Math 1021, or placement into Mathematics 1011, 1012, 1026, 1201, 1206, or any Mathematics course numbered 2000 or higher;

Pre-/Corequisite: Chemistry 1201

## CHEM 1201 General Chemistry I Laboratory

3 hours laboratory; 1.5 credits
Introduction to the chemical laboratory. Experiments involving quantitative measurements of solids, liquids, and solutions. Demonstrations of physical properties, stoichiometry, and elementary spectroscopy and other analytical techniques. (Not open to students who are enrolled in or have completed Chemistry 1100).

Pre-/Corequisite: Chemistry 1200 or Chemistry 2060

## CHEM * 2050 General Chemistry IB

3 hours lecture, 3 hours laboratory; 4.5 credits
Continuation of Chemistry*1050 [1.1]. (Not open to students who are enrolled in or who have completed Chemistry *1100 [1] ] or 2060 or 1201.) STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences

Prerequisite: Chemistry *1050 [1.1]

3 hours lecture, 1 hour recitation; 3.5 credits
Continuation of Chemistry 1050. Principles of chemistry, including an introduction to atomic structure and bonding and the nature of intermolecular forces. (Not open to students who are enrolled in or have completed Chemistry 2050 or 1100 or 1200). STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: Chemistry 1050
Pre-/Corequisite: Chemistry 1201

## CHEM *2100 General Chemistry II

1 hour recitation, 3 hours lecture, 3 hours laboratory; 5 credits Continuation of Chemistry*1100 [1]. STEM variant course Satisfies Pathways Required Core Life and Physical Sciences. (Not open to students who are enrolled in or who have completed Chemistry 2200 or 2201.)

Prerequisite: Chemistry *1100 [1] or 2050 [1.2] or Chem 1200 and 1201 or Chem 2060 and 1201; Mathematics 1011 or 1012 or 1026, or placement into Mathematics 1201,1206, or any Mathematics course numbered 2000 or higher.

## CHEM 2110 Principles of Chemical Reactivity

2 hours; 2 credits
General background in basic and more advanced concepts of chemical reactivity, molecular geometry and electronic distribution in molecules. Topics include: Atomic theory, the periodic table, periodic trends and properties (with a focus on main group elements), bonding theories, Lewis structures and formal charges, valence bond theory, polar and non-polar molecules and bonds, resonance theory, molecular orbital theory: general principles; molecular orbitals for homonuclear and heteronuclear diatomic molecules, molecular orbital theory for organic molecules focusing on functional groups, principles of symmetry in molecules, chirality, isomerism, stereoisomerism, naming chiral centers; Newman, sawhorse and fisher projections, free-energy diagrams, reaction coordinates and transition states, reaction mechanisms: curved arrow symbolism, elementary steps.

Prerequisite: Chemistry 1100 or Chemistry 2050 or Chem 1200 or Chem 2060
Prerequisite or co-requisite: Chemistry 2100 or Chem 2200

## CHEM 2200 General Chemistry II Lecture

1 hour recitation, 3 hours lecture; 3.5 credits
Continuation of material from Chemistry 1200. Topics include kinetics, equilibrium, electrochemistry, and thermodynamics. Topics in inorganic, organic, and nuclear chemistry are also addressed. STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences. (Not open students who have completed Chem 2100).

Prerequisite: Chemistry 1200 and 1201 or both Chemistry 2060 and 1201 or Chemistry 1100 or Chemistry 2050;
Mathematics 1011 or 1012 or 1026, or placement into
Mathematics 1201, 1206, or any
Mathematics course numbered 2000 or higher.
Pre-/Corequisite: Chemistry 2201

## CHEM 2201 General Chemistry II Laboratory

3 hours laboratory; 1.5 credits
Continuation of Chemistry 1201. Experiments involving
quantitative measurements of kinetics, equilibria, and electrochemistry. An extensive unit on qualitative analysis is also included. (Not open to students who are enrolled in or have completed Chemistry 2100).

Pre-/Corequisite: Chemistry 2200

## CHEM *2500 Organic Chemistry for Health-related

## Professions

1 hour recitation, 3 hours lecture, 3 hours laboratory; 5 credits Survey of fundamental classes of organic compounds, and principles of organic chemistry as applied to aliphatic, aromatic, and biologically important compounds. Emphasis on structure, properties, and preparative methods. Intended for students in nursing or other health-related fields. Not intended for chemistry majors. (Not open to students who are enrolled in or have completed Chemistry 3510 [51] or both 3511 and 3512.)

Prerequisite: Chemistry *1100 [1] or 2050 [1.2] or 1040 [5] or both 1200 and 1201 or both 2060 and 1201.

## CHEM 2700 Introduction to Inorganic Chemistry

3 hours; 3 credits
Introduction to the principles of modern inorganic chemistry. Integration of the properties and reactions of representative compounds with illustrations of the importance of inorganic chemistry in the chemical industry, in fuel and advanced materials technology, in biology/medicine, and in environmental issues.

Prerequisite: Chemistry *2100 [2] or both Chem 2200 and 2201.

## CHEM 3410 Analytical Chemistry

3 hours lecture, 4 hours laboratory; 5 credits
Theory and practice of classical and modern analytical chemistry. Laboratory emphasizes quantitative methods. (Not open to students who are enrolled in or have completed Chemistry 3415W [41W].)

Prerequisite: Chemistry *2100 [2] or both Chem 2200 and 2201.

## CHEM 3415W Analytical Chemistry

3 hours lecture, 4 hours laboratory, 1 hour writing workshop; 5 credits
Theory and practice of classical and modern analytical chemistry. Laboratory emphasizes quantitative methods. Writing-intensive section. (Not open to students who are enrolled in or have completed Chemistry 3410 [41].)

Prerequisite: Chemistry *2100 [2] or both Chem 2200 and 2201, and English *1012 [2].

## CHEM 3420 Instrumental Analysis

2 hours lecture, 6 hours laboratory; 5 credits
Principles and applications of modern instrumentation in analytical chemistry including basic electronics, electroanalytical methods, chromatography, and spectroscopic methods.

Prerequisite: Chemistry 3410 [41] or 3415 [41W]; and Physics *2100 [2] or 2150 [2.5].

## CHEM 3450 Chemistry Teaching Laboratory Management

2 hours lecture, 4 hours laboratory; 4 credits
Course Description: Basics of creating a chemistry laboratory curriculum, including laboratory safety, the procurement, storage,
dispensing and disposal of chemicals, and budgeting experiments. Introduction to modern laboratory pedagogies. Role of chemistry in modern society, with examples of industrial chemistry and information on careers in the field.

Prerequisite: one semester of organic chemistry (Chemistry *2500 [50] or 3510 [51] or both 3511 and 3512) and one semester of analytical chemistry (Chemistry 3410 [41] or 3415W [41W])

## CHEM 3510 Organic Chemistry I

1 hour recitation, 3 hours lecture, 4 hours laboratory; 5 credits Structure and properties of fundamental classes of organic compounds. Emphasis on reactivity, reaction mechanisms, synthesis, stereochemistry, and applications to allied fields. Chemistry 3510 [51] (or both Chemistry 3511 and 3512) and 3520 [52] (or both 3521 and 3522) are required for admission to medical and dental schools. (Students who have taken Chemistry *2500 [50] will lose credit for Chemistry *2500 [50] upon successful completion of this course.)

Prerequisite: Chemistry *2100 [2] or both Chem 2200 and 2201.

## CHEM 3511 Organic Chemistry I Lecture

3 hours lecture, 1 recitation; 3 credits
Structure and properties of fundamental classes of organic compounds. Emphasis on reactivity, reaction mechanisms, synthesis, stereochemistry, and applications to allied fields. First semester of a two-semester sequence intended for students interested in science and in health professional programs including medical, dental and pharmacy school. (Students who have taken Chemistry 2500 or 3510 will lose credit for Chemistry 2500 and 3510 upon successful completion of this course.)

Prerequisite: Chemistry 2100 or both Chem 2200 and 2201, and Chemistry 2110.

## CHEM 3512 Organic Chemistry I Laboratory

4 hours laboratory; 2 credits
An introduction to basic laboratory skills of organic chemistry including distillation, synthesis, and purification techniques such as column chromatography. (Students who have taken Chemistry 2500 or 3510 will lose credit for Chemistry 2500 and 3510 upon successful completion of this course.)

Prerequisite: Chemistry 2100 or both Chemistry 2200 and 2201 Prerequisite/Corequisite: Chemistry 3511

## CHEM 3520 Organic Chemistry II

1 hour recitation, 2 hours lecture, 4 hours laboratory; 5 credits Continuation of Chemistry 3510 [51] or both 3511 and 3512.

Prerequisite: Chemistry 3510 [51] or both 3511 and 3512.

## CHEM 3521 Organic Chemistry II Lecture

3 hours lecture, 1 hour recitation; 3 credits
Continuation of Chemistry 3511. Different classes of compounds, including biomolecules and polymers, with a greater emphasis on reaction mechanisms and synthesis. A second semester of a twosemester sequence intended for students interested in science and in health professional programs including medical, dental, and pharmacy school. (Students who have taken Chemistry 2500 or Chemistry 3520 will lose credit for Chemistry 2500 and 3520 upon successful completion of this course.)

Prerequisite: Chemistry 3511 or Chemistry 3510

## CHEM 3522 Organic Chemistry II Laboratory

4 hours laboratory; 2 credits
An introduction to basic laboratory skills of organic chemistry. Emphasis is placed on qualitative analysis and spectroscopic identification of compounds. (Students who have taken Chemistry 2500 or Chemistry 3520 will lose credit for Chemistry 2500 or 3520 upon successful completion of this course.)

Prerequisite: Chemistry 3512 or Chemistry 3510
Prerequisite/Corequisite: Chemistry 3521

## CHEM 3900 Professional Readiness for Chemists

3 hours, 3 credits
This course covers topics necessary for students entering the workforce as laboratory scientists. The first half of the course considers professional ethics, scientific statistics, and topics related to diversity and conduct in the workplace. The second half of the course focuses on topics related to chemical safety. These include the nature and identification of laboratory hazards, the minimization of risk, and best practices in the storage, use, and disposal of hazardous substances.

Prerequisite: Chem 3415W, 3511, and 3512; Math 1206

## CHEM 4530 Advanced Organic Laboratory Techniques

2 hours lecture, 6 hours laboratory; 5 credits
Elucidation of the structures of organic compounds by spectrometric methods. Separation, purification, and identification of the components of mixtures. Synthesis of compounds utilizing modern methods.

Prerequisite: Chemistry 3410 [41] or 3415W [41W]; and 3520 [52] or both 3521 and 3522.

## CHEM 4550 Advanced Organic Chemistry

3 hours; 3 credits
Intensive study of organic reaction mechanisms including topics of current interest.

Prerequisite: Chemistry 3520 [52] or both 3521 and 3522.

## CHEM 4570 Biochemistry I

3 hours lecture, 4 hours laboratory; 5 credits
Properties and reactions of compounds of biological importance. Oxygen-transport proteins. Enzyme kinetics and mechanisms. Basic immunology. Biological membranes. DNA replication, mutation, and repair. Transcription and the Genetic Code. Protein biosynthesis. Laboratory work emphasizes basic biochemical skills. (Not open to students who are enrolled in or have completed Chemistry 4571 or 4572.

Prerequisite: Biology 2074 or Biology 1002. Prerequisite: Chemistry 3520 or both 3521 and 3522.

## CHEM 4571 Biochemistry I Lectures

3 hours; 3 credits
Properties and reactions of compounds of biological importance. Oxygen-transport proteins. Enzyme kinetics and mechanisms. Basic immunology. Biological membranes. DNA replication, mutation, and repair. Transcription and the Genetic Code. Protein biosynthesis. (Not open to students who are enrolled in or have completed Chemistry 4570.)

Prerequisite: Biology 2074 or Biology 1002; Chem 3510 or both Chem 3511 and 3512

## CHEM 4572 Biochemistry Laboratory I

4 hours laboratory; 2 credits
An introduction to laboratory techniques for biochemistry including spectroscopic and chromatographic methods used in the study of biomolecules and their reactions. The course will also include use of specialized software and biotechnology databases. (Not open to students who have completed Chemistry 4570.)

Prerequisite or corequisite: Chemistry 3520 or both 3521 and 3522; Chemistry 4571.

## CHEM 4581 Biochemistry II Lectures

3 hours; 3 credits
This course presents common metabolic pathways and introduces reaction mechanisms and regulation of principal biochemical pathways. The course addresses the biochemistry of metabolic disorders with clinical implications. Special topics include photosynthesis, iron homeostasis, nitric oxide, and molecular biology. (Not open to students who are enrolled in or have completed Chemistry 4580 [58].)

Prerequisite: Chemistry 4570 [57] or 4571 [57.1].

## CHEM 4600 Foundations of Physical Chemistry

## 3 hours; 3 credits

Physical chemistry with applications to biochemical processes.
Topics include thermodynamics, chemical and physical equilibria, transport phenomena, kinetics, and quantum chemistry. Not recommended for students who intend to take graduate courses in chemistry. Students who complete Chemistry 4600 [60.1] may take Chemistry 4610 [61], but must forfeit three credits of Chemistry 4600 [60.1]. (Not open to students who are enrolled in or have completed Chemistry 4610 [61].)

Prerequisite: Chemistry *2100 [2] or both Chemistry 2200 and 2201, and Mathematics *1206 [4.3].
Prerequisite or corequisite: Physics *2100 [2] or 2150 [2.5].

## CHEM 4610 Physical Chemistry I

3 hours lecture, 4 hours laboratory; 5 credits
Thermodynamics, including nonelectrolyte and electrolyte solutions, reaction equilibria, and phase equilibria. Laboratory emphasizes physicochemical measurements. Students who complete Chemistry 4600 [60.1] may take Chemistry 4610 [61], but must forfeit three credits earned for Chemistry 4600 [60.1].

Prerequisite: Chemistry 3410 [41] or 3415 [41W]; and
Mathematics *2201 [5.3]; and Physics *2100 [2] or 2150 [2.5].

## CHEM 4620 Physical Chemistry II

3 hours lecture, 4 hours laboratory; 5 credits
Continuation of Chemistry 4610 [61]. Chemical kinetics; transport properties; quantum mechanics; atomic and molecular structure; spectroscopy; statistical mechanics.

Prerequisite: Chemistry 4610 [61]

## CHEM 4640 Quantum Chemistry

3 hours; 3 credits
Application of quantum mechanics to molecular electronic
structure, including the Schroedinger equation, operators, angular momentum, variation and perturbation methods, electron spin, Pauli principle, many-electron atoms, application of molecularorbital and valence-bond theories to diatomic and polyatomic molecules.

Prerequisite or corequisite: Chemistry 4620 [62].

## CHEM 4760 Inorganic Chemistry

3 hours lecture, 4 hours laboratory; 5 credits
Atomic structure. Symmetry and Group Theory. Molecular orbitals. Coordination chemistry. Organometallic chemistry. Elements of catalysis and bioinorganic chemistry. Solid-state materials. Laboratory emphasizes the synthesis, purification and characterization of coordination, organometallic, main group, solid state, and bioinorganic compounds. (Not open to students enrolled in or who have completed Chemistry 4761).

Prerequisite: Chemistry 4600 [60.1] or 4610 [61]; Chemistry 2700 [35] is strongly recommended.

## CHEM 4761 Inorganic Chemistry

3 hours; 3 credits
Atomic structure. Symmetry and Group Theory. Molecular orbitals. Coordination chemistry. Organometallic chemistry. Elements of catalysis and bioinorganic chemistry. Solid state materials. (Not open to students enrolled in or who have completed Chemistry 4760).

Prerequisite: Chemistry 4600 [60.1] or 4610 [61]; Chemistry 2700 [35] is strongly recommended.

## CHEM 4780 Environmental Chemistry

3 hours; 3 credits
Principles of chemistry applied to problems of the environment. Sources, reactions, effects of chemical species on the environment. General and specific problems of analysis, interpretation of results, and pollution control. Methods and impact of energy production.

Prerequisite: Chemistry 3410 [41] or 3415W [41W]; Chemistry 3520 [52] or both 3521 and 3522.

## CHEM 5010 Research I

Minimum of 6 hours conference and independent work§; 2 credits Planning and carrying out a research problem under supervision of a faculty member. Weekly conference. Written and oral reports. Students may not receive credit for more than three terms of undergraduate research.

Prerequisite: Chemistry 3410 or 3415 W ; Chemistry 3520 or both 3521 and 3522; and permission of the instructor and the chairperson.

## CHEM 5020 Research II

Minimum of 6 hours conference and independent work§; 2 credits Planning and carrying out a research problem under supervision of a faculty member. Weekly conference. Written and oral reports. Students may not receive credit for more than three terms of undergraduate research.

Prerequisite of 5020: Chemistry 5010 [73.1] and permission of the instructor and the chairperson.

Minimum of 6 hours conference and independent work§; 2 credits Planning and carrying out a research problem under supervision of a faculty member. Weekly conference. Written and oral reports. Students may not receive credit for more than three terms of undergraduate research.

Prerequisite of 5030: Chemistry 5020 [73.2] and permission of the instructor and the chairperson.

## CHEM 5400 Industrial Internship in Chemistry

9 hours fieldwork; 2 credits
Off-campus internship in a commercial or government organization, supervised by a faculty member. Positions and assigned tasks will vary depending on the needs of the host institution, but will make extensive use of chemical knowledge and skills. A final report will be required.

Prerequisite or Corequisite: Chemistry 3510 or both 3511 and 3512, and either Chemistry 3520, or both 3521 and 3522, or Chemistry 3410, or Chemistry 3415W. A minimum GPA of 2.3 or better within Chemistry courses is also required.

## CHEM 5450 Independent Development of Laboratory Curriculum Materials

Minimum 6 hours conference and independent work; 2 credits This course is intended for students enrolled in the B.A. degree program in adolescence education: chemistry teacher. Students will develop a laboratory experiment suitable for a high school or college course in chemistry chosen to satisfy a set of learning objectives identified by the instructor. The student will search the educational literature to identify good candidate procedures, test and modify procedures to ensure they are suitable for the specific application, and prepare written materials for students and instructors who would be conducting the experiment in a laboratory classroom. The student will also complete a module on laboratory safety.

Prerequisite: Minimum 6 credits in advanced laboratory coursework and permission of the instructor and chairperson.

## Honors courses

## CHEM 5110 Independent Research I

Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Weekly conference. Written and oral report. Students may not receive credit for more than three terms of undergraduate research.

Prerequisite: Chemistry 3410 or 3415 W ; 3520 or both 3521 and 3522; an index of 3.30 or higher in chemistry; and permission of the instructor and the chairperson.

## CHEM 5120 Independent Research II

Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Weekly conference. Written and oral report. Students may not receive credit for more than three terms of undergraduate research.

Prerequisite of 5120 [83.2]: Chemistry 5110 [83.1], an index of 3.30 or higher in chemistry, and permission of the instructor and the chairperson.

## CHEM 5130 Independent Research III

Minimum of 9 hours conference and independent work§; 3 credits

Independent research supervised by a faculty member. Weekly conference. Written and oral report. Students may not receive credit for more than three terms of undergraduate research.

Prerequisite of 5130 [83.3]: Chemistry 5120 [83.2], an index of 3.30 or higher in chemistry, and permission of the instructor and the chairperson.

## CHEM 5210 Seminar I

Minimum of 3 hours conference and independent work§; 1 credit Presentation and discussion of current topics.

Prerequisite: completion of an approved program of advanced courses and permission of the chairperson.

## CHEM 5220 Seminar II

Minimum of 3 hours conference and independent work§; 1 credit Presentation and discussion of current topics.

Prerequisite: completion of an approved program of advanced courses and permission of the chairperson.

## CHEM 5230 Seminar III

Minimum of 3 hours conference and independent work§; 1 credit Presentation and discussion of current topics.

Prerequisite: completion of an approved program of advanced courses and permission of the chairperson.

## CHEM 5310 Colloquium I

Minimum of 9 hours recitation, conference, and independent work§; 3 credits
Intensive reading and group discussion of a special field. A term report or examination may be required. Students should consult the department bulletin board for current offerings. Colloquium topics may include: statistical mechanics, polymer chemistry, interfacial phenomena, neurochemistry, physical biochemistry, spectroscopy, separation methods, solid-state, modern electrochemical methods. Students and faculty may suggest colloquium topics to the chairperson.

Prerequisite: completion of an approved program of advanced courses and permission of the chairperson.

## CHEM 5320 Colloquium II

Minimum of 9 hours recitation, conference, and independent work§; 3 credits
Intensive reading and group discussion of a special field. A term report or examination may be required. Students should consult the department bulletin board for current offerings. Colloquium topics may include: statistical mechanics, polymer chemistry, interfacial phenomena, neurochemistry, physical biochemistry, spectroscopy, separation methods, solid-state, modern electrochemical methods. Students and faculty may suggest colloquium topics to the chairperson.

Prerequisite: completion of an approved program of advanced courses and permission of the chairperson.

The following inactive course(s) will only be offered if there is sufficient demand:
CHEM 5000 Introduction to Research

# Childhood, Bilingual and Special Education 

Department office: 2105 James Hall
Phone: 718.951.5447
Full-time Faculty
Professors: Rose, Rubal-Lopez
Associate Professors: Ascenzi-Moreno, Haydar, Kharem, Lee
Assistant Professors: Dembek, Hwu, Kaya, O'Connor-Petruso, Reed
Clinical Professor: Kyprianou

## B.A. degree program for childhood education teacher (grades 1-6) HEGIS code 0802.00; SED program code 26829

Childhood education teacher is a writing-intensive major program.
Program requirements
Completion of the B.A. degree with a major in childhood education qualifies students to receive New York State initial teacher certification (grades 1-6) and prepares students for employment in the schools of New York City. Students majoring in the childhood education teacher program are expected to have satisfied the foreign language requirement in high school.

In addition to fulfilling the Pathways requirements, students must complete a liberal arts and sciences concentration (30 credits) or have a second major in lieu of a concentration. Specific requirements apply for each concentration or second major approved by the department. The Childhood major must be the primary major. Students should meet with an adviser in the Childhood, Bilingual and Special Education Department and consult separate listings for the following departments: American studies; anthropology; art; children's studies; classics; computer and information science; English; general science; health and nutrition sciences; history; Judaic studies; mathematics; modern languages and literatures (including Chinese, French, Italian, Russian, Spanish); music; philosophy; political science; psychology; Puerto Rican and Latino studies; sociology; theater; urban sustainability; women's and gender studies.

With departmental permission, appropriate course substitutions are allowed in the major under special circumstances.
Students must also complete the following courses and their corequisites and prerequisites: One of the following social science courses: Africana Studies 3324, Anthropology 3135, Political Science 3141, Psychology 2040, Puerto Rican and Latino Studies 3325, Sociology 2200; One of the following arts and humanities courses: Art 3260, Classics 1213, English 3180, Judaic Studies 3010, Philosophy 3323, Communication Arts, Sciences, and Disorders 1718, Theater 1003; Mathematics 1401, or a mathematics course numbered 1701 or higher and a passing score on a Mathematics Department proficiency examination; General Science 2040 or 2010 or 2020 or 2030 or 2050; Mathematics 1406; and General Science 3050 (17-18 credits).

In addition, students must complete the following pedagogical courses: CBSE 2001, 2002, 3201, 3202, 3203, 3204, 3205, 3206, 3207, 3456, and 4221 (33 credits).

Admission requirements and academic standing

Students must present a G.P.A. of at least 2.70 or higher based on a minimum of 30 credits in liberal arts and science courses for admission into the major.
Each education course must be completed with a grade of C or higher.
Students must present a GPA of at least 3.00 overall and a GPA of at least 3.00 in education courses prior to student teaching CBSE 4221.

## B.A. degree program for childhood education teacher, bilingual (Spanish/English) education extension (grades 16) <br> HEGIS code 0802.00; SED program code 26828

Childhood education teacher, bilingual (Spanish/English) is a writing-intensive major program.

## Program requirements

York State initial teacher certification for childhood education (grades 1-6) with an extension of that certification to include teaching bilingual education. This program is offered to selected students interested in teaching children in Spanish/English bilingual programs to qualify for teacher certification in Spanish/English bilingual education. Students must demonstrate proficiency in English and Spanish. For courses in Spanish, students should seek counseling in the Department of Puerto Rican and Latino Studies. Students majoring in childhood education with an extension for bilingual education are expected to have satisfied the foreign language requirement in high school.

In addition to fulfilling the Pathways requirements, students must complete a Puerto Rican and Latino Studies concentration (bilingual education) or have a second major in Puerto Rican and Latino Studies in lieu of the concentration. See PRLS section of the bulletin for additional course requirements Each course must be completed with a grade of $C$ or higher. Students must meet with a department adviser to declare their intention to complete this sequence.

With permission of the Puerto Rican and Latino Studies departmental curriculum committee, appropriate Puerto Rican and Latino Studies course substitutions are allowed in the concentrations under special circumstances (31 credits).

Students must also complete the following courses and their corequisites and prerequisites: One of the following social science courses: Africanc Studies 3324, Anthropology 3135, Political Science 3141, Psychology 2040, Puerto Rican and Latino Studies 3325, Sociology 2200; One of the following arts and humanities courses: Art 3260, Classics 1213, English 3180, Judaic Studies 3010, Philosophy 3323, Communication Arts, Sciences, and Disorders 1718, Theater 1003; Mathematics 1401, or a mathematics course numbered 1701 or higher and a passing score on a Mathematics Department proficiency examination; General Science 2040 or 2010 or 2020 or 2030 or 2050; Mathematics 1406; and General Science 3050 (17-18 credits). In addition, students must complete the following pedagogical courses: CBSE 2001, 2002, 3201, 3202, 3203, 3301, 3205, 3206, 3207, 3456 and 4321. (33 credits).

Admission requirements and academic standing
Students must present a G.P.A. of at least 2.70 or higher based on a minimum of 30 credits in liberal arts and science courses for admission into the major.
Each required education course must be completed with a grade of $C$ or higher.
Students must present a G.P.A. of at least 3.00 overall and a GPA of at least 3.00 in education courses prior to student teaching (CBSE 4321).

## Courses

College-verified fingerprint clearance required for School of Education courses. Refer to the School of Education website, Fingerprint Verification instructions at http://www.brooklyn.cuny.edu/web/academics/schools/education/certification/fingerprints.php.

## CBSE 2001 Historical, Philosophical, and Cultural Foundations of Education

4 hours recitation, 20 hours field experience; 3 credits Study of teaching and learning with an emphasis on the urban context, through philosophical, historical, and cultural perspectives. Relation of significant educational movements, philosophies, and teaching practices for all students, including students with special needs and English language learners, from birth through adolescence. Opportunities through class discussion, portfolio preparation, and field experiences (20 hours) for reflection on and analysis of interactions between school and community, teachers' roles, and issues of diversity, social justice and local, state and national education policies and mandates. (Open only to students who have completed at least 30 credits in liberal arts and sciences with a grade point average of 2.70 or higher.) Starting Spring 2018 Satisfies Pathways Flexible Core Individual and Society requirement. This course is the same as SEED 2001.

Prerequisite: English 1010 [1].

## CBSE 2002 Children and Youth in Urban Education: Developmental, Psychological and Sociological Perspectives

4 hours recitation, 20 hours field experience; 3 credits Relationships between developmental psychology and sociological processes of children and youth and their educational experiences in schools, families and communities. Role of culture, ethnicity, race, gender, sexuality, and social class in the context of biological, sociological and psychological processes. In depth analysis of established educational and developmental theorists with
application to curriculum and instruction. Emphasis on children and adolescents in urban, multicultural schools, including students with special needs and English language learners, from birth through adolescence. Introduction to contemporary frameworks in line with current state and national requirements. Linkage of field experience to relevant and critical theories; observations and interviews of children; continuation of portfolio development; reflection upon field experiences of 20 hours. This course is the same as SEED 2002.

Prerequisite: English 1010

## CBSE 3001 Parent as Educator

3 hours; 3 credits
Parenting as an educative process; needs of parents and children; effect of parental attitudes and cultural influences on the child's development and learning. The home and family as an educational environment; roles of parents in preschool and school settings. (This course cannot be credited towards any education sequence or taken for credit by an education major.)

## CBSE 3002 Studio II: The Culture and Politics of Teaching

## 2 hours; 2 credits

Continuation of Studio I with a shift in focus to social, institutional, and cultural frameworks for teaching. (Not open to students who are enrolled in or have completed Education 48.1, 48.21, 48.22, 58.1, 58.11, or 58.12.)

Prerequisite: CBSE 3201 [36].

Prerequisite or corequisite: CBSE 3204 [40] or ECAE 3104 [40.1] or CBSE 3301 [40.2] or 40.3; and CBSE 3205 [43].

## CBSE 3201 Education and Society: Teaching the Social Sciences

2 hours recitation, 2 hours supervised field experience; 3 credits The teaching of social science contributions to the teaching of social studies. The influence of culture, class, ethnicity, gender and race, as well as factors in the home, school, and community, on students' readiness to learn, and on the creation of a sense of active citizenship, sense of community, and respect for one another. Approaches to the social studies curriculum that address multiple research-validated instructional strategies, the uses of technology, and assessment methods for all students, including English language learners and students with special needs. Continuation of portfolio development. Fieldwork in classrooms.

Prerequisite: Childhood and Special Education 2001 and 2002.
Corequisite: Childhood and Special Education 3205 and one of the following: Africana Studies 3324, Anthropology 3135, Political Science 3141, Psychology 2040, Puerto Rican and Latino Studies 3325, Sociology 2200. A student who receives a failing grade in Childhood and Special Education 3201 and a grade of C or higher in the corequisite social science course may with departmental permission, repeat Childhood and Special Education 3201 without a corequisite requirement.

## CBSE 3202 Education and Literacy: An Interdisciplinary Approach to the Language Arts

3 hours recitation, 2 hours supervised field experience; 3 credits Framework for integrating the humanities with related teaching arts. Identification of the learning processes, motivation, communication, and classroom organization skills necessary for language acquisition and literacy development. Study of multiple literacies and narrative structures. Curriculum development and planning, individualized instruction and assessment strategies for teaching the language arts to all children, including English language learners and students with special needs. Psycholinguistic and sociolinguistic factors in literacy. Emphasis on multiethnic children's literature and arts experiences. Continuation of portfolio development.

Prerequisite: Childhood and Special Education 2001 and 2002. Corequisite: Childhood and Special Education 3204 and one of the following: Art 3260, Classics 1213, English 3180, Judaic Studies 3010, Philosophy 3323, Communication Arts, Sciences, and Disorders 1718, Theater 1003. A student who receives a failing grade in Childhood and Special Education 3202 and a grade of C or higher in the corequisite humanities course may, with departmental permission, repeat Childhood and Special Education 3202 without a corequisite requirement.

## CBSE 3203 Education and Science/Mathematics/Technology

## 2 hours; 2 credits

Integrates study of the sciences, mathematics, technology, and education. Analysis of the processes of scientific investigation that students experience in General Science 2040 [9.1], 2010 [9.2], 2020 [9.3], 2030 [9.4], or 2050 [9.5], and development of the ability to make effective use of these experiences in teaching. Models of instruction, such as cooperative learning and inquirybased learning. Continuation of portfolio development.
Examination of mathematics, science, and technology in the current and historical social context. Influence of attitudes towards science on learning. Use of the Internet and computer software in
education. National, state, and local mathematics, science, and technology teaching and curriculum standards.

Prerequisite: Childhood and Special Education 2002 and Mathematics*1401.

Corequisite: General Science 2040, 2010, 2020, 2030 or 2050. A student who receives a failing grade in Childhood and Special Education 3203 and a grade of C or higher in General Science 2040, 2010, 2020, 2030 or 2050 may, with departmental permission, repeat Childhood and Special Education 3203 without a corequisite requirement.

## CBSE 3204 Integrated Methodologies for Literacy Instruction.

2 hours recitation, 2 hours supervised field experience; 3 credits An integrated approach to teaching literacy to all children, including English language learners and students with special needs. Appropriate multiple research-validated instructional strategies; formal and informal assessment methods for evaluating student learning and improving instruction. Continuation of portfolio development. Supervised field experiences.

Prerequisite: Childhood and Special Education 2001 and 2002.
Corequisite: Childhood and Special Education 3202.

## CBSE 3205 Teaching the Creative Arts

2 hours recitation, 2 hours supervised field experience; 3 credits Analysis and application of theories and educational research in learning to the teaching of the visual arts, music, dance, and drama. Strategies for developing creative skills, aesthetic sensitivity, and an understanding of the role of materials and performance in artistic expression and classroom practice. Role and value of the arts in individual and social development in a society of varied cultures, communities, and families. Approaches and techniques that foster and deepen all children's creativity and thinking skills. Continuation of portfolio development. Work with a variety of artistic forms and media; guided field trips and supervised field experience.

Prerequisite: Childhood and Special Education 2001. Corequisite: Childhood and Special Education 3201.

## CBSE 3206 Teaching Mathematics: Childhood Education

2 hours laboratory, 2 hours supervised field experience; 2 credits Study of how children learn mathematics. Curriculum development; research-based instruction; multiple forms of assessment. Approaches to teaching mathematics to all students, including English language learners and students with special needs. Technology as a tool for student learning and a resource for teaching. Application of course content in field placement and development of reflective practice. Continuation of portfolio development. Taught in coordination with Mathematics 1406 [1.97]

Prerequisite: Childhood and Special Education 3203 [38], General Science 2040 [9.1], or 2010 [9.2], or 2020 [9.3], or 2030 [9.4], or 2050 [9.5], and Mathematics *1401 [1.95]. Corequisite: Mathematics *1406 [1.97].

## CBSE 3207 Teaching Science: Childhood Education

1 hour recitation, 2 hours supervised field experience; 2 credits Methods of teaching basic science concepts and processes to children. Focus on promoting scientific curiosity and developing
literacy through inquiry and active learning needed for science explorations. Methods of teaching science to all students, including English language learners and children with special needs. Application of course content in field sites with emphasis on developing reflective practice. Continuation of portfolio development. Taught in coordination with General Science 3050 [20].

Prerequisite: Childhood and Special Education 3203 [38] and General Science 2040 [9.1], or 2010 [9.2], or 2020 [9.3], or 2030 [9.4], or 2050 [9.5].
Corequisite: General Science 3050 [20].

## CBSE 3301 Integrated Methodologies for Bilingual Literacy Instruction

2 hours recitation, 2 hours supervised field experience; 3 credits An integrated approach to teaching literacy to all children, including students with special needs, with a primary focus on literacy development and language acquisition in bilingual (Spanish/English) programs. Appropriate multiple research-validated instructional strategies; formal and informal assessment methods for evaluating student learning and improving instruction. Supervised field experiences.

Prerequisite: Childhood and Special Education 2001 [16] and 2002 [34].
Corequisite: Childhood and Special Education 3202 [37].

## CBSE 3302 Teaching Emergent Bilinguals Across Diverse Monolingual Contexts

3 hours; 3 credits
Introduction to early and late development of language for teachers who work with emergent bilinguals in monolingual settings. Emphasis on specific populations of emergent bilinguals including newcomers, emergent bilinguals with special needs, students with interrupted education, among others. Focus on language diversity in urban areas (i.e. multiple languages in one setting). The role of educators in monolingual settings in supporting emergent bilinguals' learning language and literacy across content. Translanguaging pedagogy in monolingual settings. Emphasis on engagement with diverse, multilingual families and communities. This course is the same as PRLS 3302.

## CBSE 3456 Inclusive Education and Teaching Students with Special Needs

3 hours recitation, 20 hours of field experience; 3 credits Objectives, variations and clinical practice in collaborative and coteaching methodologies and curriculum development, evaluation, regulatory compliance, and application of early interventions to teaching diverse student populations, with an emphasis on English language learners and students with special needs, including the gifted. Planning content area curriculum and assessments that are differentiated and accessible to students with a wide range of abilities. Continuation of portfolio development. Field experience (20 hours) in special education and/or inclusive classrooms required.
This course is the same as SEED 3456. Not open to students who have taken SEED 3456.

Prerequisite: CBSE 2001 and 2002.

## CBSE 4201 Seminar and Comprehensive Student Teaching: Childhood Education

3 hours recitation, weekly supervised teaching (at least 300 hours); 9 credits

Student teaching. Application of the principles of teaching to all aspects of the curriculum, including literacy instruction in both childhood classroom settings, grades 1-3 and 4-6; long- and shortterm planning. Focus on self-reflective teaching and assessment procedures to address the learning needs of a diverse student population, including English language learners and students with special needs. Preparation in development of school-community relationships and collaborative learning; integration of instructional technology; culmination of portfolio development. Readings and discussions on significant issues related to classroom teaching and professional development, including preventing child abduction, substance abuse, safety education, and child abuse awareness. Focus on skills in fostering effective relationships and interactions to support all students and urban schools and the process of school change. Open only to students who have completed all required education courses with a grade point average of 3.00 or higher, and a grade point average of 2.75 or higher in liberal arts and sciences courses.)

Prerequisite: Childhood and Special Education 3205 [43], 3206 [44], 3207 [45].

## CBSE 4220 Seminar and Comprehensive Student Teaching I: Childhood Education

2 hours recitation, weekly supervised teaching(at least 150 hours); 4 credits
Student teaching. Application of the principles of teaching to all aspects of the curriculum, including literacy instruction in childhood classrooms (grades 1-6); long- and short-term planning; development of an interdisciplinary approach to teaching. Focus on self-reflective teaching and assessment procedures to address the learning needs of a diverse student population, including English language learners and students with special needs. Preparation in development of school-community relationships and collaborative learning; integration of instructional technology; culmination of portfolio development. Readings and discussions on significant issues, related to classroom teaching and professional development, including preventing child abduction, substance abuse, safety education, and child abuse awareness. Focus on skills in fostering effective relationships and interactions to support all students. Open only to students who have completed all required education courses with a grade point average of 3.00 or higher, and a grade point average of 2.75 or higher in liberal arts and sciences courses.

Prerequisite: Childhood and Special Education 3205, 3206, and 3207.

## CBSE 4221 Seminar and Comprehensive Student Teaching II:Childhood Education

2 hours recitation, weekly supervised teaching (at least 300 hours); 6 credits
Student teaching. Application of the principles of teaching to all aspects of the curriculum, including literacy instruction in childhood classrooms (grades 1-3 and 4-6); long- and short-term planning. Focus on self-reflective teaching and assessment procedures to address the learning needs of a diverse student population, including English language learners and students with special needs. Preparation in development of school-community relationships and collaborative learning; integration of instructional technology; culmination of portfolio development. Readings and discussions on significant issues related to classroom teaching and professional development, including preventing child abduction, substance abuse, safety education, and child abuse awareness. Focus on urban schools and the process of school change. Open only to students who have completed all required education
courses with a grade point average of 3.00 or higher, and a grade point average of 3.00 or higher in liberal arts and sciences courses.

Prerequisite: Childhood, Bilingual and Special Education 3206, 3207.

## CBSE 4301 Seminar and Comprehensive Student Teaching: Bilingual Education

3 hours recitation, weekly supervised teaching (at least 300 hours); 9 credits
Student teaching. Application of the principles of teaching to all aspects of the curriculum, including literacy instruction in both childhood classroom settings, grades 1-3 and 4-6; long- and shortterm planning. Methods of teaching native language arts to bilingual (Spanish/English) language learners; methods of teaching content areas using Spanish and English. Focus on self-reflective teaching and assessment procedures to address the learning needs of a diverse student population, including English language learners and students with special needs. Preparation in development of school-community relationships and collaborative learning; integration of instructional technology; culmination of portfolio development. Readings and discussions on significant issues related to classroom teaching and professional development, including preventing child abduction, substance abuse, safety education, and child abuse awareness. Focus on skills in fostering effective relationships and interactions to support all students and urban schools and the process of school change. (Open only to students who have completed all required education courses with a grade point average of 3.00 or higher, and a grade point average of 2.75 or higher in liberal arts and sciences courses.)

Prerequisite: Childhood and Special Education 3205 [43], 3206 [44], 3207 [45].

## CBSE 4320 Seminar and Comprehensive Student Teaching I: Bilingual Education

2 hours recitation, weekly supervised teaching (at least 175 hours); 4 credits
Student teaching. Application of the principles of teaching to all aspects of the curriculum in bilingual and non-bilingual classrooms, including literacy instruction in childhood classrooms, (grades 1-6); long- and short term planning; methods of teaching native language arts to bilingual (Spanish/English) language learners; methods of teaching content areas using the native language and English; development of an interdisciplinary approach to teaching. Focus on self-reflective teaching and assessment procedures to address the learning needs of a diverse student population, including English language learners and students with special needs. Preparation in development of school-community relationships and collaborative learning; integration of instructional technology; and culmination of portfolio development. Readings and discussions of significant issues related to classroom teaching and professional development, including preventing child abduction, substance abuse, safety education, and child abuse awareness. Focus on skills in fostering effective relationships and interactions to support all students. (Open only to students who have completed all required education courses with a grade point average of 3.00 or higher, and a grade point average of 2.75 or higher in liberal arts and science courses.)

Prerequisite: Childhood and Special Education 3206 [44] and 3207 [45].

## CBSE 4321 Seminar and Comprehensive Student Teaching: Bilingual Education

2 hours recitation, weekly supervised teaching (300 hours); 6 credits

Student teaching. Application of the principles of teaching to all aspects of the curriculum in bilingual and non-bilingual classrooms, including literacy instruction in childhood classrooms, grades 1-3 and 4-6; long- and short-term planning; methods of teaching native language arts to bilingual (Spanish/English) language learners; methods of teaching content areas using Spanish and English. Focus on self-reflective teaching and assessment procedures to address the learning needs of a diverse student population, including English language learners and students with special needs. Preparation in development of school-community relationships and collaborative learning; integration of instructional technology; and culmination of portfolio development. Readings and discussions on significant issues related to classroom teaching and professional development, including preventing child abduction, substance abuse, safety education, and child abuse awareness. Focus on skills in fostering effective relationships and interactions to support all urban schools and the process of school change. (Open only to students who have completed all required education courses with a grade point average of 3.00 or higher, in and a grade point average of 3.00 or higher in liberal arts and science courses.)

Prerequisite: Childhood, Bilingual and Special Education 3206, 3207.

## CBSE 4501 Science Education Research Seminar

4 hours of lecture and minimum of 9 conference and independent work hours; 3 credits Introduction to concepts of educational research, including design of research, data analysis, and utilization of results of research. Introduction of students to the methods of research in science education and uses of technology to access, process, and analyze data. Development of student familiarity with general procedures and methods used in educational research literature, design and performance of research investigation on an appropriate topic of interest in science education, and integration of research experience into science learning and teaching.

Prerequisite: Instructor's permission.

## CBSE 4502 Advanced Methods in Science Education Research Seminar

4 hours of lecture, minimum of 9 conference and independent work hours; 3 credits
Advanced seminar in concepts of educational research, including design of research, data analysis, and utilization of results of research. Designed for students who have already been introduced to the methods of research in science education and uses of technology in accessing, processing, and analyzing data. Student development of familiarity with general procedures and methods used in educational research literature, design and performance of research investigation on an appropriate topic of interest in science education, and integration of research experience into science learning and teaching.

Prerequisite: EDUC 4501, Instructor's permission.

## Children and Youth Studies

## Department office: 1304 James Hall

Phone: 718.951.3192
The innovative interdisciplinary field of children's studies (later renamed children and youth studies) was founded in 1991 at Brooklyn College and every year since its inception, the program has attracted more and more students at the college. The Children's Studies Center was established in 1997 to expand the scope of the academic courses and to promote teaching, research, community outreach and advocacy. The Program has a chartered Children's First Club that is student-organized.

The children and youth studies program offers a bachelor of arts, a 30-credit interdisciplinary concentration in children and youth studies for education majors in the early childhood education teacher program (birth-grade 2) and the childhood education teacher program (grades 1-6), a 15-credit interdisciplinary minor, and a 12-credit minor, Pre-professional Explorations: Focus on Children in Social Services and the Law for all liberal arts majors. The children and youth studies program also offers an interdisciplinary program of study for students in the CUNY Baccalaureate program.

The interdisciplinary field of children and youth studies aims to bring the perspectives of different disciplines to bear on developing theoretically, historically, and contextually grounded perspectives on childhood and adolescence. The program provides an opportunity for students to observe and participate in understanding childhood and adolescence at the intersection of academic disciplines across the spectrum of the social sciences, arts, and sciences as well as from a rights perspective. The program seeks to build knowledge and promote skills in relation to the students' present and future roles as professionals, parents, and citizens.

Students will endeavor to understand that childhood and adolescence are social constructions situated in context; how childhood and adolescence have changed over time and why; gain exposure to various disciplinary perspectives on childhood and adolescence; consider childhood and adolescence through a range of topical lenses; and gain experience finding, evaluating and responding critically to empirical and theoretical readings on childhood and youth. Students will be able to describe what social construction is in relationship to childhood/adolescence, identify key forces in the historical social construction of childhood and adolescence, articulate core concepts of a children and youth studies framework, and apply an understanding of children and youth studies to current experiences of children and youth

Children and youth studies topics include human rights of children; autobiography as an inquiry into the child's self; the history of childhood and adolescence, schooling, gender and sexuality, disability, child development and health; the child in family, school, and community contexts; applied research methodologies; social, economic, and educational policies affecting children and youth; consumerism, labor, capital \& profit, transnationalism and immigration, surveillance, policing \& incarceration, advocacy and policy research in the areas of child welfare and juvenile justice, imagination, agency, \& liberation, rights, and participation. Along with current texts, students will also consider the rich knowledge and experiences from their own lives.

The program offers internship opportunities to explore the diverse careers in child and youth-related settings, to meet and network with individuals in the field, and to gain professional level experience often required when applying to graduate programs and related employment.

The interdisciplinary bachelor of arts degree in children and youth studies prepares students to pursue future careers in professional domains and occupations related to children and youth at public and government agencies, non-profits, and business settings, including advocacy work, health-related areas, the systems of child welfare and juvenile justice, as well as careers in media and the arts,

Children and youth studies graduates successfully pursue advanced degrees and certifications, and are employed in various fields such as child welfare and social services, counseling, youth work, pediatrics, public health and well-being, juvenile justice and the law, the arts, and education, to name but a few of the diverse career options available to these majors.

## B.A. degree program in children and youth studies HEGIS code 2009.00; SED program code 33088

Program requirements (30 credits)
a) All of the following courses: Children and Youth Studies 2100, 4200, 4900W.

The program director, with the approval of the program's advisory committee, may allow substitutions for one or more of following requirements consistent with the educational goals of the program.
b) Five of the following courses: Children and Youth Studies [2120], 2200, 3110, 3126, 3610, 3410, 3310, 3320, 3620, 3630, 3510, 3430, 3130, 3700, 4100, 5100, 5200.
c) Two of the following courses: Africana Studies 3335; Childhood, Bilingual, and Special Education 2002 or Secondary Education 2002; English 3189 or Communication Arts, Sciences, and Disorders 1717 or 2231; Health and Nutrition Sciences 3170; History 3320 or 3457 (crosslisted as Children and Youth Studies 3120); Psychology 2210 or 3220 or 3240; Puerto Rican and Latino Studies 2005; Sociology 2400 or 2401; School Psychology, Counseling and Leadership 3500.

All courses must be completed with a grade of $C$ or higher.
A minimum of 9 credits must be completed at Brooklyn College.
Students interested in majoring in Children and Youth Studies must consult a program advisor as early as possible. Students should plan to complete all major requirements before taking the capstone course, Children and Youth Studies 4900W.

## Departmental Minor(s)

## Minor in Children and Youth Studies

Department Requirements
Fifteen credits as follows:
The program director, with the approval of the program's advisory committee, may allow substitutions for one or more of following requirements consistent with the educational goals of the program.

Children and Youth Studies 2100 or Children and Youth Studies 3110.
Two courses from the following: Children and Youth Studies [2120], 2200, 3126, 3310, 3410, 3620, 3630, 4200; English 3189 or Communication Arts, Sciences, and Disorders 1717 or 2231; Health and Nutrition Sciences 3170 or Children and Youth Studies 4100; Psychology 2210; Sociology 2401.

Two courses from the following: Africana Studies 3335; Children and Youth Studies 3610, 3510, 3130, 3430, 3320, 5100; Childhood, Bilingual, and Special Education 2002 or Secondary Education 2002; Children and Youth Studies 3120 or History 3320; Puerto Rican and Latino Studies 2005.

All courses must be completed with a grade of $C$ or higher.
A minimum of nine credits must be completed at Brooklyn College.
Students interested in this minor should consult with the Children and Youth Studies program adviser to plan an appropriate sequence of courses and to declare their minor.

## Minor in Preprofessional Explorations: Focus on Children in Social Services and the Law

Department requirements (12 credits)
The program director, with the approval of the program's advisory committee, may allow substitutions for one or more of following requirements consistent with the educational goals of the program.

Students must complete 12 credits for the minor.
One course from the following:
Children and Youth Studies 2100 or Children and Youth Studies 3110
Three courses from the following:
Children and Youth Studies 3120, Children and Youth Studies 3310; Children and Youth Studies 3610; Children and Youth Studies 3620;
Children and Youth Studies 3320; Children and Youth Studies 3700; Children and Youth Studies 4100.

All courses must be completed with a grade of $C$ or higher.
A minimum of nine credits must be completed at Brooklyn College.
Students interested in this minor should consult with the Children and Youth Studies program adviser to plan an appropriate sequence of courses and to declare their minor.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Children and Youth Studies

The requirements for early childhood education teacher (birth-grade 2) and childhood education teacher (grades 1-6) programs are described in the Early Childhood and Art Education section and the Childhood, Bilingual, and Special Education section of the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in Children and Youth Studies must complete at least 30 credits in the Program in Children and Youth Studies with a grade of $C$ or higher in each course.

Concentration requirements (30 credits):
Children and Youth Studies 2100.
Two courses from the following: Children and Youth Studies 3110; Children and Youth Studies 3120 or History 3320; Sociology 2400 or 2401.
Three courses from the following: Children and Youth Studies 4200; Children and Youth Studies 3610; Children and Youth Studies 3620; Children and Youth Studies 3320; Psychology 2210 or 3220 or 3240; Communication Arts, Sciences, and Disorders 2231.

Three courses from the following: Africana Studies 3335; Children and Youth Studies [2120], 2200, 3126, 3310, 3510, 3630; Health and Nutrition Sciences 3170; Puerto Rican and Latino Studies 2005.

One course from the following: Children and Youth Studies 3410; Children and Youth Studies 3430; Children and Youth Studies 3130; English 3189; Communication Arts, Sciences, and Disorders 1717.

All courses must be completed with a grade of $C$ or higher. A minimum of nine credits must be completed at Brooklyn College. Students who are interested in this concentration should consult with the Children and Youth Studies program adviser to plan an appropriate sequence of courses and to declare their concentration.

## Courses

## CHST 2100 Perspectives on Childhood

## 3 hours; 3 credits

Childhood viewed from the perspectives of health science, history, literature, psychology, sociology, and the arts. The history of childhood; autobiography as inquiry into the child's selfhood; the child's imagination; child development and health; adolescence as life-stage and perceptions of adolescence; the child in relation to the family, school, and community; children's experiences of personal, social, and political problems; social, economic, and educational policies affecting children; children's rights and international policy. May be team-taught. (Not open to students who have completed Children's Studies [1] or 2100W.)

Prerequisite: English 1012 or permission of program director.

## CHST 2200 Special Topics: Issues in Children's Studies

3 hours; 3 credits
Emerging issues, policies, and research in rapidly developing areas relating to children and youth. Topics vary from term to term. (Not open to students who have completed Children's Studies [5].)

Prerequisite: English 1010 or permission of program director.

## 3 hours; 3 credits

Latin American, Caribbean and Latinx children's and young adult literature, poetry and songs, the history of children's books, picture books and their illustrators, and traditional storytelling (fables, fairy tales, folktales, myths, and parables); bilingualism in literature, reading culturally relevant texts, culturally sustaining pedagogy, translanguaging in literature. Course will be taught in Spanish. This course is the same as SPAN 2950: Children's and Young Adult Literature. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite or Corequisite: Spanish 1030 or a level 5 on the Brooklyn College online language placement test or permission of the chairperson.

## CHST 3110 The Human Rights of Children: A Transnational Development <br> 3 hours; 3 credits

Development of the human rights of children movement nationally and internationally. Central documents, data bases, national and international legislation in the area of children and youth rights, the U.N. Convention on the Rights of the Child of 1989, and its implementation, Children Ombudsmen in other countries, UNICEF activities, and more. Rights of children to full development, to education, health care, culture, and with such topics as street
children, child abuse, child prostitution, discrimination on the basis of sex, race, and religion, child soldiers, and child labor.

Prerequisite: English 1010 [1]; or permission of program director.

## CHST 3120 History of Children, Public Policy, and the Law in the United States

3 hours lecture; 3 credits
Political and legal history of children's issues in the United States, focused on the attitudes and actions of figures in power. Origins of public education and welfare; debate over child labor. Brown v. Board of Education, In re Gault, Tinker v. Des Moines. Abortion, busing, welfare reform, and children's rights in the legal and political arenas. (This course is the same as History 3457.)

## CHST 3126 Generation Next: Adolescence and Youth Culture in Cross-Cultural Perspective

## 3 hours; 3 credits

Critical overview of youth-in-context - how youth actively engage with the world around them, how youth are talked about, how they talk about themselves. Analysis of who youth are from an interdisciplinary, theoretical approach including cultural anthropology, sociology, psychology, psychological anthropology, feminism, gender theory, postcolonial theory, political economy, and critical race theory. Readings include African literature, memoirs, international labor policy research, urban ethnography, theory texts, and journal articles. This course is the same as Anthropology 3126.

Prerequisite: English 1012 or the permission of the program director.

## CHST 3130 Children of New York

3 hours; 3 credits
Examination of children's lives in New York and the institutions that affect them. Exploration of children's living conditions and lifestyles. Relevant demographic variables including: age, gender, ethnicity, race, geography, and socioeconomic status. Conditions and dynamics of housing, education, religion, family structure, and public health. Children's social organization in such activities as play, sports, music, video gaming, internet use, illegal music downloading, television, dance clubs, etc. Examination of demographic trends with focus on child welfare; including analysis of legal and social policies affecting children. (Not open to students who have taken Children's Studies 2200 [25], Special Topics during the spring 2005 or fall 2005 semesters.)

Prerequisite: English 1010 [1]; or permission of the program director.

## CHST 3310 Children and the Law

3 hours; 3 credits
An introduction to the role law plays in the many aspects of the lives of children, age birth to legal majority, ranging from education to child welfare to juvenile justice.

Prerequisite: English 1010 [1] or permission of the program director.

## CHST 3320 Children, Public Policies, Advocacy and Legislation in New York State

3 hours; 3 credits
In-depth analyses of reports of conditions of children and young people in different institutional contexts from education, health and
mental health, to child welfare (from foster care to adoption and termination of parental rights) to children in the juvenile and criminal justice systems. Emphasis on corresponding legislation and its implementation by public as well as by not-for-profit and private agencies in New York State and City. Focus on system integrative policies in existing fragmented sectors. Regular presentations, including reports from heads of state or city agencies. (This course is not open to students who took Children's Study 2200 Special Topics: Children, Government and Public Policy in New York State, during fall 2009 or fall 2010.)

Prerequisite: English 1010 or permission of program director.

## CHST 3338 The Home and the World: Gender, Family, and Nation-State -- A Cross-Cultural Perspective

3 hours; 3 credits
Exploration of gender, family, and households, and their connection with nation and state formation; social construction of gender, different forms of families and households, class-caste-racial hierarchies, the life-course, sexualities, gender, labor, and family inequalities across time in various geopolitical contexts, sociocultural and political-economic processes. This course is the same as History 3336 and Women and Gender Studies 3338.

Prerequisite: English 1010

## CHST 3430 Children and the Media

3 hours; 3 credits
Introduction to the role that media plays in the lives of children and youth. History of children's media and children's current use of media and communicative technology. Effects of media on developing cognitive and social function. Role of media in education. Risks and vulnerabilities of communicative technology. Commercialism and advertising in children's media. Examination of federal and local communicative regulations, and how advocacy shapes media policy. (This course is not open to students who completed this topic in Children's Studies 2200 [25].)

Prerequisite: English 1010 or permission of the program director.

## CHST 3510 Perspectives on Children and Disability: Local, National and International

## 3 hours; 3 credits

A critical overview of children and disability using local, national and international perspective. Historical to contemporary based discussions on culture and policy demonstrated through education, media, and medical practices, specific to children and disability. Understanding of current policy, child centered research and practices specific to child and disability extending from the U.S. to China. (This course is not open to students who completed this topic as Children's Studies 2200 [25], Special Topics, during the fall 2006 and spring 2007 semesters.)

Prerequisite: English 1010 [1] or permission of the program director.

## CHST 3610 Children in Crisis

3 hours; 3 credits
Focus on children in extreme situations of social, cultural, political, and familial disruption. Examination of such global and domestic situations as war, natural disaster, famine, poverty, abuse, and terrorism which can lead to starvation, disfigurement, slavery, forced prostitution, child soldiers, forced employment, separation, homelessness, and even high incidents of infanticide. Children and September 11, 2001; other conditions faced by children, including
foster care, displacement, detention and intra-family abuse; effects of violence and crisis situations on children and educational experience. Focus on preventative measures and alleviation of children's suffering.

Prerequisite: English 1010 [1] or permission of the program director.

## CHST 3620 Child Abuse and Neglect

3 hours; 3 credits
Introduction to contemporary understandings of what constitutes child abuse and neglect and the controversies surrounding definitions, interventions, and legal processes.

Prerequisite: English 1010 or permission of the program director.

## CHST 3630 Child Well-Being in a Global World: Focus on the United States

3 hours; 3 credits
Introduction to the concept and study of children's well-being. The evolving jurisprudence of children's rights and child well-being. Effects of poverty, deprivation, exclusion, and vulnerability on children and youth. Child well-being from an international perspective with detailed focus on children's well-being in the U.S. Methodologies for measuring child well-being. Public policy and the role of the state in ensuring children's welfare. (This course is not open to students who took Children's Studies 2200: Special Topics: Child Well-Being in a Global World: Focus on the United States, during fall 2010 or spring 2011.)

Prerequisite: English 1010 or permission of the program director.

## CHST 3700 Future Careers with Children and Young People: Professional Orientation and Exploration

3 hours; 3 credits
Introduction to career possibilities relating to major topic areas in children's studies. Exploration of current professional markets, including their historic and future developments. Emphasis on increasing student interest in diverse fields and preparing personal plans of study, tailored to individual career interests. This course is the same as SPCL 3700.

Prerequisite: Children and Youth Studies 2100 or permission of the program director.

## CHST 4100 Internship in Applied Children's Studies

7 hours fieldwork, 1 hour conference; 3 credits
Off-campus internships to explore careers in professional settings that focus on children, youth, and families. Placements include such institutional areas as the media, advertising, governmental and non-governmental organizations, medicine, law, and corporations whose activities have a bearing on the lives of children and youth. Final report required.

Prerequisite: Children and Youth Studies 2100 or 3110 or 3610 with a grade of C or better or permission of the program director.

## CHST 4200 Applied Research in Children's Studies

3 hours; 3 credits
Study of applied research with children in social science settings. Discussion of ethical issues that arise when conducting research with children. Students will develop their own research questions and explore appropriate methodologies for examining them. Different approaches to research, both qualitative and quantitative/experimental will be discussed. Students will gain
hands-on experience with one or more research methods inside and/or outside of the class. The course emphasizes critical reading and understanding of the research literature and the presentation of research findings. (This course is not open to students who completed this topic in Children's Studies 25 in the spring or fall 2006)

Prerequisite: Children and Youth Studies 2100 or permission of the program director.

## CHST 4900W Professional Perspectives and Children

3 Hours; 3 Credits
In-depth examination of careers in child-related professions and occupations by sectors, institutions, and public and private agencies. Theoretical and research-based issues relating to professional practice, policy, and advocacy. Academic requirements, training, and career opportunities relating to different professions focusing on and working with children. Writing intensive course.

Prerequisite: Children and Youth Studies 2100, Children and Youth Studies 4200, and permission of the program director.

## CHST 5100 Independent Study

Minimum of 9 hours conference and independent work; 3 credits Independent research supervised by a Children and Youth Studies faculty member on an approved topic and with approved readings that culminates in a research paper. Periodic conferences. May be taken only once for credit.

Prerequisite: Children and Youth Studies 2100; and 4200; Children and Youth Studies 3110, or 3610 with a grade of C or higher; and completion of an approved program of advanced Children and Youth Studies courses; and permission of the Director of Children and Youth Studies.

## CHST 5200 Introduction to Advanced Research Methods in Children's Studies

3 hours; 3 credits
Advanced quantitative and qualitative methods for analysis in children's studies, including GIS spatial analysis, basic statistical operations, methods of interpreting, coding, and analyzing qualitative data, and using popular software packages including $R$, SPSS and Nvivo. Specific topic areas include spatial analysis, longitudinal research, child policy research, ethnography, and participatory methods. Students develop skills in method design and analysis through an advanced applied research project.

Prerequisite: Children and Youth Studies 4200 or permission of the program director.

The following inactive course(s) will only be offered if there is sufficient demand: CHST 3410 The Professional Performing Child: Past and Present Issues

## Classics

Department office: 2408 Boylan Hall
Phone: 718.951.5191
Full-time Faculty
Professors: Clayman, Smith, Van Sickle, Yarrow
Associate Professors: Schur, Thibodeau
Assistant Professor: Sowers

The diverse, interdisciplinary nature of classics makes it a perfect element in a liberal arts and sciences education. Its theoretical and practical analysis of ancient civilizations provides students with a fundamental background for understanding the modern world. The Brooklyn College Department of Classics introduces students to the cultures of ancient Greece and Rome. From a variety of perspectives, we examine the language and literature of these cultures as well as their history; their mythic, religious, political, and philosophical traditions; their ways of constructing gender and sexuality; and their architecture and art.

The department offers a bachelor of arts and a minor in classics. A major or minor in classics equips a student not only with important knowledge about the past, but also with many contemporary, marketable skills, in particular a rigorous approach to language. Our graduates have succeeded in a wide variety of careers in law, medicine, international relations, business and finance, government, publishing, social work, communications and information technologies, teaching, and the arts.

Students who major or minor in classics should meet with the department's student adviser, who will help them to develop a course of study suited to their desired career or the requirements for postgraduate study. A doctorate in classics is offered by the Graduate Center of the City University of New York.

## B.A. degree program in classics <br> HEGIS code 1504; SED program code 02049

Degree requirements (30-35 credits)

Classics is a writing-intensive major.

## Option I: Concentration in Classical Languages

The Language concentration is specially designed for students who wish to attend graduate school in classics, linguistics, or philosophy. It is also an excellent choice for those who plan to teach languages in high school, and for those who will pursue law or computer studies.

Greek 2001, and 2002; or Greek 2019.
and Latin 2101, and 2102; or Latin 2119;
Greek 3011 and Greek 3012; or Latin 3111 and 3112. Students who take Greek 2019 or Latin 2119 are exempt from this requirement.
With the permission of the chairperson, students who have studied Greek or Latin before coming to Brooklyn College may substitute more advanced Greek, Latin or Classics classes for these introductory courses.

A minimum of 18 credits in Greek and Latin are required for this concentration.
Any additional three Classics or Greek or Latin courses numbered above 3000 and below 4000.
Any two Classics or Greek or Latin courses numbered above 4000.

## Option II: Concentration in Greek and Roman Culture

The Culture concentration is for students who want to enter professional fields such as law, medicine, business, communications, etc. This is a good choice for students interested in a double major. Not intended for students planning to pursue graduate study in Classics.

Greek 2001, and 2002; or Greek 2019;
or Latin 2101, and 2102; or Latin 2119;
With the permission of the chairperson, students who have studied Greek or Latin before coming to Brooklyn College may substitute more advanced Greek or Latin classes for these introductory courses.

A minimum of six credits in Greek and Latin are required for this concentration.
Any additional six Classics or Greek or Latin courses numbered above 3000 and below 4000 . Classics 1110 and 2109 may be counted towards these six courses. Students who have taken Greek 2019 or Latin 2119 only need four additional courses.

Any two Classics or Greek or Latin courses numbered above 4000.

Departmental Honors
Students who wish to be considered for honors in Classics must meet the following requirements:

1) a grade-point average of 3.6 or higher in all Classics courses
2) either the completion of a course numbered 5000 or higher; or taking a course numbered 3000 or 4000 or higher for honors by prearrangement with the instructor.
3) minimum six credits of Greek and/or Latin with a grade-point average of 3.0 or higher in these courses.

## Departmental Minor(s)

## Minor in Classics

## Department Requirements

Twelve credits in Classics, Greek, or Latin courses. With departmental permission, relevant courses in other departments may be substituted.
All courses must be completed with a grade of $C$ or higher.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Classics

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in classics must complete at least 30 credits in the Classics Department with a grade of C or higher in each course. Students must meet with a department adviser to declare their intention to complete this sequence.

Concentration requirements:
----------------------------------------------------------------------------------10
At least two of the following courses: Latin 2101, 2102; Greek 2001, 2002 or one of the following courses: Latin 2119; Greek 2019;
and at least two of the following courses: Classics 1011, 1213, 3200, 3230, 3210, 3211, 3231, 3212, 3232, 3220, 3222, 3233, 3240, 3221, 3223, 3224, 3234, 3235; Latin 3111, 3112; Greek 3011, 3012
and at least two of the following courses: Classics 4010, 4011, 4012, 4020, 4021, 4030, 4031, 4032, 4040, 4900; Latin 4133, 4151, 4160, 4170, 4180, 4131, 4132, 4141, 4134, 4142; Greek 4031, 4032, 4041, 4042, 4043, 4060, 4070, 4080, 4044.

## Placement in language courses

Students who have begun studying Latin or Greek in high school should consult the chairperson for placement in an appropriate course. The following guidelines apply to those who wish to begin study of Greek or Latin at Brooklyn College. Classical Greek can be studied through the intermediate level in one of two tracks; in track (a), each course is the prerequisite of the next. Completion of either track qualifies students for advanced work in Greek.
(a) Regular track: Greek 2001, 2002, 3011, and 3012.
(b) Intensive track: Greek 2019.

Latin can be studied through the intermediate level in one of two tracks; in track (a), each course is the prerequisite of the next. Completion of either track qualifies students for advanced work in Latin.
(a) Regular track: Latin 2101, 2102, 3111, and 3112.
(b) Intensive track: Latin 2119.

## Summer programs

In addition to sections of the CUNY Pathways curriculum taught during Brooklyn College's two summer sessions, the department offers the following special summer programs: Greek 2019.(Greek Institute), Greek 4060 (Greek Institute: Intensive Reading), Latin 2119 (Latin Institute), Latin 4160 (Latin Institute: Intensive Reading), and Classics 3212 (Summer Archaeological Field School).
Please contact the Latin/Greek Institute office at 212-817-2081 or the Department of Anthropology and Archaeology at 718-951-5507.

## Courses

*Courses marked with an asterisk (*) are not counted toward the major or minor.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## CLAS *1011 Vocabulary Building: The Greek and Latin Element in English

3 hours; 3 credits
Intensive study of word derivation through systematic analysis of Latin and Greek elements in English. Some attention to technical and scientific vocabulary. (Not open to students who are enrolled in or have completed either Latin 15 or 16.)

## CLAS 1110 Tyranny, Democracy, Empire: Classical Cultures

## 3 hours; 3 credits

Introductory study of ancient cultures through close reading of a variety of texts; most sections will focus on Greece and Rome, but some may explore other classical traditions such as those of India, Mesopotamia or China. Attention to such questions as material, historical, or performance contexts, gender, political institutions, religion, philosophy, models of culture and the creation of a classical tradition. Practice in close reading and communication by means of critical writing, class discussion and other methods, such as collaborative group work. Satisfies Pathways Flexible Core World Cultures and Global Issues requirement. (Not open to students who are enrolled in or have completed CORC 1110).

## CLAS 1213 Social Themes: Ancient and Modern

3 hours; 3 credits
Analysis of representative ancient Greek texts (epic, history, philosophy, tragedy, comedy) to investigate four significant social themes: the family, cultural diversity, love, and the role of women. Analysis of texts organized on the collaborative model with small working groups along with traditional lecture and classroom discussion.

Prerequisites: Core Studies 1 or Core Curriculum 1110 [1.1] or Classics 1110 or permission of the chairperson.
Corequisite: Education 3202 [37].

## CLAS 2104 Literature and Film

3 hours; 3 credits
Exploration of the intersection of literature and film. Development of students' understanding of aesthetics of language and literature and acquaintance with new approaches to reading. Topics include narrative structure; character; setting; point of view;
representation of emotion and thought. Same as ENGL 2004. (Not open to students who have completed Core Curriculum 3104.) 2017-2018: Satisfies Pathways College Option requirement. Starting Fall 2018 Satisfies Pathways Flexible Core World Cultures and Global Issues requirement.

## CLAS 2109 The Self and Society

## 3 hours; 3 credits

Critical examination of issues of the self and society in diverse literary traditions. Topics include reflections on the self and personal integrity, justice and responsibility, alienation. (Not open to students who have completed Core Curriculum 3109.) 20172018: Satisfies Pathways College Option requirement. Starting Fall 2018 Satisfies Pathways Flexible Core Individual and Society requirement.

## CLAS 2113 The Monster Within

3 hours; 3 credits
Considers literal and figurative perversions of the human ideal. Themes to be explored may include transcendence and degradation, nature and civilization, gender, and fears of miscegenation. (Not open to students who have completed Core Curriculum 3113.) 2017-2018 and 2018-2019 Satisfies Pathways College Option requirement.

## CLAS 2114 The Road to Science Fiction

## 3 hours; 3 credits

Historical survey on the development, significance, and projected future of the literary and cinematic genre of Science Fiction. (Not open to students who have completed Core Curriculum 3114.) 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement.

## CLAS 2117 From Utopia to Dystopia

3 hours; 3 credits
Exploration of the origins and development of the idea of the perfect society (utopia) including examples of ones that have gone terribly wrong (dystopias). Focus will be on historical, philosophical, and literary material. (Not open to students who have completed

Core Curriculum 3117.) 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement.

## CLAS 3022 Searching for God: Ancient Greeks, Jews, and Christians

3 hours; 3 credits
History of theology in the Mediterranean basin from ancient through medieval periods. Same as JUST 3022, PHIL 3729, and RELG 3022.

## CLAS 3030 Black Classicism

3 hours; 3 credits
How African, African-American and Caribbean writers have received and employed some of the major ancient Greek and Roman texts, as well as classical mythology and Athenian views on democratic government. Explores the interpretation, rewriting, and reimagining of Greek and Roman life, literature and mythology by black writers. Starting Fall 2020 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

## CLAS 3035 Conversing with Antiquity

3 hours; 3 credits
Classical Receptions. Understanding and use of ancient Greek and Roman culture in later historical periods and literary genres. How later uses open new readings of the original materials. Exploration of the relationships between interpretation and the rewriting, reimagining and rethinking of Greek and Roman literary and material cultures.

Prerequisite: English 1010, CLAS 1110, or permission of the chairperson

## CLAS 3100 Ancient Wisdom Traditions

3 hours; 3 credits
Survey of wisdom traditions in the Greek and Roman worlds, including early lawgivers, the Seven Sages, the Sophists, philosophical schools, and popular moralizing, from a historical and literary perspective. Study of the social conditions in which wisdom traditions developed, the influence of 'wise men' on the culture at large, and the reception of texts and ideas. Analysis of the literary and rhetorical features of wisdom texts.

Prerequisite: English 1010 or permission of the chairperson

## CLAS 3101 The Public Thinker

3 hours; 3 credits
This course introduces students to theoretical and practical issues facing thinkers who engage with the classical tradition. By examining examples of public discourse, students will encounter a range of historical and cultural perspectives, with special attention to proficiencies needed for engagement in intellectual dialogue across national boundaries. The classical tradition itself will be subject to critique. In addition to considering the linguisticrhetorical dimension of public discourse, this course will consider various forms of censorship, persecution, and media control. Projects may include the drafting of letters, opinion pieces, and speeches.

Prerequisite: English 1010 or permission of the chairperson.

## CLAS 3113 English Professional Language: its Greek and Latin Tools <br> 3 hours; 3 credits <br> Introducing basic terminology that English draws from Greek and Latin for theory and practice in professions such as medicine, law, science, engineering, industry, communications, comprising media (advertising, journalism, television, theater), likewise critical argumentation in philosophy, philology, and politics. Concept of Linguistic Kinship: the 'family' of Romance languages relating English, Spanish, Portuguese, Italian, French; likewise the 'family' of Indo-European languages, relating, e.g., Germanic, Celtic, Persian, Indic. Tools for students to analyze and master terminology in their special fields. Starting Fall 2020 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

## CLAS 3200 Heroes, Gods, Monsters: Classical Mythologies

3 hours; 3 credits
Classical myths and modern theories of mythology. Readings in English translation from the ancient sources. This course is the same as RELG 3030. Satisfies Pathways Flexible Core Individual and Society requirement.

## CLAS 3209 After Alexander: A Confluence of Cultures

3 hours; 3 credits
Cultural and socio-political developments in the aftermath of Alexander's conquests from western Anatolia to the Indus, including Egypt and the edges of Arabia. Focused regional studies, evincing the plurality of cross-cultural exchange. Broad surveys of developments in warfare, economy, the arts, myth, religion, and family structures, demonstrating common cross-regional developments. (Not open to students who have completed Core Curriculum 3209.) 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement. Starting Fall 2019 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

## CLAS 3210 Digging the Past

3 hours; 3 credits
Introduces the multidisciplinary nature of archaeology; origins of agriculture and the rise of early civilizations; practical experience in aspects of archaeological field methods and analytical techniques; examination of stone, ceramic, and metal artifacts; wood, seed, and pollen, human and non-human bone materials. This course is the same as Anthropology 1400.

## CLAS 3211 Interdisciplinary Approaches to Archaeology

3 hours; 3 credits
Historical and current trends in archaeology; methodology and techniques of anthropology, classics, art history, and the physical sciences relevant to archaeological studies. This course is the same as Anthropology 3410. (Not open to students who have completed Classics 21 or Anthropology 3410 [21].)

Prerequisite: one of the following: Classics 2.2, 3210 [26], 62.5, Anthropology 2401 [2.2], 20, or permission of the chairperson.

## CLAS 3212 Summer Archaeological Field School (Intensive Program)

3 hours lecture, 6 hours supervised fieldwork; 6 credits
Intensive instruction in field methods and techniques of
archaeology through participation in every aspect of an excavation; training in archaeological mapping, excavation techniques, and methods of archaeological laboratory analysis. This course is the same as Anthropology 3470. (Not open to students who have previously received credit for archaeological fieldwork.) STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: permission of the chairperson and one of the following: Classics 3210 [26], Anthropology 2400 or 2401 [2.2], Core Studies 1 or Core Curriculum 1110 [1.1], [2.1], [9] or Classics 1110, Judaic Studies 3012 [12], a course in archaeological theory and methodology.

## CLAS 3220 Reading Tragedy

3 hours; 3 credits
Development of Greek tragedy. Different perspectives of Aeschylus, Sophocles, Euripides. Criticism of tragedy by Aristophanes, Plato, Aristotle. Roman drama of Seneca. Reading in the works of modern critics.

Prerequisite: English 1010 [1] or permission of the chairperson.

## CLAS 3221 The Comic Tradition in Greece and Rome

3 hours; 3 credits
The development of the comic tradition in Greece and Rome. Invective, the Old Comedy of Aristophanes, the New Comedy of Menander, Roman adaptations of Greek New Comedy by Plautus and Terence, satire, the novel, and the arts.

Prerequisite: English 1010 [1] or permission of the chairperson.

## CLAS 3222 Greek and Roman Epic

3 hours; 3 credits
Development of epic poetry among the Greeks and Romans. Homer's Iliad and Odyssey, Apollonius' Argonautica, Vergil's Aeneid, Statius' Thebaid, Lucan's Pharsalia. Oral and written traditions. Narrative focus and intertextuality.

Prerequisite: English 1010 [1] or permission of the chairperson.

## CLAS 3223 Exile and Return in Classical and Caribbean Epic

3 hours; 3 credits
Narratives of exile and the struggle to get home in the Bible,
Homer's Odyssey, and Virgil's Aeneid, with special emphasis on Derek Walcott's Omeros, along with other Caribbean writings.

Prerequisite: English 1010 [1] or permission of the chairperson.

## CLAS 3224 Makings of Pastoral Myth

## 3 hours; 3 credits

Pastoral, a powerful mode of mythic imagination, studied in its roots and transformations: plots and themes (herdsmen as lovers, rulers, and poets; kings as herdsmen and poets) originating in ancient Mediterranean cultures and still at work in imagination today. Return and change of basic mythemes to meet the challenges of new times and worlds. This course is the same as English 3188 and Comparative Literature 3602.

Prerequisite: English 1010 [1] or permission of the chairperson.

## CLAS 3230 Ancient Sport and Spectacle

3 hours; 3 credits
An investigation of ancient Greek and Roman sport and spectacle
as cultural phenomena with special attention to the nature of various events and the social context in which they took place. Analysis of representative ancient Greek and Roman texts (epic, history, philosophy, tragedy, comedy, medical writings, epigraphy) and relevant iconographical evidence. Comparison with modern sports and public spectacles.

Prerequisite: English 1010 [1] or permission of the chairperson.

## CLAS 3231 Science and Technology in Classical Antiquity

3 hours; 3 credits
Science and technological progress of classical antiquity. Place of science and technology in ancient society.

Prerequisite: English 1010 [1] or permission of the chairperson.

## CLAS 3232 Environmental Ideologies and Their Classical Roots

3 hours; 3 credits
Basic ideas about human nature and human activity that are rooted in the ancient Mediterranean ecosystem (Egypt, Greece, Italy) and still shape attitudes towards the environment, with special attention to such ideas as "nature, chaos, wildness, scarcity" and their contraries "culture, cosmos, tameness, fullness". Evidence from epic, historical, philosophical, and scientific writers.

Prerequisite: English 1010 [1] or permission of the chairperson.

## CLAS 3233 Moral Choices in Classical Literature

3 hours; 3 credits
Moral problems as they were understood by the ancient Greeks and Romans. Topics include friendship, personal ambition, and social responsibility.

Prerequisite: English 1010 [1] or permission of the chairperson.

## CLAS 3234 Government and Society in Antiquity

3 hours; 3 credits
Political structures and institutions of Classical Athens and Republican Rome. Investigation of constitutional forms. Contrast between theoretical frameworks and historical realities. Investigation of the nature of social status, types of power, and imperialism.

Prerequisite: English 1010 [1] or permission of the chairperson.

## CLAS 3235 Greek and Roman Rhetoric: Theory and Practice

3 hours; 3 credits
Study of the classical rhetorical tradition. Practical application of rhetorical techniques in oral speech and writing. Critique of the uses of rhetoric.

Prerequisite: English 1012 [2] or permission of the chairperson.

## CLAS 3236 Survey of Latin Literature

3 hours; 3 credits
Survey of major Roman authors and genres. Study of literary history, intertextuality, and development of genres. Comparison of literary styles. Not open to students who have taken Classics 3240 [38] in Spring 2010.

Prerequisite: English 1010 [1] or permission of the chairperson.

## CLAS 3237 Ancient Mediterranean Religions

## 3 hours; 3 credits

Religious developments and conflicts. Intersections of ancient Judaisms, Christianities, state religions, mystery cults and other belief systems in the Ancient Mediterranean. This course is the same as History 3310.

## CLAS 3238 Gender and the Body in Ancient Religions

3 hours, 3 credits
Study of social, historical, cultic, and literary contexts of gender roles, the body, and sexuality in ancient Greco-Roman religions, ancient Judaisms, and early Christianities. Application of modern theory to ancient evidence. This course is the same as Women's and Gender Studies 3710 and Studies in Religion 3042.

Prerequisites: English 1010 or permission of the chairperson.

## CLAS 3239 Ancient Medicine: The Classical Roots of the Medical Humanities

3 hours, 3 credits
Survey of ancient medicine. Study of social, historical, scientific, and ideological contexts to ancient medical theory and practice. Comparison of ancient and modern scientific inquiry and application.

Prerequisites: English 1010 or permission of the chairperson

## CLAS 3240 Special Topics

3 hours; 3 credits
Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take Classics 3240 [38] for credit twice but may not repeat topics.

Prerequisite: English 1010 [1] or permission of the chairperson.

## CLAS 3241 Magic in the Ancient World

3 hours; 3 credits
Survey of magic rituals and practitioners in ancient Greece, Rome and contemporary ancient cultures including ancient Egypt, Babylon, and Judea. Study of the social context behind ancient magic, as well as the surviving literary, papyrological, and epigraphic evidence for magic rituals. This course is the same as Religion Studies 3041.

Prerequisite: English 1010 or permission of the chairperson.

## CLAS 3244 Death and Afterlife in the Ancient World

3 hours; 3 credits
TThe world of antiquity seen through a cultural history of ideas and practices relating to death and the afterlife in the ancient world. Mortuary practices and beliefs promulgated by populations in Egypt, Mesopotamia, Ancient Israel, Greece, Rome, Syria, North Africa and Asia Minor from the second millennium B.C.E. through the sixth century C.E. Covers: (1) the ancient context out of which notions about the afterlife emerged (2) cross-cultural developments, which resulted in ideas about death and the afterlife more familiar from Judaism and Christianity. Direct engagement with primary source materials through visits to local cemeteries, museums, and through individual research. This course is the same as Religion 3035 and History 3025.

CLAS 3245 Comparative Identity Politics: The Ancient Mediterranean and the Modern World

3 hours; 3 credits
Investigation of questions of the interactions between personal and group identities in ancient societies, including questions of race, ethnicity, sexualities, gender, and religious and political affiliations. Discussion of how ancient cultures such as Athens, Persia, Egypt, Rome, or Carthage dealt with persons whose identities were considered somehow transgressive or "other". Examination of how such solutions and rationalizations continue to affect discussion of these identities in modern societies. Satisfies Pathways Flexible Core World Cultures and Global Issues requirement. Starting Fall 2019 also qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

## CLAS 3246 Questions of Text and Truth: Introduction to Judaism, Christianity, and Islam

3 hours; 3 credits
A consideration of Judaism, Christianity, and Islam in terms of their origins, major beliefs, practices, and history. Introduction to the concepts of myth, symbol, ritual, and doctrine. Relationship of these religions to cultural changes, literary and artistic developments, community life, and individual identity. This course is the same as Religion 3003. Starting fall 2019 satisfies Pathways Flexible Core Individual and Society requirement.

## CLAS 3301 Ancient Greece to the Death of Alexander the Great

3 hours; 3 credits
A historical survey covering the beginnings of Greek culture; the development of the polis system; the rise and fall of the Athenian empire; federalist impulses of the fourth century; and the conquests of Alexander the Great. Topics such as religion, economy, social structures, art and architecture are also addressed. This course is the same as History 3021.

Prerequisite: English 1010 or permission of the chairperson

## CLAS 3302 The Hellenistic World

3 hours; 3 credits
The history, culture, and art of post-classical Greek antiquity, focusing especially on the time frame between Alexander the Great and Cleopatra VII. Analysis of how the ancient world changed with Alexander and his successors, especially on the political, social, and cultural transformations that came with a multicultural world;
changes in the religious landscape; gender roles; literary forms; and state formation. This course is the same as History 3022.

Prerequisite: English 1010 or permission of the chairperson

## CLAS 3303 Rome: From its Origins to the Death of Julius Caesar

3 hours; 3 credits
A historical survey covering the foundations of the city of Rome, especially its relationship with other Italic and Mediterranean culture groups; the rise and fall of the republican constitution; imperialism; and social structures. Topics such as religion, economy, art and architecture are also addressed. This course is the same as History 3023.

Prerequisite: English 1010 or permission of the chairperson

## CLAS 3304 Rome: From Julius Caesar to Constantine

3 hours; 3 credits
A historical survey covering the Roman civil wars that led to the

Principate (Imperial Period), Julio-Claudian Period and subsequent Dynasties, finishing with crises of the third century CE, the transformation into the divided Dominate (post 284 CE) and finally reunified and re invented under Constantine. The diversity of the Roman experience across its vast geographical territory, different ethnic and religious groups, and social hierarchies is emphasized. This course is the same as History 3024.

Prerequisite: English 1010 or permission of the chairperson

## CLAS 4010 Problems in Greek History

3 classroom hours plus conference and independent research; 4 credits
A course on new directions and specific issues in ancient history, including but not limited to the development of Greek ideas about democracy and empire; sociopolitical changes; changes in the landscape and built environment; forms of government; development of religious, social, and political networks.
Investigation of literary, epigraphic, numismatic, and archaeological source materials and the problems of interpretation. Emphasis on research methodologies.

Prerequisite: English 1012 [2] and at least sophomore standing; or permission of the chairperson.

## CLAS 4011 The Rise of Macedon

3 classroom hours plus conference and independent research; 4 credits
Rise of Macedon, from feudal state to world power. Development of government and society. Political and military developments under Philip II and Alexander the Great. Cultural exchange under Alexander. Focus on archaeological, epigraphic, and literary evidence. Emphasis on research methodologies. This course is the same as History 3015.

Prerequisite: English 1012 [2] and at least sophomore standing, or permission of the chairperson.

## CLAS 4012 Prophecy, Oracles, and Seers

3 classroom hours plus conference and independent research; 4 credits
The religious, historical, and social significance of prophecy at Delphi and other locations in the ancient world. Literary and archaeological evidence. Rites and festivals held at sanctuaries may also be considered. Emphasis on research methodologies. (Not open to students who have completed Classics 17.)

Prerequisite: English 1012 [2] and at least sophomore standing; or permission of the chairperson.

## CLAS 4020 Rome: Questions and Problems

3 classroom hours plus conference and independent research; 4 credits
A course on specific issues and new directions in historical research, including, but not limited to, literary and historiographical reflections of empire; changes in the urban environment and provincial landscape: housing, public buildings, monuments, boundaries, land use; and developments in the social hierarchy: slavery, class issues, role of women, ethnic and religious minorities. Emphasis on research methodologies.

Prerequisite: English 1012 [2] and at least sophomore standing; or permission of the chairperson.

## CLAS 4030 Ancient Cities

3 classroom hours plus conference and independent research; 4 credits
Development of urban culture in the ancient Mediterranean world. Surveys of societal changes brought about by urbanization, negotiation of secular and sacred space, political transformations, and development of new technologies. Focus on archaeological, textual, numismatic, and epigraphical evidence. Emphasis on research methodologies.

Prerequisite: English 1012 [2] and at least sophomore standing; or permission of the chairperson.

## CLAS 4031 Approaches to Literature, Ancient and Modern

3 classroom hours plus conference and independent research; 4 credits
Ancient and modern approaches to literature in general. Readings will include selections from modern literary theory, Plato's Republic and Phaedrus, Aristotle's Poetics and Rhetoric and Horace's Ars Poetica. Emphasis on research methodologies.

Prerequisite: English 1012 [2] and at least sophomore standing; or permission of the chairperson.

## CLAS 4032 Gender and Sexuality in Ancient Greece and Rome

3 classroom hours plus conference and independent research; 4 credits
An exploration into the ways in which individual sexual experience was categorized and evaluated by society in the ancient world, with special attention to questions of gender role, sexual orientation, and the intersection of the personal and the political. Evidence from such literary and nonliterary sources as lyric poetry, epigram, drama, oratory, history, philosophy, epigraphy, and the visual arts. Emphasis on research methodologies. This course is the same as Women's and Gender Studies 3715. (Not open to students who have completed Classics 14 or 62.3.)

Prerequisite: English 1012 [2] and at least sophomore standing; or permission of the chairperson.

## CLAS 4033 Being Greek under the Empire: The Second Sophistic and Beyond

3 classroom hours plus conference and independent research; 4 credits
Survey of the literature of the Greek cultural reflorescence under Roman Imperial rule known as the Second Sophistic. Close reading, analysis, and research into authors such as Lucian, Longus, Achilles Tatius, and the early Christian hagiographers.

Prerequisite: English 1012 and at least sophomore standing; or permission of the chairperson.

## CLAS 4040 Ancient Explorations

6 hours; 6 credits
On-site learning and teaching. Topography and monuments of one or more major centers of ancient Mediterranean culture such as Athens, Rome, the Bay of Naples, or western Asia Minor. Emphasis on research methodologies and social contexts.

Prerequisite: English 1012 [2] and at least sophomore standing; or permission of the chairperson.

4 hours; 4 credits
A significant recurrent theme in Western literature and philosophy. Course description may be obtained in the department office before registration. Reports and term paper. Offered jointly by the Departments of Classics, English, Philosophy. This course is the same as Comparative Literature 4602, English 4112, Philosophy 4120.

Prerequisite: a grade of B or higher in six credits in advanced courses in the major field and permission of the instructors and the chairperson.

## CLAS 5100 Independent Research

Minimum of 9 hours conference and independent work§; 3 credits Study of an area of classical civilization. Independent research leading up to a final paper. This course may be taken for credit twice but students may not repeat topics.

Prerequisite: English 1012 [2] and at least sophomore standing; or permission of the chairperson.

## CLAS 5200 Research Assistantship

9 plus conference; 3 credits
Supervised participation in a professional research project in Classics or an allied discipline. Experience gathering and analyzing data, surveying existing scholarship, and preparing findings for presentation and publication. This course may be repeated twice for credit on the same research project, three times on two or three separate projects.

Prerequisite: English 1012 and permission of the chairperson.

## GRKC *2001 Ancient Greek 1

3 hours; 3 credits
Study of the fundamentals of the language in preparation for reading literary works and for linguistic studies. (Not open to students who are enrolled in or have completed Greek 2019 [1.9].) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

## GRKC *2002 Ancient Greek 2

3 hours; 3 credits
Continuation of Greek 2001 [1]. Review of fundamentals. Readings from Greek prose and poetry. (Not open to students who are enrolled in or have completed Greek 2019 [1.9]) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Greek 2001 [1] or permission of the chairperson

## GRKC 2019 Greek Institute

20 hours; 12 credits
Rapid, intensive introduction to the forms and syntax of Greek and to major authors and literary genres read in the original. History of Greek literature and methods of literary criticism. In the literature section, students study selections from the archaic through the Hellenistic periods. This program covers the entire sequence through course 3012 [14] and satisfies the college language requirement. Eleven-week summer course taught at the Graduate Center. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Latin/Greek Institute.

## GRKC 3011 Ancient Greek 3

3 hours; 3 credits
Completion of the study of basic morphology and syntax. Readings from ancient Greek prose and/or poetry. (Not open to students who have completed Greek 2019.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Greek 2002 [2] or permission of the chairperson.

## GRKC 3012 Ancient Greek 4

3 hours; 3 credits
Extended readings from ancient Greek prose and/or poetry. (Not open to students who have completed Greek 2019.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Greek 3011 [12] or permission of the chairperson.

## GRKC 4031 Greek Drama I: Tragedy

3 hours; 3 credits
Two tragedies by Aeschylus, Sophocles, and/or Euripides. Close analysis of language, meter, and dramatic structure. Survey of modern critical perspectives. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Greek 2019 [1.9] or 3012 [14].

## GRKC 4032 Greek Drama II: Comedy

3 hours; 3 credits
Two comedies by Aristophanes and/or Menander. Close analysis of language, meter, and dramatic structure. Survey of modern critical perspectives. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Greek 2019 [1.9] or 3012 [14].

## GRKC 4033 Greek Epic

3 hours, 3 credits
Close readings of ancient Greek epic, including, but not necessarily limited to, Homer, Hesiod, the Homeric Hymns, and Apollonius. Study of the generic conventions of ancient epic. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisites: Greek 2019 or 3012 or permission of the chairperson

## GRKC 4041 Greek Historians

3 hours; 3 credits
Readings from ancient Greek historians, including authors such as Herodotus and Thucydides. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Greek 2019 [1.9] or 3012 [14].

## GRKC 4042 Greek Philosophers

## 3 hours; 3 credits

Selected readings from ancient Greek philosophical texts, including but not limited to Plato and Aristotle. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a
LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Greek 2019 [1.9] or 3012 [14].

## GRKC 4043 Greek Orators

3 hours; 3 credits
Close readings of ancient Greek orators, including, but not necessarily limited to, Isocrates, Demosthenes, and Aischines. Study of the particular genres of forensic and epideictic oratory and their conventions. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Greek 3012 [14] or Greek 2019 [1.9] or permission of the chairperson.

## GRKC 4044 Greek Prose Fiction

3 Hours; 3 Credits
Close readings of ancient Greek prose fiction, including, but not necessarily limited to, Lucian, Longus, and Heliodoros. Study of the literary styles of these authors as well as their predecessors and influences, including Menander, Homer, and Theocritus. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Greek 2019 [1.9] or 3012 [14] or permission of the chairperson.

## GRKC 4045 Greek Biography

## 3 hours, 3 credits

Close readings of ancient Greek biographical works, including, but not necessarily limited to, Diogenes Laertius and Plutarch. Study of the generic conventions of ancient biography. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisites: Greek 2019 or 3012 or permission of the chairperson

## GRKC 4060 Greek Institute: Intensive Reading

21 hours for 7 weeks; 8 credits
Intensive reading program in Greek. Improvement of reading skills and knowledge of Greek syntax through the close reading of both prose and poetry. Regular prose composition exercises. Sevenweek summer course taught at the CUNY Graduate School and University Center. Special fee for photocopied materials. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Permission of the director of the Latin/Greek Institute.

## GRKC 4070 Studies in Greek

3 hours; 3 credits
Studies in a genre, period, or author not covered by the regular
course offerings. Students may take this course for credit twice but may not repeat topics. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Greek 2019 [1.9] or 3012 [14] or permission of the chairperson.

## GRKC 4080 Readings in Greek

1 hour; 1 credit
Translation of Greek texts to supplement classics courses. The department will announce coordinated classics courses each semester. Students may take this course for credit four times but may not repeat topics. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Greek 2019 [1.9] or 3012 [14]; and permission of the chairperson.

## LATN *2101 Latin 1

3 hours; 3 credits
Fundamentals of the language in preparation for reading literary works and for linguistic studies. (Not open to students who are enrolled in or have completed Latin 2119 [1.9].) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

## LATN *2102 Latin 2

3 hours; 3 credits
Continuation of Latin *2101. Review of fundamentals. (Not open to students who are enrolled in or have completed Latin 2119.)
Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Latin *2101 [1] or permission of the chairperson.

## LATN 2119 Latin Institute

20 hours; 12 credits
Rapid, intensive introduction to the forms and syntax of Latin and to major authors and literary genres read in the original. History of Latin literature and methods of literary criticism. In the literature section, students choose to concentrate on either classical or medieval authors. This program covers the entire sequence through course 3112 [12] and satisfies the Pathways College Option LOTE (Language Other Than English) requirement. Elevenweek summer course taught at the Graduate Center.

Prerequisite: application to and permission of the director of the Latin/Greek Institute.

## LATN 3111 Latin 3

3 hours; 3 credits
Completion of the study of basic morphology and syntax. Readings from Latin prose and/or poetry. (Not open to students who are enrolled in or have completed Latin 2119 or 3112.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Latin *2102 [2] or permission of the chairperson.

## LATN 3112 Latin 4

3 hours; 3 credits
Extended readings from Latin prose and/or poetry. (Not open to students who are enrolled in or have completed Latin 2119.)

Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Latin 3111 [11] or permission of the chairperson.

## LATN 4131 Latin Drama

3 hours; 3 credits
Readings from the major Roman dramatists Plautus, Terence, and Seneca. Attention to be paid to style, meter, dramaturgy, relationship of the plays to their Greek models, the social context of performance. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Latin 3112 [12] or Latin 2119 [1.9] or permission of the chairperson.

## LATN 4132 Latin Lyric Poetry

3 hours; 3 credits
Readings from the two major Roman lyric poets, Catullus and Horace. Translation of their work and study of its style, themes and imagery, meter, relationship to Greek models, and social context. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Latin 3112 [12] or Latin 2119 [1.9] or permission of the chairperson.

## LATN 4133 Latin Satire

3 hours; 3 credits
Readings from the Latin verse satirists Lucilius, Horace, Persius, Juvenal. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Latin 2119 [1.9] or 3112 [12].

## LATN 4134 Latin Elegy

3 hours; 3 credits
Survey of the major Latin love elegists, including Catullus, Propertius, Tibullus, and Ovid. Particular attention will be paid to themes of love and war, the structure of the Roman poetry book, the elegists' subjective style, and the development of the genre from its origins in Catullus to its codification by Ovid. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Latin 3112 [12] or Latin 2119 [1.9] or permission of the chairperson.

## LATN 4135 Latin Epic

3 hours, 3 credits
Close readings of ancient Latin epic, including, but not necessarily limited to, Virgil, Lucan, and Ovid. Study of the generic conventions of ancient epic. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisites: Latin 2119 or 3112 or permission of the chairperson.

3 hours; 3 credits
Close reading of select portions of the Ciceronian corpus.
Exploration of his different genres, particularly the relationship of style and content. Texts considered in light of their socio-political context. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Latin 3112 [12] or Latin 2119 [1.9] or permission of the chairperson.

## LATN 4142 Latin Historians

3 hours; 3 credits
Close readings of Latin historical authors, including but not necessarily limited to Sallust, Caesar, Livy, and Tacitus. Concentration on conventions of the genre as a whole and the features the sub-genres of the historical monograph, commentaries, and annalistic history. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Latin 3112 [12] or Latin 2119 [1.9] or permission of the chairperson.

## LATN 4143 Latin Biography

## 3 hours, 3 credits

Close readings of ancient Latin biographies, including, but not limited to, Nepos, Suetonius, and Tacitus. Study of the generic conventions of ancient biography. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisites: Latin 2119 or 3112 or permission of the chairperson

## LATN 4151 Post-Classical Latin

3 hours; 3 credits
Readings from medieval Latin texts. Connections with Romance languages. Students may take this course for credit twice but may not repeat the same texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Latin 2119 [1.9] or 3112 [12].

## LATN 4160 Latin Institute: Intensive Reading

21 hours for 7 weeks; 8 credits
Intensive reading program in Latin. Improvement of reading skills and knowledge of Latin syntax through the close reading of both prose and poetry. Regular prose composition exercises. Sevenweek summer course taught at the CUNY Graduate School and University Center. Special fee for photocopied materials. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Permission of the director of the Latin/Greek Institute.

## LATN 4170 Studies in Latin

3 hours; 3 credits
Studies in a genre, period, or author not covered by the regular course offerings. Students may take this course for credit twice but may not repeat topics. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Latin 2119 [1.9] or 3112 [12] or permission of the chairperson.

## LATN 4180 Readings in Latin

1 hour; 1 credit
Translation of Latin texts to supplement classics courses. The department will announce coordinated classics courses each term.
This course may be taken for credit four times but students may
not repeat topics. Qualifies as a LOTE (Language Other Than
English) course for Pathways College Option purposes.
Prerequisite: Latin 2119 [1.9] or 3112 [12]; and permission of the chairperson.

The following inactive course(s) will only be offered if there is sufficient demand:
CLAS *1000 Special Topics
CLAS*1012 Medical and Scientific Terminology
LATN 5085 Senior Research Essay

## Communication Arts, Sciences, and Disorders

Department office: 3439 Boylan Hall
Phone: 718.951.5225
Full-time Faculty
Professors: Haas, Levy, Lu, Marton, Schaeffer, Silman
Associate Professors: Epstein, Fuse, Longtin, Thompson
Assistant Professors: Avivi Reich, Hazamy, Neave-DiToro, Yang
Lecturers: Beaumont-Bowman, Sass-Brown
The Department of Communication Arts, Sciences, and Disorders is a community of scholars, researchers, clinicians, and instructors who facilitate students' exploration of the broad dimensions of human communication from a number of perspectives. The department offers majors in Professional Communication as well as Communication Sciences and Disorders (SpeechLanguage Pathology and Audiology). The department also administers an interdisciplinary Communication BA Program that gives students the option to pursue a concentration in: Interpersonal and Intercultural Communication; or Professional and Organizational Communication; or Visual and Media Studies.

The department's goal is to train thoughtful, effective communicators who become mindful of how others communicate in a wide range of settings. Students learn to conduct, analyze, and present research. Students in Communication Sciences and Disorders explore the development and nature of speech, language, communication, and swallowing from physiological, neurological, psychological, and multicultural perspectives. They develop foundational understanding of the assessment and treatment of individuals with communication and swallowing difficulties.

Many of the students in the department go on to graduate studies before entering the fields of business, government, education, or allied health disciplines. Students who wish to pursue graduate studies in Communication Sciences and Disorders may apply to the master's or doctoral degree programs offered by, or in conjunction with, the department.

## B.A. degree program in communication sciences and disorders HEGIS code 1220; SED program code 85189

Department requirements (47 credits)
It is required that majors in the Communication Sciences and Disorders program attend a new majors meeting prior to declaring their major and recommended that students meet with a departmental advisor once a year thereafter.

Students may not offer more than six credits for a baccalaureate degree from Communication Arts, Sciences, and Disorders 4270, 5271, 5272, and 5273.

The department chair may allow substitutions for one or more of these requirements consistent with the educational goals of the program.
Students must complete all of the following: Communication Arts, Sciences, and Disorders 1113, 1176, 1178, 1179, 2277, 2481, 2482; 2231, 2232, 3381, 4383, 5275W, Linguistics 2001, and
One of the following: Communication Arts, Sciences, and Disorders 1619, 1635, or 4666.
Additionally, students who intend to pursue advanced degrees in speech-language pathology or audiology are encouraged to take courses that satisfy the American Speech-Language-Hearing Association Certification Standards. Courses in the areas of statistics (Psychology 3400 or its equivalent), physical sciences (Physics 1005/1100, Chemistry 1007 or an equivalent), and social/behavioral sciences (Psychology 1000 or its equivalent) are strongly suggested.
Program Policies: Students must maintain a "B" average in major courses, with no grade lower than a C. No course may be repeated more than once.

The program in Communication Sciences and Disorders comprises three tiers. Students must complete all courses within a given tier before advancing into the next.

Tier 1 (20 credits)
All of the following: Communication Arts, Sciences, and Disorders 1113, 1176, 1178, 1179, and Linguistics 2001
One course from the following: Communication Arts, Sciences, and Disorders 1619, 1635, or 4666

Tier 2 (16 credits)
All of the following: Communication Arts, Sciences, and Disorders 2277, 2231, 2232, 2481, and 2482
Tier 3 (11 credits)
All of the following: Communication Arts, Sciences, and Disorders 3381, 4383, and 5275W

## B.A. degree program in professional communication HEGIS code 1506; SED program code 81375

Department requirements (26 credits)
It is recommended that majors in Professional Communication meet with an adviser in the first year of studies.
Majors must complete the following courses (20 credits): Communication Arts, Sciences, and Disorders 1110, 1608; 1707; 1619; 2623; 3733 and 5275W.

In addition, majors must choose 2 courses ( 6 credits) from the following: Communication Arts, Sciences, and Disorders 1618, 1627, 1643, 2631, 2719,4625 , or 4646 .

## Departmental Minor(s)

## Minor in Communication Sciences and Disorders

Department Requirements (13 credits)
All of the following: Communication Arts, Sciences, and Disorders 1176 and 1178; and one of the following: Communication Arts, Sciences, and Disorders 1113 or 1179; and one of the following: Communication Arts, Sciences, and Disorders 1635 or 1651. All courses toward this minor must be completed with a grade of C or higher.

## Minor in Professional Communication

## Department Requirements (12 credits)

## All of the following:

Communication Arts, Sciences, and Disorders 1619, 2623, 3733.
One course from the following:
Communication Arts, Sciences, and Disorders 1707, 4646, 4666 (this course is the same as Health and Nutrition Sciences 2183).
All the required courses used to meet these degree requirements must be completed with a grade of C or higher.

## Department honors

To be eligible for department honors, a student must have a grade point average of 3.50 or higher, complete 30 credits in the Communication Arts, Sciences, and Disorders Department, receive a grade of B or higher in CASD 5283 or 5284 or 5285, and have the recommendation of the Communication Arts, Sciences, and Disorders Department and the Faculty Council Committee on Honors, Citations, and Awards.

## Graduate Studies

The Communication Arts, Sciences, and Disorders Department offers a master of science in speech-language pathology. The department collaborates with the School of Education so that students who take graduate courses in education as part of the master of science in speechlanguage pathology may be eligible for NYS teacher certification as a teacher of students with speech and language disabilities (TSSLD). Additionally, a collaborative program with the School of Education provides an interdisciplinary advanced certificate in autism spectrum disorders. Some courses may be creditable toward the CUNY doctoral degree.
The master's (M.S.) education program in speech-language pathology is accredited by the American Speech-Language-Hearing Association, 2200 Research Boulevard, \#310, Rockville, MD 20850, 800-498-2071 or 301-296-5700. The department participates in the Au.D. (Doctor of Audiology) program offered by the CUNY Graduate Center in collaboration with Brooklyn and Hunter colleges.

For information, students should consult the department's deputy for graduate studies.

## Courses

*Courses marked with an asterisk (*) are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in this department.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## CASD *1101 Clinic

1 hour; no credit
Remedial, clinical, noncredit work. Individual consultations or carefully selected small groups. This course is usually assigned in the freshman year.

## CASD *1103 Techniques in Speech Communication

## 3 hours; 3 credits

Attention to developing speaking skills appropriate to the demands of modern life. Exercise in forms of communication and in voice and diction based on the student's experience. (Not open to students who are enrolled in or have completed CASD 1101 or 1104.

## CASD *1104 Techniques in Speech Communication

5 hours; 3 credits
Attention to developing speaking skills appropriate to the demands of modern life. Designed for students with foreign accents. Exercise in forms of communication and in voice and diction. (Not open to students who are enrolled in or have completed CASD 1101 or CASD *1103. Not open to students who have completed more than five credits in communication arts, sciences and disorders.)

## CASD 1110 Professional Speech

3 hours; 2 credits
Attention to general effectiveness in communication with emphasis on manner of speaking, voice, and diction. Exercises and projects in speaking and reading. For native speakers of American English. (Not open to students who are enrolled in or have completed CASD 1111. Not open to students who have completed more than five credits in communication arts, sciences and disorders.)

## CASD 1111 Professional Speech for Speakers of English as a Second Language

3 hours; 2 credits
Attention to general effectiveness in communication with emphasis on manner of speaking, voice, and diction. Exercises and projects in speaking and reading. For speakers of English as a second language. (Not open to students who are enrolled in or have completed CASD 1110. Not open to students who have completed more than five credits in Communication Arts, Sciences, and Disorders.)

## CASD 1113 Articulatory Phonetics

## 4 hours; 4 credits

Introduction to the science and development of the English speech sound system; phonetics as it relates to areas of linguistic science; dialectal variations in American English; speech patterns of Second Language Learners; and phonological disorders. Transcription of typical and disordered speech of children and adults using the International Phonetic Alphabet (IPA).

## CASD*1114 Survey of Speech, Language, and

## Communication Disorders

3 hours; 3 credits
Survey of speech, language, and communication disorders for educators. Consideration of varied disorders that might be encountered in educational settings; application to children from culturally and linguistically diverse backgrounds.

## CASD 1176 Introduction to Communication Disorders

3 hours; 3 credits
Overview of the field of Communication Disorders; distinction between communication differences and disorders; multicultural concerns in the professions of speech-language pathology and audiology; roles, responsibilities in professional practice across the lifespan and work settings; scope of practice related to speech, language, communication, and swallowing disorders; interprofessional practice; prevention, assessment and intervention from an evidence-based perspective.

## CASD 1178 Anatomy and Physiology of Speech and Swallowing

3 hours; 3 credits
An introductory and functional background in the anatomy and physiology of the respiratory, phonatory, articulatory and deglutitive systems; introduction to speech and swallowing disorders. STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences

## CASD 1179 Speech-Language and Hearing Science:

 Acoustics4 hours; 4 credits
Introduction to the acoustics of speech and hearing. Analysis of simple and complex signals. Waveform and spectral analysis through the use of an oscilloscope and real-time analyzer. Mechanics of speech production and perception.

Prerequisite: CASD 1113 [13].

## CASD 1205 Modern Communication Theories

3 hours; 3 credits
Survey of basic concepts in modern communication, including history, theories, models and issues pertaining to intrapersonal, interpersonal, nonverbal, small group, intercultural, and mass communication. Includes examination of technology, literacy, and communication processes. (This course is the same as Communication 1001.)

CASD 1608 Fundamentals of Interpersonal Communication
3 hours; 3 credits
Development of rhetorical competence and awareness of
communication strategies in one-to-one settings through readings, lectures, class exercises.

## CASD 1618 Group Communication

3 hours; 3 credits
An examination of effective small group communication. Topics include member characteristics, roles, norms, cohesiveness, leadership, problem solving, conflict resolution, and decision making.

## CASD 1619 Intercultural Communication

3 hours; 3 credits
Description and analysis of differences in speech patterns, codes, norms, and meanings as they affect intercultural communication between individuals of different cultural and ethnic backgrounds. Improvement of skills for effective communication in intercultural contexts. Starting Fall 2019 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

## CASD 1627 Nonverbal Communication

3 hours; 3 credits
Theory and practice of nonverbal communication. Socio-cultural and bio-evolutionary influences on nonverbal communication, the role and function of nonverbal communication in interpersonal relationships, and the relationship between verbal and nonverbal communication. Practical case studies.

## CASD 1635 Family Communication

3 hours; 3 credits
Theories and research in family communication and relationships. Nature and functions of communication in family life; diversity of family forms and experiences; crucial importance of social support in influencing family outcomes; multiple roles of family members.

## CASD 1643 Visual Communication

3 hours; 3 credits
Historical, physiological, perceptual and cognitive aspects of visual communication. Broad and diverse approaches to visual perception, reception and persuasion including theoretical perspectives, critical analysis methods, and ethical implications.

## CASD 1651 Communication and Identity

3 hours; 3 credits
Theory and practice of discourse analysis and their influence on intercultural and interethnic communication. Topics include speech acts, narratives, genre, interaction structures, communication style, dialect, accents, and their links to identities (e.g. ethnic, racial, professional, personal, religious, age, gender, dis/ability). Practical case studies.

## CASD 1707 Public Speaking

3 hours; 3 credits
Rhetorical principles. Practice in the technique of speech construction and delivery. Manuscript and extemporaneous delivery of several types of speeches. Satisfies Pathways Flexible Core Individual and Society requirement.

## CASD 1714 Oral Interpretation: Prose

3 hours; 3 credits
Fundamental principles of the study of literature through performance. Emphasis on prose forms.

## CASD 1715 Oral Interpretation: Poetry

3 hours; 3 credits
Application of basic oral interpretation skills to the analysis and performance of poetry.

## CASD 1717 The Performance of Children's Literature

3 hours; 3 credits
Specific performance elements in reading to and with children. (Not open to students who are enrolled in or have completed CASD 1718.)

## CASD 1718 The Oral Interpretation of Children's Literature

3 hours; 3 credits
An investigation of traditional and contemporary children's literature from various cultures. (Not open to students who are enrolled in or have completed CASD 1717.)

## CASD 2231 Language Development: Birth to Age Five

## 3 hours; 3 credits

Language development in relation to motor, perceptual, cognitive, emotional, and social development from birth to age five; language sampling. Implications for individual, cultural, and linguistic variation and emergent literacy.

Prerequisite: CASD 1113, 1176, 1178, 1179, LING 2001, and one of the following CASD 1619, 1635, or HNSC 2183.

## CASD 2232 Language Development: School-Age through

 Adolescence3 hours; 3 credits
Language acquisition during the school-age years and adolescence; literacy development and its role in academic performance; language assessment. Individual, gender, cultural, and linguistic variation in language development.

Prerequisite: CASD 1113, 1176, 1178, 1179, LING 2001, and one of the following CASD 1619, 1635, or HNSC 2183.
Corequisites: CASD 2231

## CASD 2277 Neurological Bases of Communication and Related Disorders

3 hours; 3 credits
Fundamental concepts and information regarding the anatomy and physiology of the human nervous system specific to swallowing, communication and other cognitive-linguistic functions; introduction to neurogenic communication disorders.

Prerequisites: CASD 1113, 1176, 1178, 1179, LING 2001, and one of the following CASD 1619, 1635, or HNSC 2183

## CASD 2481 Introduction to Clinical Audiology

4 hours; 4 credits
Anatomy and physiology of the auditory mechanism, pathology of
the ear, assessment of hearing using behavioral, electroacoustic and electrophysiological measures with related instrumentation; Interpretation of audiometric test results. Experiential clinicalrelated activities.

Prerequisite: CASD 1113, 1176, 1178, 1179, LING 2001, and one of the following CASD 1619, 1635, or HNSC 2183.

## CASD 2482 Introduction to Rehabilitative Audiology

3 hours; 3 credits
Auditory intervention for children and adults; implications for early hearing detection and intervention; assessing communicative needs. Amplification devices, cochlear implants, hearing assistive technology, hearing protection and modes of communication. Experiential clinical-related activities.

Prerequisite: CASD 1113, 1176, 1178, 1179, LING 2001, and one of the following CASD 1619, 1635, or HNSC 2183.

## CASD 2607 Communication and Sports

3 hours; 3 credits
Theories and research in sports communication: Critical examination of the role of sports in society; Gender, race, and public policy in the context of sports. The role of communication in sports participation; leadership; motivation; cohesion; and teamwork.

## CASD 2615 Social Media Communication

## 3 hours; 3 credits

Theory and practice of social media communication. History and growth of social media as a 21st century communication tool, impact of social media on interpersonal relationships, organizational communication, civic engagement, political participation, strategies by individuals and organizations for effective social media usage. Practical case studies. (This course is the same as TREM 2615).

## CASD 2623 Interpersonal Communication for Business and Professions

3 hours; 3 credits
Analysis and application of speech communication skills to the workplace for the purpose of increasing entry-level and careerrelated competencies.

Prerequisite: open to students who have completed a minimum of 61 college credits.

## CASD 2631 Crisis Communication

3 hours; 3 credits
Theory and practice of organizational crisis communication; crisis communication as an organizational communication function, proactive and reactive forms of crisis communication; crisis communication campaigns; practical case studies.

## CASD 2639 Communication Theory

## 3 hours; 3 credits

Major models, theories and methodologies of communication; use of theories; used to describe, analyze and explain a variety of communication phenomena in real-world situations. This course is the same as COMM 2000. (Not open to students who took Speech 1205 or Communication 1001)

Prerequisite: COMM 1000 and ENGL 1010, or permission of the chairperson.

## CASD 2719 Argumentation

3 hours; 3 credits
Principles and practice of convincing by means of logical proof. Logical analysis, identification of issues, briefing, and types of evidence.

## CASD 2720 Morphology

4 hours; 4 credits
Analysis of the internal structure of words in natural languages. Examination of the nature of the morpheme and of word-formation processes including inflection, derivation, and compounding. Interface between morphology and other levels of linguistic analysis. This course is the same as Linguistics 3019.

Prerequisite: Linguistics 2001 [1] or Anthropology 2301 [2.3].

## CASD *2722 Parliamentary Procedure

1 hour; 1 credit
Study and practice in the rules of parliamentary procedure.
Prerequisite: sophomore or junior or senior standing.

## CASD 3235 Communication Law and Policy

3 hours; 3 credits
US Media Law. First Amendment. Intellectual Property. US Media
Policy History. Digital and satellite challenges for policy and law.
Theories of public interest and deregulation. Cultural and political implications of law and policy. (This course is the same as Television, Radio and Emerging Media 3535 and Communication 3300.)

Prerequisite: Television, Radio and Emerging Media 1165 [6.5] or permission of the chairperson.

## CASD 3381 Nature and Assessment of Speech-Language Disorders across the Lifespan

3 hours lecture; 1 hour laboratory plus conference; 4 credits Etiologies, characteristics, and assessment of speech-language disorders across the lifespan. Clinical methods for screening and assessment. Culturally and linguistically appropriate evidencebased assessment. Observations of speech-language assessment.

Prerequisite: CASD 2277, 2231, 2232, 2481, and 2482

## CASD 3733 Organizational Communication

3 hours; 3 credits
The communicator and communication in organizations. Theory, relationships, and objectives.

## CASD 4260 Special Topics

3 hours; 3 credits
Topics vary from term to term. Course description may be obtained from the department office before registration. Students may take this course for credit twice but may not repeat topics.

Minimum of 45 hours satisfactory participation; 1 credit Satisfactory participation in projects and activities not included as part of the work of a specific course in any area of the Department of Communication Arts, Sciences, and Disorders. Students may take this course for credit four times, but may not offer more than six credits toward a baccalaureate degree from CASD 4270, 5271, 5272 , and 5273. Students should consult the department office about the special registration procedures required for this course.

## CASD 4383 Intervention for Speech-Language Disorders across the Lifespan

3 hours lecture; 1 hour laboratory plus conference; 4 credits Clinical theory and practice in the intervention for speech-language disorders across the lifespan. Culturally and linguistically appropriate evidence-based intervention. Observations of speechlanguage intervention.

Prerequisite: CASD 3381

## CASD 4625 Gender and Communication

3 hours; 3 Credits
The intersection between gender, culture, and communication. Scholarly theory, social scientific studies, and critical analyses of gender across a broad range of contexts, including personal relationships, organizations, and the media. Experience applying course material to everyday interactions.

## CASD 4646 Conflict and Negotiation

3 hours; 3 credits
Familiarity with current research and theory on interpersonal conflict and negotiation. Methods for analyzing conflict.
Appropriate skills for conflict management and dispute resolution.

## CASD 4666 Health Communication

3 hours; 3 credits
The way we create, seek, process, and share information about health, medicine, and the health care system. Intrapersonal, interpersonal, group, organizational, and societal communication. The multidisciplinary nature of health communication. Literature from communication studies and the social sciences. (This course is the same as Health and Nutrition Science 2183.)

Prerequisite: Health and Nutrition Sciences 1100 [6.1] or equivalent.

## CASD 4744 Special Topics in Oral Interpretation

## 3 hours; 3 credits

Analysis and performance of literature in various modes and genres. Such topics as chamber theater and the oral interpretation of individual literary styles, nonfiction, and folk literature. Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take this course for credit twice but may not repeat topics.

## CASD 5271 Independent Study

3 hours independent work§ and conferences; 1 credit Directed research of a topic approved by the instructor, under the supervision of the instructor. Substantial final project; oral presentation, performance, research paper, or a combination of these forms. May be repeated for credit, but students may not offer
more than six credits toward a baccalaureate degree from CASD 4270, 5271, 5272, and 5273.

Prerequisite: five or more credits in Department of Communication Arts, Sciences, and Disorders courses and permission of the chairperson.

## CASD 5272 Independent Study

6 hours independent work§ and conferences; 2 credits Directed research of a topic approved by the instructor, under the supervision of the instructor. Substantial final project; oral presentation, performance, research paper, or a combination of these forms. May be repeated for credit, but students may not offer more than six credits toward a baccalaureate degree from CASD 4270, 5271, 5272, and 5273.

Prerequisite: five or more credits in Department of Communication Arts, Sciences, and Disorders courses and permission of the chairperson.

## CASD 5273 Independent Study

9 hours independent work§ and conferences; 3 credits Directed research of a topic approved by the instructor, under the supervision of the instructor. Substantial final project; oral presentation, performance, research paper, or a combination of these forms. May be repeated for credit, but students may not offer more than six credits toward a baccalaureate degree from CASD 4270, 5271, 5272, and 5273.

Prerequisite: five or more credits in Department of Communication Arts, Sciences, and Disorders courses and permission of the chairperson.

## CASD 5275W Senior Seminar: Current Issues in Communication Arts, Sciences, and Disorders.

3 hours; 3 credits
Research and writing of scholarly paper. Disciplinary conventions. Practical research studies. Writing-intensive section.

Prerequisite: Senior Status or Departmental Permission

## CASD 5283 Independent Research

Minimum of 9 hours independent work $\S$ and conference or class meetings; 3 credits
Research or fieldwork in one of the areas of speech supervised by a faculty member. Periodic conferences. Final report or paper.

Prerequisite: an average grade of B or higher in a program, approved by the chairperson, of advanced Communication Arts, Sciences, and Disorders Department courses and permission of the instructor and the chairperson.
Prerequisite for students in the speech pathology/audiologyspeech and hearing science area: Speech 2231 [31] or 38.3.

## CASD 5284 Seminar

Minimum of 9 hours independent work§ and conference or class meetings; 3 credits
Readings in speech. Course description may be obtained in the department office before registration. Final examination.

Prerequisite: an average grade of $B$ or higher in a program, approved by the chairperson, of advanced Communication Arts, Sciences, and Disorders Department courses and permission of the chairperson.

Prerequisite for students in the speech pathology/audiology-
speech and hearing science area: Speech 2231 [31] or 4383 [38.3].

## CASD 5285 Workshop

Minimum of 9 hours independent work $\S$ and conference or class meetings; 3 credits
Creation of an acceptable piece of work in one of the areas of communication arts, sciences and disorders.

Prerequisite: an average grade of B or higher in a program, approved by the chairperson, of advanced Communication Arts, Sciences and Disorders Department courses and permission of the instructor or chairperson.
Prerequisite for students in the speech pathology/audiology-
speech and hearing science area: Speech 2231 [31] or 38.3.
The following inactive course(s) will only be offered if there is sufficient demand:
CASD 1609 Evaluative Listening for Oral Communication
CASD 1704 Masterpieces of Persuasion
CASD 1716 Oral Interpretation: Drama
CASD 2721 Speeches for Special Occasions
CASD 2724 Readers Theater
CASD 2725 Interpretation of Classic Literature
CASD 2729 Social Control through Persuasive Speech
CASD 3734 Studies in Public Address
CASD 5274 Senior Seminar: Current Issues in Speech Communication

## Communication Program

Department office: 3439 Boylan Hall
Phone: 718.951.5225

## B.A. degree program in communication HEGIS code 0601.00; SED program code 31603


Program requirements ( $38-41$ credits)

Students must complete both A and B below:
The program director, in consultation with the program's advisory committee, may allow substitutions for up to two course requirements, consistent with the educational goals of our program. Special topics courses may, in addition, be used to fulfill program requirements.
A. Communication Core (26-27-credits)

Each of the following nine courses in the Communication Core must be completed with a grade of C or better:
Communication 1000; Television, Radio \& Emerging Media 1165; Communication 2000/Communication Arts. Sciences, and Disorders 2639; Communication 3000 (English 3196); Communication 3100 (Psychology 3120); Communication 3150W (Television, Radio \& Emerging Media 2222W); Communication 3200 (Philosophy 3315); Communication 3300 (Communication Arts, Sciences, and Disorders 3235/Television, Radio \& Emerging Media 3535); Communication 4000 (9 or more field hours per week) or Communication 4100 (14 or more field hours per week) The internship course requirement may be waived for full-time employees in related fields with the permission of the program director; those students must take a substitute communication course elective. Internship credit cannot be earned retroactively.
B. Students must choose and complete one of the Concentrations below, consisting of four courses, one from each area: (12 credits)

Interpersonal and Intercultural Communication
Area 1 - Culture:
Africana Studies 3230 (English 3158); American Studies 3402 (English 3157); Anthropology 3301; Anthropology 3126 (Children and Youth Studies 3126; Communication Arts, Sciences, and Disorders 1619; Communication Arts, Sciences, and Disorders 1627; Puerto Rican and Latino Studies 3105; Sociology 2200.

Area 2 - Society:
Africana Studies 3228 (American Studies 3306); Anthropology 2215; Communication Arts, Sciences, and Disorders 1608; Philosophy 3308; Political Science 3106; Political Science 3160; Psychology 2100; Psychology 3110; Sociology 1101; Sociology 2601 (Africana Studies 3328); Sociology 2605; Sociology 3605.

Area 3 - Family:
Africana Studies 3320; Communication Arts, Sciences, and Disorders 1635; Psychology 3270; Sociology 2400; Sociology 3609 (Women and Gender Studies 3318).

Area 4-Gender:
Africana Studies 3362 (Women's and Gender Studies 3488); Anthropology 3310; Business 3250 (Women's and Gender Studies 3345); Communication Arts, Sciences, and Disorders 4625; Philosophy 3726 (Women's and Gender Studies 3137); Political Science 3153 (Women's and Gender Studies 3353); Political Science 3155 (Women's and Gender Studies 3330); Psychology 3360; School Psychology, Counseling and Leadership 3000; Sociology 2600 (Women's and Gender Studies 3420; Women's and Gender Studies 1001.

Professional and Organizational Communication
Area 1-Organizational:
Business 3210; Communication Arts, Sciences, and Disorders 2631; Communication Arts, Sciences, and Disorders 3733; Psychology 3171;
Sociology 3607.
Area 2 - Communication and Presentation Skills:
Business 3010 (Television, Radio \& Emerging Media 2660); Communication Arts, Sciences, and Disorders 1707; Communication Arts, Sciences, and Disorders 2623; Communication Arts, Sciences, and Disorders 2719.

Area 3 - Groups and Teams:
Business 3220; Communication Arts, Sciences, and Disorders 1618; Communication Arts, Sciences, and Disorders 4646; Psychology 3140.
Area 4 - Specialization:
Business 3160; Business 3110 (Computer and Information Sciences 1597/Television, Radio \& Emerging Media 3537); Communication Arts, Sciences, and Disorders 2607; Health and Nutrition Science 2183 (Communication Arts, Sciences, and Disorders 4666); Psychology 3172
(Business 3240); Television, Radio \& Emerging Media 2517 (Business 3130); Television, Radio \& Emerging Media 2519; Television, Radio \& Emerging Media 2726W.

Visual and Media Studies
Area 1-Culture:
Art 3167; Anthropology 3180; Film 2117; Film 2131; Film 3122; Music 3101; Philosophy 3702; Puerto Rican and Latino Studies 3335; Sociology 3802; Television, Radio \& Emerging Media 3434 (Women's and Gender Studies 3121).

Area 2 - Media:
Anthropology 2320; Art 2811; Film 2120; Film 2129; Television, Radio \& Emerging Media 2032; Television, Radio \& Emerging Media 2420.
Area 3 - History and Society:
History 3462 (American Studies 3406); Communication Arts, Sciences, and Disorders 2615 (Television, Radio \& Emerging Media 2615); English 4405; Film 2116; Sociology 2800; Television, Radio \& Emerging Media 2265; Television, Radio \& Emerging Media 4160.

Area 4 - Theory:
Art 3177; Communication Arts, Sciences, and Disorders 1643; Film 3130; Philosophy 3501; Philosophy 3511; Television, Radio \& Emerging Media 4430W

## Courses

## COMM 1000 Survey of Communication Studies

3 hours; 3 credits
Introduction to the theory and practice of the discipline of communication. How people use messages to generate meanings within and across various contexts. How human communication influences and is influenced by the relationships we form, our institutions, society, organizations, and media. (Not open to students who took Communication 1001 or
Speech/Communication Arts, Sciences and Disorders 1205.)

## COMM 1001 Introduction to Communication

## 3 hours; 3 credits

Survey of basic concepts in modern communication, including history, theories, models and issues pertaining to intrapersonal, interpersonal, nonverbal, small group, intercultural, and mass communication. Includes examination of technology, literacy, and communication processes. (This course is the same as CASD 1205.)

## COMM 2000 Communication Theory

## 3 hours; 3 credits

A survey of the major models, theories and methodologies of communication and how theories are used to describe, analyze and explain a variety of communication phenomena in real-world situations. This course is the same as CASD 2639 (Not open to students who took Speech 1205 or Communication 1001).

Prerequisite: COMM 1000 and ENGL 1010, or permission of the program director.

## COMM 3000 Orality, Literacy, and Computer Technology

3 hours; 3 credits
The evolution from orality to writing, to print culture, to computer technology, and the relationship of each to the cognitive process
and human culture. (This course is the same as English 3196.)
Prerequisite: Communication 1000 and English 1010 [1].

## COMM 3100 Cultural Psychology

3 hours; 3 credits
An exploration of theory and research in the contemporary cultural variations of thought, language, and other social behavior, addressing the question of how culture is "involved" in these processes. An examination of research in perception, cognition, motivation, and development and communication; and a review of interpersonal, group, and organizational "differences" across cultures. Historical and theoretical alternatives for making sense of these variations will be considered, leading to the consideration of a "universal" human nature. (This course is the same as Psychology 3120.)

Prerequisite: Psychology 2100 or 2210 or 2200 ; or Communication 2000.

## COMM 3150W Communication Research

3 hours; 3 credits
Qualitative and quantitative methods in communication research. Includes the use of surveys, depth interviews, focus group research, statistics, computer data analysis, and report writing. Writing Intensive Course. (This course is the same as Television, Radio and Emerging Media 2222W).

Prerequisite: English 1012 and one of the following: Television, Radio and Emerging Media 2265 or Communication 2000.

## COMM 3200 Communication Ethics

3 hours; 3 credits
Critical examination of ethical issues related to communication, information, and the media. Freedoms and responsibilities. Consideration of such issues as: privacy, confidentiality,
censorship, deception, propaganda, accuracy, fairness, intellectual property rights, conflicts of interest, obscenity and pornography, civility and offensive speech. Classical and contemporary philosophers. (This course is the same as Philosophy 3315.)

Prerequisite: one course in philosophy or Communication 1000 or permission of the Chairperson of the Philosophy department.

## COMM 3300 Communication Law and Policy

## 3 hours; 3 credits

U.S. media law. First amendment. Intellectual property. U.S. media policy history. Digital and satellite challenges for policy and law. Theories of public interest and deregulation. Cultural and political implications of law and policy. (This course is the same as Communication Arts, Sciences, and Disorders 3235 and Television, Radio and Emerging Media 3535.)

Prerequisite: Television, Radio and Emerging Media 1165 [6.5] or instructor's permission.

## COMM 3800 Special Topics in Communication

3 hours; 3 credits
A topic in the area of communication not covered in the regular curriculum. Topics vary from term to term and reflect the interests of students and faculty. Course description may be obtained in the department office before registering. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: Prerequisite for the special topic may vary with the topic offered.

## COMM 4000 Internship

9 hours per week independent work; 2 credits
A minimum of one hundred twenty-six hours field experience during the fourteen week semester in a professional communications setting commensurate with student's area of interest within the program. Evaluative report required as part of the course. May be repeated once, but the internship must have different job duties and a different supervisor. Internship credit cannot be earned retroactively.

Prerequisite: junior or senior standing in Communication Program, and approval of program advisor or instructor.

## COMM 4100 Internship

14 hours per week independent work; 3 credits A minimum of one hundred ninety-six hours field experience during the fourteen week semester in a professional communications setting commensurate with student's area of interest within the program. Evaluative report required as part of the course. May be repeated once, but the internship must have different job duties and a different supervisor. Internship credit cannot be earned retroactively.

Prerequisite: junior or senior standing in Communication Program, and approval of program advisor or instructor.

## COMM 4800 Independent Study

Minimum of 9 hours conference and independent work; 3 credits Independent reading, study or project related to communication on an approved topic under the guidance of a full-time faculty member. Periodic conferences. Research paper, final exam, or substantial final project.

Prerequisite: Communication 2000 and permission of the program director.

## COMM 4850 Independent Research

Minimum of 9 hours conference and independent work; 3 credits Independent research project related to communication on an approved topic under the guidance of a full-time faculty member. Weekly conference. Research paper, report, presentation, project or a combination of these.

Prerequisite: Communication 2000, Communication 3150W, and permission of the program director.

## Computer and Information Science

Department office: 2109 Ingersoll Hall
Phone: 718.951.5657

## Full-time Faculty

Distinguished Professors: Parikh, Raphan
Professors: Arnow, Bar-Noy, Langsam, Psarris, Rudowsky, Sokol, Weiss, Yanofsky, Yarmish, Zhou, Ziegler
Associate Professors: Cox, Levitan, Mandel, Schnabolk, Thurm
Assistant Professors: Chen, Cogan, Halevi, Kletenik
Lecturers: Chuang, Taylan
The field of computer and information science encompasses the nature of computers and computing, methods of accessing and organizing information, techniques of problem-solving, and computer applications in all fields of human endeavor.

The Brooklyn College Department of Computer and Information Science is one of the largest college departments of its kind in the metropolitan New York area, with close to thirty full-time professors. Two are distinguished professors, having achieved the highest rank that the University can bestow. Our faculty has been awarded prestigious research grants from the National Institutes of Health, the Department of Defense, and the National Science Foundation.

Our computer facilities for students are among the best in the city. Three major hubs house more than 300 computers for student use, and wireless Internet connections are available at many campus locations. A participant in the select Broadening Participation in Computing Program of the National Science Foundation, the department offers a wide range of services to our diverse student body, as well as four bachelor of science degrees, four minors, and a certificate program. The department provides educational programs that present the fundamentals of computer and information science and foster professional and intellectual maturity. The department stresses knowledge relevant to technological innovation, business needs, and the science of computing and prepares students for the job market or advanced computing studies.

Our faculty members offer students cutting-edge research opportunities in major areas of computer and information science that are relevant to industrial or academic careers. Examples of these areas of interest are robotics, software engineering, computing education, parallel and distributed computing, information systems and bioinformatics. Many of our students also receive college credit for projects and internships at prestigious commercial companies. Computer and information science graduates achieve success in a wide variety of roles in academia, government, and the computer industry as well as in other private and public sector organizations.

We offer a bachelor of science degree in information systems in collaboration with the Murray Koppelman School of Business.
Students who wish to pursue graduate studies may apply to the master's and doctoral degree programs offered by or in conjunction with this department.

## Grades in prerequisite courses

All prerequisite courses in computer and information science must be completed with a grade of C or higher.

## Department recommendations

Students interested in computer-related careers should read the brochure Advice to Undergraduate Students, which may be obtained in the department office.

Incoming students with a knowledge of a programming language other than Java should consult with a department adviser.
With counseling, students should choose electives in any departments that may prepare them to apply computer science to a particular field of interest.
Students are advised to frequently check the department Web site, http://www.brooklyn.cuny.
edu/web/academics/schools/naturalsciences/undergraduate/computers.php, and to subscribe to cistalk, the department's e-mail list.To subscribe, visit the Website.

## B.S. degree program in computational mathematics HEGIS code 1701; SED program code 02067

An interdepartmental major offered by the Department of Computer and Information Science and the Department of Mathematics.
The computational option of this program enables students to apply mathematical and computational skills to the physical, biological, social, and behavioral sciences. The theoretical option is designed for students interested in the more abstract parts of computer science and for those interested in college teaching and research.
All mathematics courses offered to satisfy the requirements for a major in computational mathematics must be completed with a grade of C - or higher. Unless otherwise specified in this bulletin, any mathematics courses used to satisfy a prerequisite for an advanced mathematics elective must be completed with a grade of C - or higher. All computer and information science prerequisites to computer and information science courses must be completed with a grade of C or higher.

Program requirements (61-69 credits)

Students should select option I or option II.

## Option I: Computational.

Mathematics 1006 and one of Mathematics 1011 or Mathematics 1012. Completion of some or all of these courses may be waived conditional on the outcome of appropriate placement exams.

Mathematics 1201 and 1206. Transfer students may also need to take Mathematics 1211 - see math department chair.
All of the following: Mathematics 2001, 2101, 2201, 2206, 3501, 4201 and 4701.
All of the following: Computer and Information Science 1115 or 1170, 3115, 3130, 3220.
Three courses chosen from among: Computer and Information Science 3240 or Mathematics 3107, Computer and Information Science 3142, 3160, 3310, 3230, 3350, 3330, 3820, 4335.
Students choosing Option I are also encouraged to minor in Distributed and Parallel Computing.
Option II: Theoretical.
Mathematics 1006 and one of Mathematics 1011 or Mathematics 1012. Completion of some or all of these courses may be waived conditional on the outcome of appropriate placement exams.

Mathematics 1201 and 1206. Transfer students may also need to take Mathematics 1211 - see math department chair.
All of the following: Mathematics 2001, 2101, 2201, 3101, 4101 and 4201.
All of the following: Computer and Information Science 1115 or 1170, 3115, 3130, 3220, 3230, 4900 or 5001.
Three of the following: Computer and Information Science 3240 or Mathematics 3107, Computer and Information Science 3142, 3160, 3350, 3330, 3820, 4335.

## Program recommendations

Mathematics 4501 is recommended. It is recommended that students choose electives in departments that prepare them to apply computer science to a particular field of interest. Majors in computational mathematics may substitute Mathematics 2001 for Computer and Information Science 2210 as a prerequisite for Computer and Information Science courses.

## Additional requirements for a B.S. degree

Candidates for a B.S. degree with a major in computer science (including computational mathematics and multimedia computing) must complete at least 60 credits in science and mathematics; 24 of these 60 credits must be completed in advanced courses numbered 2000 and above in the Department of Computer and Information Science. For the B.S. degree in computational mathematics, these 24 credits must be in the Department of Computer and Information Science and/or the Department of Mathematics. These 24 credits must be completed at Brooklyn College with a grade of $C$ or higher in each course. Specific course requirements for B.S. degrees in the department are described above. The following courses may be applied toward the 60 credits in science and mathematics:
A) All courses in the departments of biology, chemistry, computer and information science, earth and environmental sciences, mathematics, physics, and psychology.
B) Courses marked with a number sign (\#) in the Department of Health and Nutrition Sciences.
C) Anthropology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470 and 4665.

Core Studies [5, 5.1, 5.2, 7.1, 7.2, 8.1 and 8.2].
Core Curriculum [1300 through 1399]

Math 1311, Biology 1010, Chemistry 1007, Physics 1005, Earth and Environmental Sciences 1010.
Core Curriculum 3301 through 3399.
Economics 3400, 3410, 4410, 4422.
Philosophy 3203, 3204, 3231, 3232, 3422, 3423, 3601, 3605, and 3610.
Kinesiology 3271, 3275, 3281, 3285, 4229, 4251.
Sociology 2701.

## B.S. degree program in computer science <br> HEGIS code 0701; SED program code 01991

Department requirements (55-67.5 credits)

A student excused, without credit, from a course may not take the course for credit later, except with permission of the chairperson.
The department chair, with the approval of the chair of the department's undergraduate curriculum committee, may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

Computer and Information Science 1115 or 1170.
All of the following: Computer and Information Science 2210, 3115, 3130, 3140, 3320, 3305 or 3310, 3142, 3220 or 3230; 4900 or 5001.
Computer and Information Science 2820W or Philosophy 3318W.
Three additional courses in Computer and Information Science chosen from courses numbered between 3000 and 4899
All of the following: Mathematics 1006 and one of Mathematics 1011 or 1012. Completion of some or all of these courses may be waived, conditional on the outcome of appropriate placement exams.

Mathematics 1201 and 1206, or [3.20 and 4.20] and 1211.
Mathematics 2501 or 3501.
Transfer students who receive credit for Mathematics 3.20 and 4.20 are required to take Mathematics 1211 and either 2501 or 3501 to satisfy the mathematics requirement for the B.S. degree in Computer Science.

## Additional requirements for a B.S. degree

Candidates for a B.S. degree with a major in computer science (including computational mathematics and multimedia computing) must complete at least 60 credits in science and mathematics; 24 of these 60 credits must be completed in advanced courses numbered 2000 and above in the Department of Computer and Information Science. For the B.S. degree in computational mathematics, these 24 credits must be in the Department of Computer and Information Science and/or the Department of Mathematics. These 24 credits must be completed at Brooklyn College with a grade of $C$ or higher in each course. Specific course requirements for B.S. degrees in the department are described above. The following courses may be applied toward the 60 credits in science and mathematics:
A) All courses in the departments of biology, chemistry, computer and information science, earth and environmental sciences, mathematics, physics, and psychology.
B) Courses marked with a number sign (\#) in the Department of Health and Nutrition Sciences.
C) Anthropology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470 and 4665.

Core Studies [5, 5.1, 5.2, 7.1, 7.2, 8.1 and 8.2].
Core Curriculum [1300 through 1399, 3301 through 3399]
Economics 3400, 3410, 4410, 4422.
Philosophy 3203, 3204, 3231, 3232, 3422, 3423, 3601, 3605, and 3610.
Kinesiology 3271, 3275, 3281, 3285, 4229, 4251.
Sociology 2701.

## B.S. degree program in information systems HEGIS code 0702; SED program code 32153

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Degree Requirements (66-70 credits)
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All of the following:
Computer and Information Science 1050, 1115 or 1170, 3115, 3130, 3810, 4900 or 5001.

Three courses chosen from the following:
Computer and Information Science 3800, 3140, 3142, 3171, 3410, 3820, 3340, 3345, 3325.
With permission of the chairperson of the Department of Computer and Information Science, the student may substitute one of the following courses for any course in this requirement: Computer and Information Science 3220, 3160, 3320, 3310, 3610, 3630.

Computer and Information Science 2820W or Philosophy 3318W.
Business 3420 or Computer and Information Science 1590.
Business 3430 or Computer and Information Science 2531.
One of the following: Business 3120, Computer and Information Science 1530, Business 3432, Computer and Information Science 2532.
Business 4202W or Computer and Information Science 1580W.
Economics 2100 or Business 2100.
Economics 2200 or Business 2200.
Business 3200.
Finance 3310.
Accounting 2001.
Business 3400 or Economics 3400 or Mathematics 2501 or 3501 or Psychology 3400.
Business 3410 or Economics 3410 or Mathematics 1201 or Business 3421 or Computer and Information Science 2590.
24 credits must be completed in advanced courses in the Departments of Accounting, Computer and Information Science, Economics, Business Management, and/or Finance. These 24 credits must be completed at Brooklyn College with a grade of C or higher in each course.

Additional requirements for a B.S. degree

Candidates for a B.S. degree with a major in information systems must complete at least 60 credits in science and mathematics and advanced courses numbered 2000 or above in the Departments of Accounting, Computer and Information Science, Economics, Business Management, and/or Finance. Among the 60 credits, 24 credits must be completed in advanced courses in the Departments of Accounting, Computer and Information Science, Economics, Business Management, and/or Finance. These 24 credits must be completed at Brooklyn College with a grade of $C$ or higher in each course. The following courses may be applied toward the 60 credits in science and mathematics:
A) All courses in the departments of biology, chemistry, computer and information science, earth and environmental sciences, mathematics, physics, and psychology.
B) Courses marked with a number sign (\#) in the Department of Health and Nutrition Sciences.
C) Anthropology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470 and 4665. Core Studies [5, 5.1, 5.2, 7.1, 7.2, 8.1 and 8.2]. Core Curriculum [1300 through 1399, 3301 through 3399]
Economics 2200, 3400, 3410, 4410, 4422.
Philosophy 3203, 3204, 3231, 3232, 3422, 3423, 3601, 3605, and 3610. Kinesiology 3271, 3275, 3281, 3285, 4229, 4251.
Sociology 2701.
Business 2100, 2200, 3120, 3200, 3400, 3410, 3421, 3430, 3432, 4202W.
Finance 3310.
Accounting 2001.

## B.S. degree program in multimedia computing HEGIS code 0799; SED program code 31604

This program trains specialists in developing and maintaining multimedia software. The program includes basic computing background, mathematical training especially geared to multimedia design and production, specific courses in multimedia computing, and courses in digital arts.

## Program requirements (57-67 credits)

A student excused, without credit, from a course may not take the course for credit later, except with permission of the chairperson.
The department chair, with the approval of the chair of the department's undergraduate curriculum committee, may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

All of the following: Computer and Information Science 1115 or 1170, 1600, 2210, 2820W, 3115, 3130, 3220, 3620, 3630, and 4900 or 5001.
All of the following: Mathematics 1006 and one of Mathematics 1011 or Mathematics 1012. Completion of some or all of these courses may be waived conditional on the outcome of appropriate placement exams. Mathematics 1201, 1711 or 1206, 1716 or 2501. One of the following: Computer and Information Science 3650 or 3660 or 3665 or 3667.

Three additional courses chosen from the following: Computer and Information Science 3140, 3142, 3410, 3415, 3610, 3650, 3660, 3665, 3667, 3810, 4610.

Two courses chosen from among the following: Art 2811, 2812, 3812, 2820, 2821; Music 3260, 3261, 3262, 3264 (or CISC 2600), 3322; Film

1201, 2701; Television, Radio \& Emerging Media 2420, 3861, 3871, 3951.
Additional requirements for a B.S. degree
Candidates for a B.S. degree with a major in computer science (including computational mathematics and multimedia computing) must complete at least 60 credits in science and mathematics; 24 of these 60 credits must be completed in advanced courses numbered 2000 and above in the Department of Computer and Information Science. For the B.S. degree in computational mathematics, these 24 credits must be in the Department of Computer and Information Science and/or the Department of Mathematics. These 24 credits must be completed at Brooklyn College with a grade of $C$ or higher in each course. Specific course requirements for B.S. degrees in the department are described above. The following courses may be applied toward the 60 credits in science and mathematics:
A) All courses in the departments of biology, chemistry, computer and information science, earth and environmental sciences, mathematics, physics, and psychology.
B) Courses marked with a number sign (\#) in the Department of Health and Nutrition Sciences.
C) Anthropology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470 and 4665.

Core Studies [5, 5.1, 5.2, 7.1, 7.2, 8.1 and 8.2], Core Curriculum [1300 through 1399], Math 1311, Biology 1010, Chemistry 1007, Physics 1005,
Earth and Environmental Sciences 1010. Core Curriculum 3301 through 3399.
Economics 3400, 3410, 4410, 4422.
Philosophy 3203, 3204, 3231, 3232, 3422, 3423, 3601, 3605, and 3610.
Kinesiology 3271, 3275, 3281, 3285, 4229, 4251.
Sociology 2701.

## Departmental Minor(s)

## Minor in Computer Science

Department Requirements
A program of 12 credits in computer and information science, from among courses numbered between 2000 and 4899, including at least one of the following: Computer and Information Science 3130 or 3310, each with a grade of C or higher.

## Minor in Data Science

Program Requirements: 18-19 credits
Computer and Information science 3225, 3440.
Mathematics 4531.
Either Mathematics 2001 and Mathematics 3501, or Computer and Information Science 2210 and Mathematics 2501.
One additional course, chosen from among the following:
Business Management 2200 or 4400W or
Computer and Information science 1410 or 3130 or
Finance 3377 or
Economics 2200 or 3370 or 4422 or 4400 W or
Mathematics 3601 or 4101 or 4501 or
Philosophy 3203 or 3204 or 3423 or
Political Science 3014 W or 3421 or 3423 or
Psychology 3510 or 3520 or 3530 or 3580 or 4400 or
Sociology 3506 or 3604.
Prerequisite requirements for the minor:
Math 1201, 1206, 2101;
Computer and Information science 1215.
Courses presented for the major in Computer and Information Science may also be used to satisfy the minor in Data Science. A minor in CIS requires completing 12 credits from among courses numbered between 2000 and 4899 with a grade C or better.

## Minor in Multimedia Computing

A student with a major in Computer and Information Science or another field may take a minor in Multimedia Computing. A minor in CIS requires completing 12 credits from among courses numbered between 2000 and 4899 with a grade $C$ or better. The minor in multimedia requires 22-25 credits and includes the following courses.

All of the following: Computer and Information Science 1115 or 1170; 1600 and 3115 and 3130; and 3620 or 3630 .
Three of the following: Computer and Information Science 3610, 3620, 3630, 3650, 3660, 3665, 3667, 4610.
Courses presented for the major in computer and information science may also be used to satisfy the minor in multimedia computing.

## Interdepartmental Minor(s)

## Minor in Cognitive Science

An interdisciplinary and interdepartmental minor, offered by the Department of Computer and Information Science, the Department of Philosophy, and the Department of Psychology.

Program requirements: (19-20 credits)
All of the following:
Philosophy 3422, Computer and Information Science 1115, Psychology 1000, Psychology 2530 or 3530.
One from each of the following groups, a) and b):
a) Philosophy $3123,3401,3410,3420$, or 3601.
b) Computer and Information Science 1410 or 3410, or Philosophy 3423, or Psychology 3580.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Computer and Information Science

The requirements for the teacher education programs indicated above are described in the Childhood, Bilingual and Special Education and the Early Childhood and Art Education sections in this Bulletin. Students who major in either of these programs and elect a concentration in computer and information science must complete 30 credits in the Department of Computer and Information Science with a grade of C or higher in each course. Students should meet with an adviser in the School of Education regarding the appropriate sequence of teacher education courses.

## Concentration requirements:

All of the following: Computer and Information Science 1115, 1080 or Education 3003 (formerly Education 68.1), CISC 1050, CISC 2820 W.
One of the following options, (a) or (b):
(a) Computer Science Option: Computer and Information Science 3115, 2210 or 3130.
(b) Information Technology Option: Computer and Information Science 1030, 1035, 1060, 3800.

Additional courses in the Department of Computer and Information Science to bring the total number of credits in the Department to at least thirty.

## Recommendations for prospective graduate students

Prospective doctoral students in computer-related fields should develop reading competence through course 2 in at least one of the following languages: French, German, Russian, and should take Computer and Information Science 3220, 3410, 3230, and 3810.

## Graduate Studies

The Computer and Information Science Department offers a master of arts degree program in computer science and a master of science degree in information systems. Some courses may be creditable toward the CUNY doctoral degree. For information, students should consult the graduate deputy chairperson for counseling or the department Web site, http://www.brooklyn.cuny. edu/web/academics/schools/naturalsciences/graduate/computers.php.

## Courses

*Courses marked with an asterisk (*) are not counted toward the requirement of no fewer than 24 credits in advanced courses for majors in this department.

## CISC *1000 Computing: Its Nature, Power, and Limits

## 3 hours, 3 credits.

The nature, power, and limits of the computer and computing. The components of the computer. Computer networks. Information representation. Introduction to algorithms, problem-solving, and computer programming. (Not open to students who are enrolled in, or have completed, any course in Computer and Information Science numbered 1110 or 1115 or higher with a grade of C or higher, or who have completed Core Studies 5 or 5.1.) Satisfies Pathways Flexible Core Scientific World requirement.

## CISC *1001 Computing and Quantitative Reasoning

3 hours; 3 credits
Computers, programming, and their basis in quantitative reasoning. Information representation, base systems and numeric conversions between bases. The nature of algorithms; use of graphs to compare performance of algorithms. Designing and writing programs to solve mathematical problems. Feasibility and computability based on mathematical analysis. Drawing inferences from results. Computer and network security and privacy, including encryption techniques and lockout algorithms based on algebraic methods and mathematical logic. Satisfies Pathways Required Core Mathematics and Quantitative Reasoning requirement.

## CISC *1002 The Outer Limits of Reasoning

## 3 hours; 3 credits

Paradoxes and limitations arising in computer science, the physical sciences, and mathematics. Reasoning conundrums and paradoxes with an emphasis on examples from mathematics. Limitations of reason, logic, mathematics and computing. Reasoning about infinity. The inability to prove everything that is true. Problems that cannot be solved computationally in a reasonable amount of time.
Unsolvable problems. The boundary between what can and cannot be known. Starting Spring 2018 Satisfies Pathways Required Core Mathematics and Quantitative Reasoning requirement. This course is the same as Philosophy 2200. (Not open to students who have completed CORC 3310.)

## CISC *1003 Exploring Robotics

3 hours; 3 credits
Introduction to programming through the use of project-based educational robotics activities. Small group work on a series of multi-week creative projects involving use of robots to address meaningful and socially important issues, such as urban search and rescue or elder care. Introduction to the fundamentals of robotics (including aspects of mechanical design) and elementary programming within a graphical environment. (Not open to students who have completed Core Curriculum 3303.) 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement. Starting Fall 2019 Satisfies Pathways Flexible Core Scientific World requirement.

## CISC *1030 The Internet

2 hours lecture, 2 hours laboratory; 3 credits
A comprehensive survey of the design, implementation, history, and use of the Internet. Data communications and network concepts,
Transmission Control Program/Internet Protocol (TCP/IP), clientserver computing, e-mail and Web applications, Hypertext Markup Language (HTML), and client-side scripting tools. Security issues, financial and political applications, ethical concerns. (Not open to
students who have completed any computer and information science course numbered 2000 or higher.)

Prerequisite: Core Curriculum 1312 [3.12] or Core Studies 5 or 5.1 or any course in computing.

## CISC *1035 Multimedia Production for the World Wide Web

2 hours lecture, 2 hours laboratory; 3 credits
Study of interface development and animation for the Internet. Focus on technical and aesthetic considerations of website development. This course is the same as Art 3812. (Not open to students who are taking or have completed Computer and Information Science 3800 [13.2] or 3630 [52].)

Prerequisite: Core Curriculum 1312 or Core Studies 5 or 5.1 or any course in computing.

## CISC *1050 Introduction to Computer Applications

3 hours; 3 credits
Introduction to the use of the computer in the home and office. Computer literacy. Word processing, database systems, and spreadsheets. Examination and evaluation of computer peripherals and software for personal computers. (Not open to students who are enrolled in or have completed Computer and Information Science 3800 [13.2].)

## CISC *1060 Computing Workshop 1

10 hours supervised project; 3 credits each
Experience in an independent hands-on computer project, directed by a faculty member. Workshop activities designed to advance understanding of the methodology and applications of information technology. Projects drawn from such areas as programming, robotics, information systems, medical computing, business applications, game design, or multimedia computing. Designed for early students to gain a practical appreciation for "doing something" with computer technology.

Prerequisites: Core Curriculum 1312 [3.12] or 3303 [30.03], or Core Studies 5 or 5.1, or any course in Computer and Information Science; and permission of the chairperson.

## CISC *1062 Computing Workshop 2

10 hours supervised project; 3 credits each
Experience in an independent hands-on computer project, directed by a faculty member. Workshop activities designed to advance understanding of the methodology and applications of information technology. Projects drawn from such areas as programming, robotics, information systems, medical computing, business applications, game design, or multimedia computing. Designed for early students to gain a practical appreciation for "doing something" with computer technology.

Prerequisites: Core Curriculum 1312 [3.12] or 3303 [30.03], or Core Studies 5 or 5.1, or any course in Computer and Information Science; and permission of the chairperson.

## CISC *1070 Special Topics in Computing

## 3 hours; 3 credits

A topic in the area of computing practice and interdisciplinary computing studies not covered in the regular curriculum. Topics vary from term to term and reflect the interests of students and faculty. Course description may be obtained in the department
office before registering. Prerequisite for the special topic will vary with each topic offered.

## CISC *1072 Special Topics in Computing

## 3 hours; 3 credits

A topic in the area of computing practice and interdisciplinary computing studies not covered in the regular curriculum. Topics vary from term to term and reflect the interests of students and faculty. Course description may be obtained in the department office before registering. Prerequisite for the special topic will vary with each topic offered.

## CISC *1110 Introduction to Programming Using C++

3 hours lecture, 2 hours lab; 4 credits
Algorithms, computers and programs. Writing, debugging, and testing programs. Loops and conditional control structures. Functions and parameter passing. Arrays, strings and simple classes. Sorting, searching and other basic algorithms. Input and output. Programming applications selected from various disciplines. History and basic concepts of computer science. Completion of this course prohibits a student from receiving credit for CISC 1115.

## CISC *1111 Basic Principles of Computer Programming With Science Applications 1

4 hours; 2 credits
Algorithms, programs, and computers. Writing, debugging, and verifying programs. Data representation. Loops, functions, and other control structures. Introduction to basic concepts of computer science. Programming applications selected from the areas of mathematics, physics, biology and chemistry. (Open only to students in an Early College High School program.)

## CISC *1112 Basic Principles of Computer Programming With Science Applications 2

4 hours; 2 credits
Algorithms, programs, and computers. Writing, debugging, and verifying programs. Arrays, pointers, and structures. Character strings. History of computer science. Binary and hexadecimal number systems. Programming applications selected from the areas of mathematics, physics, biology, and chemistry. (Open only to students in an Early College High School program.)

Prerequisite: Computer and Information Science 1111 [1.51].

## CISC *1113 Basic Principles of Java Programming with

 Science Applications I4 hours; 2 credits
Algorithms, computers and programs. Writing, debugging, and testing programs. Loops and conditional control structures. Method definition and parameter passing. Basic concepts of computer science. Programming applications selected from mathematics, physics, biology and chemistry. (Open only to students in an Early College High School program.)

## CISC *1114 Basic Principles of Java Programming with Science Applications II

## 4 hours; 2 credits

Review of method definition and parameter passing. Arrays, ArrayLists, and Strings. Sorting, searching and other basic
algorithms. Programming applications selected from mathematics, physics, biology and chemistry. (Open only to students in an Early College High School program.)

Prerequisite: Computer and Information Science 1113

## CISC *1115 Introduction to Programming Using Java

3 hours lecture, 2 hours lab; 4 credits
Algorithms, computers and programs. Writing, debugging, and testing programs. Loops and conditional control structures. Method definition and parameter passing. Arrays, ArrayLists, and Strings. Sorting, searching and other basic algorithms. Input and output. Programming applications selected from various disciplines. History and basic concepts of computer science. (Not open to students who have completed Computer and Information Science 1110 [1.5]. Completion of this course prohibits a student from receiving credit for CISC 1110.)

## CISC *1150 UNIX Shell Programming

2 hours; 2 credits
The shell programming language. Command structure and I/O redirection. Control structures, metacharacters, process environment. Shell scripts, exception handling, numerical and string facilities, recursion. Filter programs, the software tools approach, pipeline programming. Regular expression pattern matching. Quoting. Subshells. Remote shell programs. Background processes, shell demons, process management.

Prerequisite: Computer and Information Science 1170 or 3110 [15] or 3115

## CISC *1155 Programming in Perl

2 hours, 2 credits
A survey of the Perl programming and scripting language. Data types in Perl including arrays, hashes, stacks, strings. Input and output. CGI description and examples. Database and network programming. Object-oriented programming.

Prerequisite: Computer and Information Science 3130 [22].

## CISC *1160 Visual Programming and Windowing Applications

2 hours; 2 credits
Visual programming languages and libraries. Creating windowing applications. Graphical user interfaces. Visual development environments, custom controls, dynamic link libraries, and database access.

Prerequisite: Computer and Information Science 3130 [22].

## CISC *1170 Java for Programmers

## 2 hours; 2 credits

Intensive introduction to Java for students who have completed a programming course in another language. The facilities of the Java programming language core and the key Java class libraries. Imperative and procedural programming in Java. Elementary object-oriented programming. File processing, exception handling, and an introduction to graphical user interface programming. (Not open to students who are enrolled in or have completed Computer and Information Science 1115 or 3115.)

Prerequisite: An introductory programming course in a language other than Java and permission of the chairperson.

## CISC *1180 Introduction to C++ for Programmers

## 2 hours; 2 credits

Intensive introduction to programming in C++ for students who have completed a programming course in another language. (Not open to students who are enrolled in or have completed Computer and Information Science 1110 [1.5] or 3110 [15].)

Prerequisite: An introductory programming course in a language other than $\mathrm{C}++$ or C .

## CISC *1215 Introduction to Programming Using Python

## 2 hours lecture, 2 hours lab; 3 credits

The Python programming language. Algorithms, computers and programs. Writing, debugging, and testing programs. Loops and conditional control structures. Function definition and parameter passing. Strings, Lists, and Tuples. Sorting, searching and other basic algorithms. Input and output. Programming applications selected from various areas. Python tools. History and basic concepts of computer science.

## CISC *1341 Assembly Language Programming for Microcomputers

3 hours; 3 credits
An introduction to assembly language programming for microcomputer systems. CPU architecture. Registers. Segmentation. Instruction formats and addressing modes. Instruction sets and programming. Directives and operators. Modular programming. Macros. String manipulation. Character codes. Arithmetic programming. (Not open to students who are enrolled in or have completed Computer and Information Science 4 or 2.90.)

Prerequisite: Computer and Information Science 1.10 or 1.20 or 1110 [1.5] or 1115.

## CISC *1400 Elementary Robotics

3 hours; 3 credits
Broad introduction to robotics and elementary robot programming. Fundamentals of building, programming and troubleshooting simple, pre-fabricated robots. Elements of computer programming using a graphical interface. Applications of robots in a wide range of contexts.

Prerequisite: Core Curriculum 1311 [3.11] or Mathematics 1311 or permission of the chairperson.

## CISC *1410 Philosophy and Artificial Intelligence

## 3 hours; 3 credits

Contemporary issues in philosophy and psychology, such as the mind-machine analogy, the artificial intelligence model of the human mind, intentionality, representation, consciousness, concept formation, free will, behaviorism, mechanism. Discussion and evaluation of contemporary work in the field. This course is the same as Philosophy 3423 and Psychology 3580. (Not open to students who have completed Computer and Information Science 32.1.)

Prerequisites: Core Studies 5 or 5.1 or a course in computer and information science, and Core Studies 10 or a course in philosophy; or permission of the chairperson of the offering department.

## CISC *1530 Electronic Commerce

3 hours; 3 credits

How the Internet can be used to conduct business. Topics covered include: Internet hardware and software, tools and technologies for creating a Web site, characteristics of successful Web sites, new technologies, the future of the Internet, Web communication strategies, security issues, legal and ethical issues, Internet information services, data mining, global E-commerce. Case studies of successful E-commerce businesses will be examined. This course is the same as Business 3120.

Prerequisite: Computer and Information Science 1050 or Computer and Information Science 1110 or Computer and Information Science 1115 or any course in computing.

## CISC *1580W Seminar in Computer-Assisted Management Games

3 hours; 3 credits
Simulation of a business environment providing practice in various management functions such as objective setting, planning, supervising, organizing, controlling, problem solving, and leadership. Emphasis on presentation and communication skills and presenting results and their justification. Includes games involving competition in the marketplace and use of knowledge-based management software for the business executive. The desired course objectives are enhanced negotiating skills, improved personnel observations, and optimized managerial behaviors. Writing-intensive course. (Not open to students who have completed Business 4202 W or Economics [80.3].) This course is the same as Business Management 4202W.

Prerequisite: English 1012 [2].
Prerequisite or corequisite: Business 3400 [30.2] or Mathematics 2501 [8.1] or 51.1; and Business 3430 [31.4] or Computer and Information Science 2531 [10.31]; and Business 3200 [50.1] or Economics 50.1; and Computer and Information Science 1050 [5.2] or 1110 [1.5] or 1115 or permission of the chairperson; and senior standing.

## CISC *1590 Management Information Systems

## 3 hours; 3 credits

Management information systems as a business resource for achieving competitive advantage. The major IT applications used in business and how they enable competitiveness. The central role that relational databases and data warehouses play in the business world. How IT has enabled and accelerated the growth of ecommerce. The role of decision support systems and artificial intelligence in business. Overview and impact of IT infrastructure design. System Development Lifecycle, project management, outsourcing, offshoring and its impact on the US economy. Information security, intellectual property rights, copyright and patent law on a national and international level. New trends in technology and their potential impact on industry. Case studies and team project are required. This course is the same as Business 3420. (Not open to students who have completed Business 3420 [31.3].)

Prerequisite: Computer and Information Science 1050 [5.2]; or permission of the chairperson.

## CISC *1595 Management of New and Emerging Technologies

3 hours; 3 credits
The focus of this course is on the management of work units charged with technical renewal or new applications of technology. The practical problems of people in industry, involving interpersonal relations, groups, leadership, and organizational
change, will be viewed in light of the overall strategy of the firm. Issues will range from managing project groups in traditional pyramid organizations, as well as in the newer matrix organizations, to managing the transfer of technology on an international basis. This course will use the case study approach predominantly, but also will include small group student projects. This course is the same as Business 3440. (Not open to students who have completed Economics 50.8.)

Prerequisite: Computer and Information Science 1050 [5.2] or permission of the chairperson.

## CISC *1597 New Media and Business

## 3 hours; 3 credits

The history, theory, and practice of new media in today's networked society and how this affects the profit and not-for-profit sectors; the implications of the convergence of technology and convergence of disciplines; Internet marketing; and the societal implications of the new connectedness. The latest research on the impact of second generation web-based media such as social networking, blogs, wikis, and virtual communities will be examined. This course will focus on how the new media is being used and/or should be used by the corporate world. This course is the same as Television, Radio and Emerging Media 3537 and Business 3110.

Prerequisite: Sophomore status or permission of the chairperson.

## CISC *1600 Introduction to Multimedia Computing

3 hours; 3 credits
Introduction to multimedia topics, including: web design, game design, animation, data visualization, simulation and robotics. Introduction to multimedia hardware and software, including game boxes. Human interface design and input using multimedia devices. Graphical and other forms of output to multimedia devices. Emphasis on design and creation of web pages with HTML and cascading style sheets; interactive, graphical web-based programs; simple computer games, movies and narratives. Computer-based sound editing. Introduction to agent-based programming for simulations and robotics. Uses of multimedia in industry. Hands-on exercises.

## CISC 2210 Introduction to Discrete Structures

3 hours; 3 credits
Elementary set theory, functions, relations, and Boolean algebra. Switching circuits, gating networks. Definition and analysis of algorithms. Applications of graph theory to computer science. Related algorithms. Introduction to combinatorial computing and counting arguments. Introduction to error analysis.

Prerequisite: Computer and Information Science 1.10 or 1.20 or 1110 [1.5] or 1115 or 1170 or 1215 , and Mathematics 1011 [2.9] or 1012 or 2.92 or assignment to Mathematics 3.20, 1201 [3.3], or 4.10 by the Department of Mathematics.

## CISC 2531 Operations Management

3 hours; 3 credits
Study in managerial decision making to solve a wide range of operating management problems. Topics covered include: planning, evaluation and control of operations; forecasting and inventory management; scheduling; project design and management; resource allocation; queuing models; quality of the work environment; and technological change. Design and implementation of management strategy will be emphasized
through computer simulation, problems, and cases. This course is the same as Business 3430. Not open to students who have enrolled in or have completed Mathematics 3606 [73.2] or Economics [31.4].)

Prerequisites: Core Curriculum 1312 [3.12] or Core 5.1 or Computer and Information Science 1000 [1.0] or 1050[5.2] or 1110[1.5] or 1115; Computer and Information Science 2210 [11] or Business 3400 [30.2] or Economics 3400 [30.2] or Mathematics 2501 [8.1] or Mathematics 3501 [51.1].

## CISC 2532 Information Systems Project Management

3 hours; 3 credits
Information system project definition, management and implementation using automated project management software. Analytical and automated methods for management of project time, resources, cost and risk. Ensuring system quality and usability. This course is the same as Business 3432.

Prerequisite: Computer and Information Science 1590 or Business 3420.

## CISC 2590 Foundations of Business Analytics

3 hours; 3 credits
Introduction to business analytics; kinds of analytics: descriptive/prescriptive/predictive; data mining and big data; data visualization; dashboards for organizational performance management; data warehouses and data marts; text and web mining; business issues in analytics. Cases, articles, projects and hands-on analytics software use. This course is the same as Business 3421.

Prerequisite: Business 3400, Economics 3400, Mathematics 1501, Psychology 3400, or an equivalent statistics course with a grade of C or better; and Computer and Information Science 1050 or proficiency with spreadsheets.

## CISC 2600 Introduction to Music Computing

3 hours: 3 credits
Introduction to how computers can be used for a range of artistic, scientific, and technological musical applications. This course has a particular focus on the creation and control of digital sound through digital signal processing, sound analysis, and sound synthesis. Applications of these techniques to composition, sound design, new musical instruments, and games will be explored. This course is the same as MUSC 3264.

Prerequisite: MUSC 3260

## CISC 2810W Macromolecular Structure and Bioinformatics

3 hours, 3 credits
The fundamentals of biological macromolecular structures; an introduction to the computational tools important in determining biological functions. (This course is the same as Biology 4010W.) Writing-intensive course.

Prerequisites and/or co-requisites: English 1012; Biology 1001, Biology 1002, and permission of the instructor

## CISC 2820W Computers and Ethics

3 hours; 3 credits
Analysis of ethical issues pertaining to computers and the workplace, anonymity and privacy, copyright and patent law (as applied to software), computer crime, security, unauthorized use,
codes of conduct for computer professionals, access and availability of computing technologies. Application of theoretical frameworks such as virtue ethics, deontological theories and utilitarianism to the ethical problems encountered in computing technologies. Writing intensive course. (This course is the same as Philosophy 3318W.)

Prerequisite: Core Curriculum 1312 [3.12] or Core Studies 5.1 or Computer and Information Science 1000 [1.0] or Computer and Information Science 1110 [1.5] or 1115, and English 1012 [2].

## CISC 2830 Introduction to Natural Language Processing

4 hours; 4 credits
Introduction to the principles, history, and accomplishments of natural language processing from the perspective of the structure of human language. Overview of the techniques used by natural language processing to deal with the phonetics, phonology, morphology, syntax, and semantics of natural languages. Interaction between ideas in the philosophy of language and developments growing out of natural language processing. Applications of natural language processing to a wide range of realworld contexts. This course is the same as English 3525 and Linguistics 3023.

Prerequisite: Computer and Information Science 1110 [1.5] or 1115; prerequisite or co-requisite: Computer and Information Science 2210 [11] and Linguistics 2001 [1].

## CISC 3110 Advanced Programming Techniques

4 hours; 4 credits
A second course in programming. Advanced programming techniques emphasizing reliability, maintainability, and reusability. Module design and multi-file programs. Abstract data types. Objects, classes, and object-oriented design. Storage class and scope. Addresses, pointers, and dynamic storage allocation. Test suites, test drivers, and testing strategies; debugging, assertions, and an introduction to formal techniques. Recursion and function parameters. (Not open to students who are enrolled in or have completed Computer and Information Science 3130 [22]. Completion of this course prohibits a student from receiving credit for CISC 3115.)

Prerequisite: Computer and Information Science 1110 [1.5] or 1180 [2.80].

## CISC 3115 Introduction to Modern Programming Techniques

4 hours; 4 credits
A second course in programming. Programming techniques emphasizing reliability, maintainability, and reusability. Multi-file programs. Abstract data types. Objects, classes, and objectoriented design. Test suites, test drivers, and testing strategies; debugging, assertions, and an introduction to formal techniques. Recursion, event-driven programming and threads, GUI programming, and simple network programming (Not open to students who are enrolled in or have completed Computer and Information Science 3110 [15]. Completion of this course prohibits a student from receiving credit for CISC 3110.)

Prerequisite: Computer and Information Science 1115

## CISC 3120 Design and Implementation of Software Applications 1

3 hours; 3 credits
Introduction to essential topics for modern software application
development: Graphical User Interface (GUI) programming and human-computer interaction; computer graphics; networks, security, and client-server computing, including web applications. Code development by example, and modification of instructorauthored code using Java, emphasizing its graphics and networking capabilities. Contemporary programming development environments and tools including Application Programming Interfaces (APIs) and Integrated Development Environments (IDEs). Students should be prepared to take Computer and Information Science 3140 in the following semester.

Prerequisite: CIS 3110 [15].

## CISC 3130 Data Structures

4 hours; 4 credits
Container classes: their design, implementations, and applications.
Sequences: vectors, linked lists, stacks, queues, deques, lists. Associative structures: sets, maps and their hash and tree underlying representations. Sorting and searching techniques. Collection frameworks and hierarchies.

Prerequisite: Computer and Information Science 3115; or 3110 and 1170

## CISC 3140 Design and Implementation of Large-Scale Web Applications

3 hours; 3 credits
Overview of full-stack implementation of large scale web applications. Team-based software development methodologies, tools and practice. Introduction to modern HTML, CSS. Separation of structure, style and behavior. JavaScript, dynamic types, functional programming, prototypal classes, and closures. HTTP client-server communication, synchronous and asynchronous communication. Java Server Pages, simple database creation, programmatic queries and updates.

Prerequisite: Computer and Information Science 3130; 1115 or 1170, or 3115.

## CISC 3141 Applied Software Development

3 hours; 3 credits
Applied software development skills needed for industry roles, including Front-End Engineer, Back-End Engineer, and/or FullStack Engineer. Topics chosen from general internet structure, front-end Web-based development frameworks and languages (e. g., HTML, CSS, JavaScript), and back-end Web-based development tools (database/querying) and languages (e.g., Java/Ruby). Creating application designs and diagrams, applying broader software engineering concepts, and properly translating student ideas to code with the goal of delivering comprehensive project-based fullstack Web applications. Students will have numerous projects to post on their portfolio by the end of the semester.

Prerequisite: CISC 3130; 1115 or 1170 or 3115.

## CISC 3142 Programming Paradigms in C++

3 hours; 3 credits
An introduction to C++ and its roles providing support for objectoriented programming, generic programming, procedural programming, and low-level programming. The C++ memory model, and topics in explicit memory management. Storage classes, scope, and compilation stages. The Standard Template Library. Comparison with Java. (Not open to students who have completed Computer and Information Science 3110.)

Prerequisite: Computer and Information Science 1115, 3130, and 3310.

## CISC 3144 Modern JavaScript

3 hours; 3 credits
An introduction to JavaScript for experienced programmers. JavaScript, ECMAScript, and standardization. JavaScript execution engines and developer tools. The JavaScript execution environment. Modular design in JavaScript/ECMAScript. Asynchrony in JavaScript: events, callbacks, and Promises. Language features such as functional programming. Client-side and server-side JavaScript. Commonly used libraries such as Node, Redux/React, D3, and jQuery.

Prerequisite: CISC 3140.

## CISC 3146 Engineering Mobile Software Applications

3 hours; 3 credits
A disciplined approach to the design and implementation of mobile applications. In the context of mobile application development, topics covered include: the software development process; design and architecture patterns; responsive user interface design; concepts of software validation and verification; unit and integration testing; selected topics from recent developments in mobile computing, such as the interplay and tradeoff between mobility, network connectivity, and energy efficiency; integration with computing and storage clouds; and data-driven mobile applications.

Prerequisite: CISC 3130.

## CISC 3150 Object-Oriented Programming

3 hours; 3 credits
Principles and implementation issues in object-oriented programming languages, including: memory and run-time models; encapsulation, inheritance and polymorphism; generics. Collections and other frameworks and hierarchies. Effects of binding time considerations on language design and implementation. Introduction to design patterns, such as adapter, singleton, and model-view-controller. Formal design specifications such as UML.
Case studies chosen from multiple languages such as C++, Java and Smalltalk.

Prerequisite: CISC 3130 [22].

## CISC 3160 Programming Languages

4 hours; 4 credits
The design, implementation, and evolution of programming languages. Language features and their effects upon translation and run-time environments. Languages studied are chosen for their historical and current significance, programming paradigm, and run-time environment. Syntax and semantic specification; formal grammars.

Prerequisite: Computer and Information Science 3142.

## CISC 3171 Introduction to Software Engineering

## 3 hours; 3 credits

A broad view of software engineering that introduces a variety of software engineering techniques that can be applied to practical software projects. Topics include: process models, software specification, software design, software development methods and tools, verification and validation, reliability, and human factors.

Prerequisite: Computer and Information Science 3130 [22].

## CISC 3220 Analysis of Algorithms

3 hours; 3 credits
Algorithms, data structures, and their analysis. Applications for and solution to recurrence problems. Upper and lower bounds on complexities of various problems. Classification by design structures. Sorting methods, graph and selection algorithms. Pattern matching. Efficient computation of transitive closure and equivalences. NP-completeness.

Prerequisite: CISC 2210 and CISC 3130 and MATH 1201

## CISC 3225 Data Tools and Algorithms

3 hours; 3 credits
Tools for effective programming in Python. Data acquisition, munging, and visualization. Major categories of data algorithms including ranking algorithms, tree algorithms, network algorithms and clustering algorithms. Visualization of data. Introduction to important methods of artificial intelligence including machine learning and neural networks to reach logical conclusions from data aggregations.

Prerequisites: Computer and Information science 1215; Computer and Information science 2210 or Mathematics 2001.

## CISC 3230 Theoretical Computer Science

3 hours; 3 credits
Overview of theoretical computer science. Formal language theory, computability theory. Finite automata, context-free and regular grammars, push-down automata, and Turing machines. Other models of computation, including recursive functions. Universal program and unsolvability.

Prerequisite: CISC 2210 and CISC 3130 and MATH 1201

## CISC 3240 Cryptography and Cryptanalysis

4 hours; 4 credits
An introduction to mathematical cryptography. Various cryptographic systems. Basic cryptanalytic attacks. Modern cryptographic systems; authentication; factorization attacks. This course is the same as Mathematics 3107.

Prerequisite: Mathematics 2101 [10.1] or permission of the chair.

## CISC 3305 Computer Organization

3 hours; 3 credits
Basic digital circuits. Boolean algebra and combinational logic, data representation and transfer, and digital arithmetic. Digital storage and accessing, control functions, input-output facilities, system organization, and reliability. Description and simulation techniques. Features needed for multiprogramming, multiprocessing, and realtime systems. Other advanced topics and alternate machine organizations. (Not open to students who are enrolled in or who have completed Computer and Information Science 3315 [28].)

Prerequisite: Computer and Information Science 4 or 1341 [4.1]; and 2210 [11].

## CISC 3310 Principles of Computer Architecture

4 hours; 4 credits
Introduction to digital logic. Basic digital circuits. Boolean algebra and combinational logic, data representation and transfer, digital arithmetic. Instruction sets. Introduction to assembly languages:

ALU and memory reference instructions, flow control, subroutine linkage, arrays and structures. Memory. I/O systems. Performance. Relationship between software and architecture. (Not open to students who are enrolled in or have completed Computer and Information Science 3305 [27] or 3315 [28].)

Prerequisite: Computer and Information Science 1110 [1.5] or 1115 or 1170 or 1180 [2.80]; and 2210 [11].

## CISC 3315 Digital Computer Systems

3 hours lecture, 3 hours laboratory; 4 1/2 credits
Functional components of computer systems: registers, counters, coders, multiplexers. Data representation. Memory, register, and bus transfer operations. Basic computer organization and design. Central processor organization. Hardwired and microprogrammed control units. Bus structures. Arithmetic logic units. Memory and I/O organization. Laboratory experiments on computer operations. Design of a digital computer system. (Not open to students who are enrolled in or have completed Computer and Information Science 3305 [27].)

Prerequisite: Computer and Information Science 4 or 1341 [4.1]; and 2210 [11].

## CISC 3320 Operating Systems

3 hours; 3 credits
Design and implementation of operating systems for large computers. Multiprogramming, multiprocessing, time sharing. Resource allocation and scheduling. Communications, conversational computing, computer networks. Memory protection, interrupts, segmentation, paging, and virtual memories.

Prerequisite: Computer and Information Science 21 or 3130 [22]; and 3305 [27] or 3310 [27.1] or 3315 [28]. It is recommended that students be acquainted with at least two computing platforms (e.g., PC, Macintosh, UNIX workstation, IBM mainframe) before taking Computer and Information Science 3320 [25].

## CISC 3325 Information Security

## 3 hours; 3 credits

Principles and practices of computer and network security. Fundamental concepts and principles of computer security, basic cryptography, authentication and access control, Internet vulnerability (malware, DoS attacks, etc), intrusion detection systems, firewalls, software and operating system security, database security, web and wireless security, managerial and ethical issues in computer security. Lab and project activities such as the use of network probing for illustrative and diagnostic purposes; security tool choice, deployment and configuration; secure programming techniques.

Prerequisite: Computer and Information Science 3320

## CISC 3330 Foundations of Parallel and Distributed Computing

3 hours; 3 credits
Survey of parallel and distributed hardware fundamentals, including SMP machines, clusters, grids, and networks of workstations. Introduction to the design of parallel algorithms and the analysis of their efficiency. Survey of software issues for parallel and distributed computation including message passing and shared memory, processes and threads, client/server and peer to peer, and issues of synchronization. Complexity considerations and the limits of parallelism.

Prerequisite: Computer and Information Science 3142 or permission of the chairperson.

## CISC 3340 Computer Networks and Protocols

3 hours; 3 credits
Computer networks and protocols. Network topologies and switching mechanisms. Protocol concepts and characteristics. Network protocol architectures. Physical layer concepts. Data link layer functions and protocols. Network layer concepts. Network access protocols. Local area networks and protocols. Internetworking. Transport layer functions and protocols. Upper layer issues and approaches. Application program interfaces. Network examples. (Not open to students who are enrolled in or have completed Computer and Information Science 3343 [49.1] or 3345 [49.2].)

Prerequisite: Computer and Information Science 3130 [22]; 3305 [27] or 3315 [28]; and Mathematics 2501 [8.1].

## CISC 3343 Telecommunications

3 hours; 3 credits
Introduction to telecommunications. Data transmission fundamentals. Data encoding. Modems. Digital subscriber lines. Data compression. Physical layer interfaces. Transmission error control. Telephony signaling. Wireless and cellular communications. Asynchronous Transfer Mode (ATM) Networks. Integrated Services Digital Networks (ISDN). (Not open to students who are enrolled in or have completed Computer and Information Science 3340 [49].)

Prerequisite: Computer and Information Science 3130 [22], and either Computer and Information Science 3305 [27] or 3310 [27.1] or 3315 [28], and Mathematics 2501 [8.1].

## CISC 3345 Computer Networks

3 hours; 3 credits
A course on computer networks and protocols. Network topologies and switching mechanisms. Protocol concepts and characteristics. Network protocol architectures. Data link layer functions and protocols. Network layer concepts. Network access protocols. Local area networks and protocols. Internetworking. Transport layer functions and protocols. Application layer protocols. The World Wide Web. Network security. (Not open to students who are enrolled in or have completed Computer and Information Science 3340 [49].)

Prerequisite: Computer and Information Science 3130 [22], and either Computer and Information Science 3305 [27] or 3310 [27.1] or 3315 [28]

## CISC 3350 Workstation Programming

3 hours; 3 credits
Programming techniques for development of applications on networks of workstations. Process environments, file system issues. Concurrent programming, interprocess communication. Graphical user interfaces, event-driven programming. Distributed programming; remote process creation, the client-server model, message passing.

Prerequisite: Computer and Information Science 3130 [22].

## CISC 3390 Compiler Construction

3 hours; 3 credits
Review of programming language structures, translation, loading,
execution, and storage allocation. Compilation of simple expressions and statements. Organization of a compiler including compile-time and run-time symbol tables, lexical scan, object code generation, error diagnostics, object code optimization techniques, and overall design. Use of compiler-writing languages and bootstrapping.

Prerequisite: Computer and Information Science 2.10 or 2.20 or 2.30 or 2.40 or 1150 [2.50] or 1170 [2.70] or $2.85 ; 2210$ [11]; and 21 or 3130 [22].

## CISC 3410 Artificial Intelligence

3 hours; 3 credits
Techniques for making computers exhibit intelligent behavior. Topics covered are taken from the areas of problem solving, perception, game playing, knowledge representation, natural language understanding, programs that learn (adaptive programs), expert systems, and programming languages for work in artificial intelligence.

Prerequisite: Computer and Information Science 21 or 3130 [22].

## CISC 3415 Principles of Robotics

## 3 hours; 3 credits

Basic principles of mobile robotics: architectures, mathematical foundations, control algorithms, human robot interaction, and practical applications. Applications include robots in the home, and robots in search and rescue work. Involves programming different kinds of robots.

Prerequisites: Computer and Information Science 3130 [22] and 2210 [11].

## CISC 3440 Machine Learning

3 hours; 3 credits
An introduction to machine learning for students with some mathematical maturity. Topics include: machine learning in relation to artificial intelligence, data sources and characteristics, linear and non-linear regression, machine learning concepts like the biasvariance tradeoff, linear and non-linear classification, hidden Markov models and the expectation-maximization algorithm, unsupervised learning, and deep learning. Examples will be drawn from several domains including natural language processing.

Prerequisite: Computer and Information Science 3130 or 3225; MATH 2501 or 3501 or Computer and Information Science 2210.

## CISC 3610 Introduction to Multimedia Programming

3 hours; 3 credits
In-depth study of multimedia programming. Multimedia authoring tools. Graphical user interface design. Multimedia project development. Effective use of media elements in a computer application and on the World Wide Web.

Prerequisite: Computer and Information Science 3110 [15] or 3115.

## CISC 3620 Computer Graphics

3 hours; 3 credits
Fundamentals of computer graphics programming. Graphics hardware and software standards. 2D geometric primitives and raster images. 3D object representations. Data structures, algorithms, and the graphics pipeline. Graphical user interfaces. Underlying concepts in computer graphics systems, including
games, animation, modeling, rendering, and paint systems.
Prerequisite: Computer and Information Science 3130 [22]; and
Mathematics 1011 [2.9] or 1026 [2.92] or assignment to
Mathematics *1201 [3.3] by the Department of Mathematics.

## CISC 3630 Multimedia Computing

3 hours; 3 credits
A survey of the interrelationship of state-of-the-art communication and computer technology. Hardware, software, and system design issues in the multimedia presentation of information. Multimedia standards. Audio and video compression techniques. Hypermedia database systems. Programming and the use of multimedia authoring systems. Survey of representative hypermedia applications.

Prerequisite: Computer and Information Science 3130 [22].

## CISC 3650 Human-Computer Interaction

## 3 hours; 3 credits

Overview of human-computer interfaces with an emphasis on classical and state-of-the-art approaches. Principles of humancomputer interaction and human-robot interaction. Ubiquitous computing and interfaces for mobile devices. Interfaces employing speech recognition and computer vision. Sensor and robotic technologies. Computer supported cooperative work. Virtual and augmented realities.

Prerequisite: Computer and Information Science 3115 or 3120

## CISC 3660 Game Programming

3 hours; 3 credits
Game programming techniques. 2D and 3D games. Data representations of virtual elements. Visualizing the 3D game environment. Controlling motion and behaviors. Interaction control. Game architectures, including multi-player games and message passing. Managing complexity. Teamwork to create a 3D game using a 3D multi-player game engine. Interaction with game development professionals regarding state-of-the-art hardware and software technology for game creation and adaptation. (Not open to students who have taken Computer and Information Science 3667.)

Prerequisite: Computer and Information Science 3130 [22].

## CISC 3665 Game Design

3 hours; 3 credits
Introduction to designing the intelligence behind computer games. Fundamentals of designing, programming and troubleshooting game behavior. Documenting and critiquing design. Multi-week small-group projects in game design. (Not open to students who have taken Computer and Information Science 3667.)

Prerequisite: Computer and Information Science 3130, and Mathematics 1011 or 1201.

## CISC 3667 Game Design and Development

4 hours; 4 credits
An introduction to game design and programming. Topics include analysis of existing games, game mechanics, social games. Game development using a game engine, including the use of assets and prefabs, movement, animations, audio and data persistence. Multiweek individual and small group assignments in game design and development. (Not open to students who have taken Computer and

Information Science 3660 or Computer and Information Science 3665.)

Prerequisite: Computer and Information Science 3130.

## CISC 3800 Advanced Personal Computer Techniques for Business Applications

3 hours; 3 credits
In-depth analysis of software and hardware available for current business applications. Advanced use of application packages. Critique and comparison of current application software. Designing a proper interface. Examination of current trends toward office automation. System design and analysis.

Prerequisite: Computer and Information Science 1.10 or 1.20 or 1110 [1.5] or 1115 ; and 1050 [5.2].

## CISC 3810 Database Systems

3 hours; 3 credits
Introduction to database systems. Comparison to file processing systems. Data models. Relational, hierarchical, and network systems. Database design. Normal forms. Study of several realworld database management systems, with an emphasis on microcomputer applications. Database recovery query and transaction processing, concurrency. Distributed and objectoriented databases.

Prerequisite: Computer and Information Science 3130 [22].

## CISC 3820 Introduction to Modeling and Simulation

## 3 hours; 3 credits

Introduction to simulation and comparison with other techniques. Discrete simulation models. Introduction to queueing theory and stochastic processes. Simulation methodology including generation of random numbers and variables, design of simulation experiments for optimization, analysis of data generated by simulation experiments. Variance reduction in simulation, importance sampling. Quasi-Monte Carlo integration methods, sequential Monte Carlo methods. Applications of simulation.

Prerequisites: Computer and Information Science 3110 [15] or 3115; and Mathematics 2501 [8.1] or 3501 [51.1]

## CISC 4331 System and Network Administration

2 hours lecture, 2 hours laboratory; 3 credits Installation, configuration, and maintenance of an operating system. Configuration of routers, networks, and sub-networks. Installation, configuration, and maintenance of network utilities such as email, web server, and other services. Use of network diagnostic tools. Identification and repair of network and configuration problems.

Prerequisite: Computer and Information Science 3320 or 3350 or permission of the chairperson.

## CISC 4335 Parallel and Distributed Computing

## 3 hours; 3 credits

Development of parallel and distributed applications. Examples taken from scientific programming, artificial intelligence, operations research, and management science. Symmetric models and asymmetric models. Client-server. Threaded programming. Data parallelism versus algorithmic parallelism. Issues of resource utilization, program decomposition, performance, probability, debugging. Use of formal methods, fault-tolerance, security and
other distributed systems issues.
Prerequisite: Computer and Information Science 3130 [22]; 3305 [27] or 3310 [27.1] or 3315 [28] or permission of the chairperson of the Department of Computer and Information Science; and one of the following: Computer and Information Science 1150 [2.50], 1170 [2.70], 3160 [24], 3320 [25], 3150 [26], 3410 [32], 3350 [46], 3330 [47], 3820 [48].

## CISC 4610 Multimedia Databases

3 hours; 3 credits
Multimedia data types and formats. Multimedia computer database design issues. Indexing and automated retrieval of text documents, audio files, images and video. Techniques and data structures for efficient multimedia similarity search. System support for distributed multimedia databases. Measurement of multimedia information retrieval effectiveness. Products, applications, and new developments.

Prerequisite: Computer and Information Science 3810 [45], 3635 [36] or 3630 [52]

## CISC 4800 Special Topics in Computer Science

3 hours; 3 credits
A topic in computer science not covered in the regular curriculum. Topics vary from term to term and reflect the interests of students and faculty. Course description may be obtained in the department office before registration. Topics may include mathematical software, advanced topics in switching theory, system design and analysis, and management information systems.

Prerequisite: Computer and Information Science 21 or 3130 [22]; and permission of the chairperson.

## CISC 4900 Independent and Group Projects I

3 hours recitation and at least 6 hours independent work; 3 credits each term
Planning and development of a real computer systems project supervised by a faculty member. Projects may involve group participation. Achievement measured by demonstrable attainment of the project's goals. Written report.

Prerequisite: Computer and Information Science 3110 or 3115; and permission of the chairperson.

## CISC 4905 Independent and Group Projects II

3 hours recitation and at least 6 hours independent work; 3 credits each term
Planning and development of a real computer systems project supervised by a faculty member. Projects may involve group participation. Achievement measured by demonstrable attainment of the project's goals. Written report.

Prerequisite: Computer and Information Science 4900 [60.1] and permission of the chairperson.

## CISC 4920 Programming Practicum

1 hour lecture, 2 hours lab; 2 credits
Classifying, understanding, developing, and analyzing programming solutions to practical problems under real world time constraints. Typical problems include numerical algorithms, path-finding algorithms, string manipulations, dynamic programming. Analysis of solution correctness.

Prerequisite: Computer and Information Science 3130 [22]. Prerequisite or Corequisite: Computer and Information Science 3220 [23].

## CISC 4930 Advanced Computing Topics

3 hours; 3 credits
Advanced topics in computer science. The topic will differ with each offering.

Prerequisite: dependent on course topic.

## CISC 4935 Advanced Computing Topics

## 3 hours; 3 credits

Advanced topics in computer science. The topic will differ with each offering.

Prerequisite: dependent on course topic.

## Honors courses

## CISC 4940 Seminar in Theoretical Aspects of Information

 Science I3 hours recitation and a minimum of 7 hours conference and independent work; 3 credits each term
Readings, discussions, and reports on topics in computer science. Topics may be selected from the study of formal linguistics, automata theory, theory of computation, and recursive function theory. Thesis or final examination.

Prerequisite of 4940: a superior record, including an approved program of advanced courses, and recommendation of a department faculty member and permission of the chairperson.

## CISC 4945 Seminar in Theoretical Aspects of Information Science II

3 hours recitation and a minimum of 7 hours conference and independent work; 3 credits each term
Readings, discussions, and reports on topics in computer science.
Topics may be selected from the study of formal linguistics, automata theory, theory of computation, and recursive function theory. Thesis or final examination.

Prerequisite of 4945 [84.2]: Computer and Information Science 4940 [84.1] and permission of the chairperson.

## CISC 4950 Seminar in Special Topics I

3 hours recitation and a minimum of 7 hours conference and independent work; 3 credits each term Readings, discussions, and reports on computer science topics. Thesis or final examination.

Prerequisite of 4950 [84.3]: a superior record, including an approved program of advanced courses, and recommendation of a department faculty member and permission of the chairperson.

## CISC 4955 Seminar in Special Topics II

3 hours recitation and a minimum of 7 hours conference and independent work; 3 credits each term
Readings, discussions, and reports on computer science topics. Thesis or final examination.

Prerequisite of 4955 [84.4]: Computer and Information Science 4950 [84.3] and permission of the chairperson.

## CISC 5001 Independent Study and Research I

Minimum of 9 hours conference and independent work; 3 credits Independent research study or project supervised by a faculty member; approved reading; project report or written examination.

Prerequisites: Computer and Information Science 3130 [22], a minimum grade point average of 3.0 overall and in Computer and Information Science courses, and permission of the chairperson.

## CISC 5002 Independent Study and Research II

Minimum of 9 hours conference and independent work; 3 credits Independent research study or project supervised by a faculty member; approved reading; project report or written examination.

Prerequisites: Computer and Information Science 3130 [22], a minimum grade point average of 3.0 overall and in Computer and Information Science courses, and permission of the chairperson.

## CISC 5003 Independent Study and Research III

Minimum of 9 hours conference and independent work; 3 credits Independent research study or project supervised by a faculty member; approved reading; project report or written examination.

Prerequisites: Computer and Information Science 3130 [22], a minimum grade point average of 3.0 overall and in Computer and Information Science courses, and permission of the chairperson.

## CISC 5004 Independent Study and Research IV

Minimum of 9 hours conference and independent work; 3 credits Independent research study or project supervised by a faculty member; approved reading; project report or written examination.

Prerequisites: Computer and Information Science 3130 [22], a minimum grade point average of 3.0 overall and in Computer and Information Science courses, and permission of the chairperson.

The following inactive course(s) will only be offered if there is sufficient demand:
CISC 3635 Multimedia Coding and Compression
CISC 3640 Digital Image Processing
CISC 3645 Multimedia Security

# Early Childhood Education/Art Education 

Department office: 2309 James Hall
Phone: 718.951.5205
Full-time Faculty

Professor: Bedford<br>Associate Professors: DeBey, Ferholt, Jiesamfoek, Lauterbach, Li, Louis, McFadden, Shannon, Song Assistant Professor: Pace Miles

## B.A. degree program for early childhood education teacher (birth-grade 2) HEGIS code 0823; SED program code 26737

Early childhood education is a writing-intensive major program.
Program requirements
Completion of the B.A. degree with a major in early childhood education qualifies students to apply for New York State initial teacher certification (birth through grade 2).

To obtain New York State initial teacher certification in early childhood education all required State examinations must be passed.
We do not accept students for a 2nd Bachelor of Arts degree in Early Childhood Education. Students who hold a bachelor's degree but not in early childhood should apply for our Option C (45-credit) Graduate Early Childhood Program.

In addition to fulfilling the CUNY Pathways requirements, students must complete a liberal arts and sciences concentration (30 credits) or have a second major. Specific requirements apply for each concentration and major. Students should consult separate listings for the following departments and meet with an adviser in the Early Childhood Education and Art Education Department: American studies; anthropology; art; children and youth studies; classics; English; general science; health and nutrition sciences; history; Judaic studies; mathematics; modern languages and literatures (including Chinese, French, Italian, Russian, Spanish); music; philosophy; political science; psychology; Puerto Rican and Latino studies; sociology; theater; urban sustainability; women's and gender studies. (Additional concentrations and majors may be offered).

Students must also complete the following courses and their co-requisites and pre-requisites, with a C or higher: Early Childhood and Art Education 3001, Health and Nutrition Sciences 2170, or Puerto Rican Latino Studies 4410; Communication Arts, Sciences, and Disorders 1114; Mathematics 1006, [C- is acceptable for Mathematics 1006]; Mathematics 1401, or a mathematics course higher than MATH 1401; Mathematics 1406; and General Science 3050 (17-18 credits).

In addition, students must complete the following pedagogical courses: Early Childhood and Art Education 2003, 2004, 3101, 3102, 3103, $3104,3105,3106,3107,3108$, and 4001 (37 credits).

The department Chair may allow substitutions for one or more of these requirements consistent with the educational goals of the program
Each Early Childhood and Art Education course must be completed with a grade of C or higher and a grade point average of 2.80 or higher in liberal arts and sciences courses.

To be accepted into the early childhood education program, a student must have met the following requirements:

1. Completed English 1010 and 1012, with a C or better.
2. Completed at least 40 credits in liberal arts and sciences courses with a GPA of 2.80 or higher.
3. Passed the ECAE department Math proficiency exam with a score of $80 \%$ or higher (pre-requisite for Math 1401) and passed the department Literacy exam.
4. Immunizations must be up-to-date.
5. DOI and/or DOE Finger printing must be completed and cleared.

To continue as a matriculated undergraduate EC student, the following NYS exams are required at the specified transition points:

1. Passed the Educating All Students (EAS) at the end of ECAE 3102 and 3108.
2. Passed the CST Multiple Subject-EC exams one semester prior to student teaching (we recommend students take the 3 different sections of the exam in this sequence: CST Arts \& Sciences at the end of ECAE 3105; CST-EC Literacy at the end of ECAE 3104; and CST-EC Math at the end of Math 1406).

To be accepted into student-teaching in the dual early childhood/teaching students with disabilities in early childhood (ECAE 4001), a student must have met the following requirements:

1. Completed all required Early Childhood and Art Education courses with a grade point average of 3.00 or higher.
2. Completed at least 60 credits in liberal arts and sciences courses and concentration courses with a grade point average of 2.80 or higher.

Note: A student who received a grade lower than a B in student-teaching must apply to the ECAE chairperson for permission to reregister for student-teaching. Students will be allowed to repeat an ECAE course (including student teaching) only once.
Throughout student-teaching, students complete and submit their final NYS certification exam, the Teacher Performance Assessment (EdTPA), which involves submitting video clips of teaching, lesson plans, and commentaries on planning, instruction and assessment.
Students not seeking certification must schedule a meeting with the Undergraduate Early Childhood Advisor or Undergraduate EC Coordinator to set up an alternative transition point plan during their initial semester.

## Dual certification for early childhood education teacher \& teaching students with disabilities in early childhood HEGIS code 0823; SED program code 27988

The dual early childhood education/teaching students with disabilities in early childhood education is a writing-intensive major program.

## Program Requirements

Completion of the B.A. degree with a dual major in early childhood education/teaching students with disabilities in early childhood, which includes the additional requirements in early childhood special education, qualifies students to apply for New York State initial teacher certification (birth through grade 2).

To obtain New York State initial teacher certification in dual early childhood education/teaching students with disabilities in early childhood, all New York State exams must be passed.

We do not accept students for a 2nd Bachelor of Arts degree in Dual certification for early childhood education teacher and teaching students with disabilities in early childhood. Students who hold a bachelor's degree but not in early childhood should apply for our Option C (45-credit) Graduate Early Childhood Program.

In addition to fulfilling the CUNY Pathways requirements, students must complete a liberal arts and sciences concentration (30 credits) or have a second major. Specific requirements apply for each concentration and major. Students should consult separate listings for the following departments and meet with an adviser in the Early Childhood Education and Art Education Department: American studies; anthropology; art; children and youth studies; classics; English; general science; health and nutrition sciences; history; Judaic studies; mathematics; modern languages and literatures (including Chinese, French, Italian, Russian, Spanish); music; philosophy; political science; psychology; Puerto Rican and Latino studies; sociology; theater; urban sustainability; women's and gender studies. (Additional concentrations and majors may be offered).

Students must also complete the following courses and their co-requisites and pre-requisites, with a C or higher: Early Childhood and Art Education 3001, Health and Nutrition Sciences 2170 or Puerto Rican Latino Studies 4410; Communication Arts, Sciences, and Disorders 1114; Mathematics 1006 [C- is acceptable for MATH 1006]; MATH 1401, or a mathematics course higher than MATH 1401; Mathematics 1406; and General Science 3050 (17-18 credits).

In addition, students must complete the following pedagogical courses: Early Childhood and Art Education 2003, 2004, 3101, 3102, 3103, $3104,3105,3106,3107,3108,3109,4020$ and 4001 ( 43 credits).

Students wishing to obtain dual certification for early childhood education teacher and teaching students with disabilities in early childhood must complete Early Childhood and Art Education 3108, 3109, 4020 and their prerequisites as well as 75 hours of field experiences in settings for students with disabilities in early childhood education and 300 hours of student teaching in inclusive early childhood settings.

The department Chair may allow substitutions for one or more of these requirements consistent with the educational goals of the program.
Each Early Childhood and Art Education course must be completed with a grade of C or higher and a grade point average of 2.80 or higher in liberal arts and sciences courses must be maintained.

To be accepted into the Dual certification program for early childhood education and teaching students with disabilities in early childhood, a student must have met the following requirements:

1. Completed English 1010 and 1012, with a C or better.
2. Completed at least 40 credits in liberal arts and sciences courses with a GPA of 2.80 or higher.
3. Passed the ECAE department Math Proficiency Exam with a score of $80 \%$ or higher (pre-requisite for Math 1401) and passed the department Literacy exam.
4. Immunizations must be up-to-date.
5. DOI and/or DOE finger printing must be completed and cleared.

To continue as a matriculated undergraduate EC student, the following NYS exams are required at the specified transition points:

1. Passed the Educating All Students (EAS) at the end of ECAE 3102 and 3108.
2. Passed the CST Multiple Subject-EC exams one semester prior to student teaching (we recommend students take the 3 different sections of the exam in this sequence: CST Arts \& Sciences at the end of ECAE 3105; CST-EC Literacy at the end of ECAE 3104; and CST-EC Math at the
end of Math 1406).
3. Passed the CST students with disabilities exam at the end of ECAE 3109 and 4020.

To be accepted into student-teaching in the dual early childhood/teaching students with disabilities in early childhood (ECAE 4001), a student must have met the following requirements:

1. Completed all required Early Childhood and Art Education courses with a grade point average of 3.00 or higher.
2. Completed at least 60 credits in liberal arts and sciences courses and concentration courses with a grade point average of 2.80 or higher.

Note: A student who received a grade lower than a B in student-teaching must apply to the ECAE chairperson for permission to reregister for student-teaching. Students will be allowed to repeat an ECAE course (including student teaching) only once. Throughout student-teaching, students complete and submit their final NYS certification exam, the Teacher Performance Assessment (EdTPA), which involves submitting video clips of teaching, lesson plans, and commentaries on planning, instruction and assessment. Students not seeking certification must schedule a meeting with the Undergraduate Early Childhood Advisor or Undergraduate EC Coordinator to set up an alternative transition point plan during their initial semester.

## Courses

College-verified fingerprint clearance required for School of Education courses. Refer to the School of Education website, Fingerprint Verification instructions at http://www.brooklyn.cuny.edu/web/academics/schools/education/certification/fingerprints.php.

## ECAE 2003 Infancy and Early Childhood: Family and Community Relationships

2 hours lecture, 2 hours supervised field experience; 3 credits Observing, assessing and understanding ethnically, culturally and linguistically diverse infants' and young children's social, emotional, physical, cognitive, language, play and artistic development (prenatally through 8 years). Creating healthy, respectful, developmentally appropriate curriculum and challenging learning environments for young children, including children with special needs and English language learners. Developing an understanding of parents of young children, involving families and communities in their children's development and learning, and engaging in respectful, reciprocal relationships with families. Stress on the importance of the interaction of social, cultural, and interpersonal factors throughout the course.

Corequisite: Early Childhood and Art Education 2004 or permission of the chairperson.

## ECAE 2004 Early Childhood Education Foundations

2 hours lecture, 2 hours supervised field experience; 3 credits An overview of the social, historical and philosophical foundations of early childhood education (ECE), including early childhood special education and bilingual education. Emphasis on young children (birth to 8 years of age) and families from racially, ethnically, culturally, linguistically, and socio-economically diverse backgrounds, including recent immigrants. Implementing high quality early childhood education, including developmentally appropriate practices; importance of parent involvement and social justice. Changing views in ECE curriculum and pedagogy. Integrated co-teaching and collaboration with peers, families and communities. The role of play, creativity and aesthetic education, in early learning. The role of reflective practice. Current issues in ECE. Includes 30 hours of required supervised fieldwork in early childhood and early childhood special education settings. Starting Fall 2019 satisfies Pathways Flexible Core Individual and Society requirement.

Corequisite: Early Childhood and Art Education 2003 or permission of the chairperson.

## ECAE 3001 Parents as Teachers during the Early Years

## 3 hours; 3 credits

Parenting as a supportive and educative process; needs of parents with young children with and without special needs from pregnancy
through second grade; explore how parental attitudes, culture, immigration, racial/ethnic diversity relate to children's development and learning, with a focus on low-income urban communities. The home and family as an educational environment; parent involvement at home and in early intervention programs, early childhood centers and school settings.

## ECAE 3101 Social Studies in Early Childhood Education: General and Special Education

2 hours recitation, 2 hours supervised field experience, 3 credits Social studies curriculum for young children with diverse learning needs and of differing cultural and linguistic backgrounds in varied school, family, and community settings. Study of social science texts and materials, curriculum, and pedagogic methods, including culturally developmentally appropriate practices and play-based curriculum for young children. Field experience in schools and community settings. Development of teaching portfolio.

Prerequisite: Early Childhood and Art Education 2003 and 2004.

## ECAE 3102 Development of Language and Literacy in Young Children: General and Special Education

 2 hours recitation, 2 hours supervised field experience; 3 credits Language acquisition in the early years; typical and atypical development. Planning and implementing curriculum for emergent literacy. Psycholinguistic and sociolinguistic factors in literacy; narrative structures in children's oral language and in children's literature. Consideration of the needs of English language learners. Role of families and cultural communities in language and literacy development, with a particular focus on the urban experience. Study of children's literature, texts, and materials, including on-line resources. Communication and early literacy in an integrated early childhood curriculum that includes the arts and the humanities. Development of teaching portfolio.Prerequisite: Early Childhood and Art Education 2003 and 2004.
Prerequisite or corequisite: Early Childhood and Art Education 3101.

## ECAE 3103 Early Education and Care of Infants and Toddlers: General and Special Education

2 hours recitation, 1 hour supervised field experience; 2 credits This course addresses developmental needs and appropriate practices in the education and care of infants and toddlers.

Prospective teachers will study current research in typical and atypical early development and learn to create nurturing and learning environments for all children. Introduction to models of infant and toddler programs, including early intervention, with a focus on culturally diverse, urban settings. Establishing partnerships with families and caregivers; developing community resources. Consultation and collaboration with other professionals in education and related services. Development of teaching portfolio. Field assignments.

Prerequisite: Early Childhood and Art Education 2003 and 2004.
Prerequisite or corequisite: Early Childhood and Art Education 3101 and 3102.

## ECAE 3104 Literacy Teaching and Learning in Early Childhood: General and Special Education

2 hours recitation, 2 hours supervised field experience; 3 credits Nature and basis of literacy teaching and learning for young children; curriculum development strategies; print and on-line resources for emergent and early literacy. Approaches to integrating early literacy throughout the curriculum for all children, including English language learners and children with special needs. The role of families and communities in literacy teaching and learning.

Prerequisite: Early Childhood and Art Education 2003, 2004, 3101, 3102, and 3103.

Prerequisite or corequisite: Early Childhood and Art Education 3105.

## ECAE 3105 Arts in Early Childhood Curriculum: General and Special Education

2 hours recitation, 2 hours supervised field experience, 3 credits Analysis and application of theory and research to the teaching of the visual arts, music and movement, dance, and drama for all young children, birth through grade two, including culturally and linguistically diverse children, as well as children with special needs. Role of materials and performance as they apply to artistic learning in young children. Approaches to integrating the arts in early childhood curriculum; place of the arts in diverse cultures and communities, with a focus on the urban experience. Development of teaching portfolio. Work with a variety of artistic forms and media, field trips, and supervised field experience.

Prerequisite: Early Childhood and Art Education 2003, 2004, 3101, 3102, and 3103.

Corequisite: Early Childhood and Art Education 3104.

## ECAE 3106 Teaching Mathematics in the Early Years:

 General and Special Education2 hours mathematics laboratory, 2 hours supervised field experience; 2 credits
Approaches to the teaching of mathematics with an emphasis on the curricular and instructional topics emphasized in early childhood. These include the development of mathematical thinking processes in young children; curricular guidelines from New York State, National Association for the Education of Young Children, and National Council of Teachers of Mathematics; integration of mathematical experiences into all curricular areas; needs of special populations, including English language learners; familial involvement; appropriate use of technology; and multiple perspectives on assessment. Development of early childhood teaching portfolio.

Prerequisite: Early Childhood and Art Education 2003, 2004, 3101, 3102, 3103, 3104, 3105, and Mathematics 1021, 1401 and 1406 and obtain 80\% or above on the Early Childhood and Art Department math competency exam. Prerequisite or corequisite: Early Childhood and Art Education 3107.

## ECAE 3107 Science Inquiry for Young Children: General and Special Education

2 hours recitation, 2 hours supervised lab and field experience; 3 credits
Creation of environments that promote scientific curiosity and playful exploration in all children, including children with special needs and English language learners. Integration of science within the early childhood curriculum; the role of movement, music, and the performing arts in representing, refining, reviewing, and communicating science learning. Exploration of technologies and community resources, with a particular focus on urban environments. Review of professional, state, and local curriculum standards. Family involvement in science education. Development of teaching portfolio. Taught in coordination with General Science 3050 [20].

Prerequisite: Early Childhood and Art Education 2003, 2004, $3101,3102,3103,3104$, and 3105.

Prerequisite or corequisite: Early Childhood and Art Education 3106; General Science 3050.

## ECAE 3108 Foundations and Pedagogy in Early Childhood Special Education

3 hours recitation, 1 hour supervised field experience; 3 credits Introduction to the historical, social, cultural, and legal foundations of special education and educational models of early childhood special education. An examination of developmental disabilities in young children, their identification and developmentally appropriate and effective remediation. Implications for adapting the environment, individualizing settings and instruction, coteaching and cooperative models and methods. Development of positive behavior supports for all young children, including English language learners. Role of families and educators in creating learning environments at home and in educational setting.

Prerequisite: Early Childhood and Art Education 2003, 2004, 3101, and 3102.

## ECAE 3109 Environments and Curriculum Adaptation for Young Learners with Special Needs

3 hours recitation, 1 hour supervised field experience; 3 credits Introduction to planning, implementing, and evaluating instruction for young children with special needs. Designing environments, curricular planning and modification to implement inclusive programs, including work in developmental and curriculum areas and positive behavior supports. Working with related service professionals; assessment and interventions with children and families; interagency collaborations. Focus on young children from diverse cultural and linguistic backgrounds in urban settings. Must be taken with the paired section of Early Childhood and Art Education 4020.

Prerequisite: Early Childhood and Art Education 2003, 2004, and 3108.

Corequisite: Early Childhood and Art Education 4020.

## ECAE 4001 Seminar and Comprehensive Student Teaching: Early Childhood Education

4 hours recitation; weekly supervised teaching (at least 300 hours); 9 Credits
Design of developmentally appropriate environments, curricula and pedagogy for young children birth-grade 2. Classroom organization and curriculum modification for children of different age levels and with diverse learning needs in culturally and linguistically diverse, urban settings, including children with special needs and English language learners. Families and communities in early childhood education. Development of teaching portfolio. 300 hours of student teaching in one or more of the following age levels: preschool, kindergarten, grades 1 and 2 as required for the initial certificate in early childhood education. (Open only to students who have completed all required Early Childhood Art Education courses with a grade point average of 3.00 or higher, and a grade point average of 2.80 or higher in a minimum of 60 credits in liberal arts and sciences courses.)

Prerequisite: Early Childhood and Art Education 2003, 2004, $3101,3102,3103,3104,3105,3106,3107$ and 3108.

Additional prerequisites for dual early childhood/special education certification: Early Childhood and Art Education 3109 and 4020.

## ECAE 4020 Seminar and Intensive Fieldwork in Early Childhood Special Education

1 hour seminar, 4 hours supervised fieldwork and lab, 3 credits Development of co-teaching and cooperative models and methods, the role of materials and adaptive resources in the early childhood years; classroom organization and curriculum modification for young children of different age levels and with diverse learning needs in culturally and linguistically diverse, urban settings; formal and informal assessment, including curriculum-based assessment. Families and communities in early childhood special education; special topics in early childhood special education, with emphasis on collaboration with other professionals and parents. Development of teaching portfolio and IFSP/IEP goals. Intensive field experience with young children with special needs and their parents. Must be taken with the paired section of Early Childhood and Art Education 3109.

Prerequisite: Early Childhood and Art Education 2003, 2004, 3101, 3102, 3103, 3104, 3105, 3106, 3107, and 3108.

Corequisite for dual early childhood education and early childhood special education certification: Early Childhood and Art Education 3109.

## ECAE 4021 Seminar and Comprehensive Student Teaching

 II: General and Special Education3 hours seminar, supervised teaching (at least 225
hours/semester); 5 credits
Methodology and curriculum development in early childhood settings, birth to grade
2. Integrated curriculum in early childhood settings, with a focus on culturally and linguistically diverse, urban settings. Teachers as researchers; development of a reflective approach to teaching and assessing a diverse child population, including children with special needs and English language learners. Families and communities in early childhood education. Development of teaching portfolio. Students who have completed at least 225 hours of student teaching in Education 4020 in preschool, kindergarten, or grades 1 and 2 , must complete the student teaching requirements for this course in a second age level. Open only to students who have
completed all required Early Childhood Art Education courses with a grade point average of 3.00 or higher, and a grade point average of 2.80 or higher in a minimum of 60 credits in liberal arts and sciences courses.

Prerequisite: Early Childhood and Art Education 2003, 2004, 3101, 3102, 3103, 3104, 3105, 3106, 3107 and 3108.

## Earth and Environmental Sciences

Department office: 3137 Ingersoll Hall
Phone: 718.951.5416
Full-time Faculty
Professors: Aja, Chamberlain, Cheng, Cherrier, Cranganu, Groffman, Marra, Powell, Seidemann
Associate Professors: Boger, Branco
Lecturer: Garb
The Department of Earth and Environmental Sciences draws on chemistry, physics and biology to give students an understanding of our planet, its varied environments and its 4.5-billion-year history. Students learn to observe, record and interpret data pertinent to Earth's materials and environment, including minerals, rocks, fossils, soils, water and energy resources, and to processes that alter our natural physical environment--climate change, coastal erosion, mountain building and the migration of continents, among others. Earth and environmental scientists use this information to predict such trends as global warming; to forecast and attempt to mitigate natural disasters, including floods, earthquakes and volcanic eruptions; to explore for energy and mineral resources; to assess air, water and soil quality; and to aid in the remediation of contaminated environments.

The department offers a bachelor of science and a bachelor of arts in earth and environmental science as well as a minor in earth and environmental science. Our undergraduate courses and programs explore the global system and emphasize the emphasize the geology and environments of the New York City region. We integrate the city as an extension of the laboratory in our curriculum through partnerships with the City's agencies (i.e. DEP, Mayors Office, Parks), museums, and community educational organizations. Students in the earth science teacher program learn to utilize the city's resources in their middle and high school classrooms, and are introduced to all content areas defined by the New York State standards for earth science. They are thereby prepared for successful completion of the Content Specialty Examination in Earth Science, required for New York State licensure for teacher of earth science.

Department of Earth and Environmental Sciences graduates master a comprehensive education that is a gateway to a wide range of geoscience and environmental science career options in industry, government agencies, the private sector, and primary, secondary and postsecondary education. Students who wish to pursue graduate studies may apply to the master's and doctoral degree programs offered by or in conjunction with this department.

## Selecting a Program of Study

Students who anticipate majoring in earth and environmental science should consult with a departmental adviser during their first year in the department in order to plan their programs.

## B.A. degree program in earth and environmental sciences HEGIS code 1914; SED program code 02090

Department requirements (32-35 credits)
All of the following:
Earth and environmental sciences 1101, 1201, 2100, 2200W, 2400, 2500.
Two (2) additional EESC courses at the 2000 level or higher.
Chemistry 1040 or 1100 or its equivalent.
Mathematics 1201, or Computer and Information Science 1115, or Earth and Environmental Sciences 2600.
All required Earth and Environmental Sciences courses numbered 2000 or higher must be completed with a grade of C- or higher in each course.

## B.S. degree program in earth and environmental sciences HEGIS code 1914; SED program code 02092

Department requirements (64.5-66 credits)

## All of the following:

a) Earth and Environmental Sciences 1101, 1201, 2100, 2200W, 2400, 2500, 3100, 3600, 3975.
b) At least eighteen elective credits in the following courses: any Earth and environmental sciences courses numbered 4000 or above, and which may include up to six credits in courses from the following departments after permission of the EESC chairperson:
Anthropology, Biology, Chemistry, Health and Nutrition Sciences and Physics.
c) One of the following capstone courses: Earth and Environmental Sciences 4010 or 4250.
d) Chemistry 1040, 1100 or its equivalent.
e) Mathematics 1201.
f) Mathematics 1206 or Computer and Information Science 1115 or Earth and Environmental Sciences 2600.
g) Biology 1001 or Physics 1100 or its equivalent or Physics 1150.

All required earth and environmental sciences courses numbered 2000 or higher must be completed with a grade of C- or higher in each course. A college-wide minimum of 24 credits in advanced courses in Earth and Environmental Science must be completed at Brooklyn College.

Additional requirements for a B.S. degree
Candidates for a B.S. degree with a major in earth and environmental sciences must complete at least 60 credits in science and mathematics; 24 of these 60 credits must be completed in advanced courses in the Earth and Environmental Sciences Department. These 24 credits must be completed at Brooklyn College with a grade of C- or higher in each course. Specific course requirements for a B.S. degree are described above.

The following courses may be applied toward the 60 credits in science and mathematics:
A) All courses in the departments of biology, chemistry, computer and information science, earth and environmental sciences, mathematics, physics and
psychology.
B) Courses marked with a number sign (\#) in the Department of Health and Nutrition Sciences.
C) ---Anthropology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470, 4665.
D) ---Core Curriculum [1300 through 1399] and 3301 through 3399.
E) ---Economics 3400, 4410, 3410, 4422.
F) ---Philosophy 3203, 3204, 3231, 3232, 3422, 3423, 3601, 3605, 3610.
G) ---Kinesiology 3271, 3275, 3281, 3285, 4229, 4251.
H) ---Sociology 2701.

## B.A. degree program in adolescence education: earth science teacher HEGIS code 1917.01; SED program code 32681

The Department of Secondary Education and the Department of Earth and Environmental Sciences jointly offer a program for students who plan to teach earth science in grades 7 through 12. Additional information may be obtained from the Department of Secondary Education or the Department of Earth and Environmental Sciences. Adolescence education (grades 7-12) and special subject programs are writing intensive. Students should consult a counselor as early as possible to plan their program.
This program is writing intensive.
Program requirements ( $73.5-81$ credits)
All of the following:
a) Earth and environmental sciences 1101, 1201, 2100, 2200W, 3100, 3975, 4010, 4025, 4060, 4275.
b) Chemistry 1100 or its equivalent.
c) Mathematics 1201 or 1501, or Earth and Environmental Sciences 2600.
d) One of the following courses in physics: Physics 1100 or 1150, or Core Curriculum 1331, or Physics 1005 or Earth and Environmental Sciences 4150.
e) One of the following courses in biology: Biology 1001 or 1080, or Core Curriculum 1321 or Biology 1010.

Students must complete all of the courses in the Department of Secondary Education as specified below.
a) Secondary Education 2001, 2002, 3401, 3402 and 3456. These courses may be started in the lower-sophomore term, or upper-sophomore term.
b) Secondary Education 4480. This course may be taken in the junior year.
c) Secondary Education $4481,4482,4483$, and 4484 in the senior year. Students must have successfully completed Secondary Education 4480 before taking any of these courses

The two student teaching field courses, Secondary Education 4482 and 4484, may be taken in the same semester.
Secondary Education 4404 is course equivalent to all of Secondary Education 4480, 4481, and 4482.
Secondary Education 4410 is course equivalent to all of Secondary Education 4480, 4483, and 4484.
Degree programs in Secondary Education include a major in an appropriate department of the college.
Completion of an adolescence education program as part of a major in one of the sciences qualifies students for New York State initial certification in adolescence education in that science content area for grades 7 through 12.

Students qualifying for the initial certification in adolescence science education may obtain an extension to teach the sciences in grades 5 and 6 by taking Secondary Education 3454.

Admission requirements and academic standing
Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001.
Students must have a B- in both Secondary Education 2001 and 2002 and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

Students who wish to register for student teaching seminar and field placement will need to file an application with the science education program head for permission. See program office for details.

To take Secondary Education 4480, students must have an overall GPA of 2.75 or higher and the permission of the Secondary Education science education program head, department chair, or deputy;

To take either Secondary Education 4481, 4482, 4483, and/or 4484, students must earn a B+ or higher in Secondary Education 4480, a GPA of 2.75 or higher in their major, and the permission of the Secondary Education science education program head, department chair, or deputy.

A student who takes either Secondary Education 4481 and/or 4482 prior to Secondary Education 4483 and/or 4484 must earn a B or better grade in Secondary Education 4481 and/or 4482 before taking either Secondary Education 4483 or 4484.

A student who takes either Secondary Education 4483 and/or 4484 prior to Secondary Education 4481 and/or 4482 must earn a B or better grade in Secondary Education 4483 and/or 4484 before taking either Secondary Education 4481 or 4482.

## Departmental Minor(s)

## Minor in Earth and Environmental Sciences

Department Requirements
Earth and environmental sciences 1101, 1201 and 12 credits in earth and environmental science courses 2000 and higher, each completed with a grade of C - or higher at Brooklyn College.

## Interdepartmental Minor(s)

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C- or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Recommendation for prospective graduate students

Students who plan graduate study in earth or environmental science should select advanced electives pertinent to their planned course of study. All B.S. students planning graduate study should also develop reading competence through the second introductory course in at least one foreign language chosen from French, German, and Russian.

## Graduate Studies

The Department of Earth and Environmental Science offers both master of arts and master of science degree programs in earth and environmental science. The department also offers courses creditable toward the CUNY doctoral degree program in earth and environmental science. For information, students should consult the department's deputy for graduate studies. A Graduate Bulletin is available for download on the Brooklyn College Web site.

## Courses

*Courses marked with an asterisk ( ${ }^{*}$ ) are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in this department.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

Field trips or similar extra-classroom activity may be required in any course.

## EESC *1010 The Dynamic Earth

2 hours lecture, 2 hours lab, 3 credits
Introduction to Earth science; NYC-focused, thematic examples of interaction between Earth's spheres, including plate tectonics; deep time; Earth materials and processes as resources and hazards; human interactions with the Earth system. (Not open to students who are enrolled in or have completed CORC 1332.) Through summer 2019 satisfies Pathways Flexible Core Scientific World requirement. Starting Fall 2019 satisfies Pathways Required Core Life and Physical Sciences requirement.

## EESC 1050 Society and the Ocean

## 3 Hours; 3 Credits

How oceanography has matured into a truly interdisciplinary science; ocean phenomena in terms of the interconnections between geology, chemistry, biology, and physics; how ocean phenomena are critical to society in terms of climate, transportation, food resources, and earth habitability; the analysis of oceanographic data sets; one required field trip. (Not open to students who have completed Core Curriculum 3311.) 20172018: Satisfies Pathways College Option requirement. Starting Fall 2018 Satisfies Pathways Flexible Core Scientific World requirement.

## EESC 1060 Exploring Issues in Sustainable Water Resources Management

3 credits; 3 hours
An overview of water resources management from different perspectives, water use and development in early civilizations, physical and chemical characteristics of water, the hydrologic cycle, surface water hydrology (rivers, lakes, flood events), groundwater hydrology, municipal water systems, dams (basics, impacts, hydropower potential, landscape modification), water allocation and regulation laws, Federal, regional and state water agencies, water components and quality standards, water pollution (inorganic, organic, microorganisms), drinking water and
wastewater treatment, water wars, constraints on global water supplies, sustainability of global water supplies. (Not open to students who have completed Core Curriculum 3316.) 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement. Starting Fall 2021 Satisfies Pathways Flexible Core Scientific World requirement.

Prerequisite: Junior standing.

## EESC 1070 Exploring the Earth System

3 hours; 3 credits
Earth system science, Origin and evolution of the earth, Time scales of environmental and geological processes, Earth materials, Rock cycle, Plate tectonics, Biogeochemical cycles, Global climate changes, Greenhouse effect and global warming, Circulation in the oceans and atmosphere, Atmospheric circulation, Stratospheric ozone depletion, Global population dynamics, Environmental pressures on natural resource utilization (petroleum \& water), Public policy and global environment, Humans as geologic agents

## EESC 1080 Climate Change - Torn Between Myth and Fact

3 hours; 3 credits
Myths and facts of climate change with emphasis on anthropogenic global warming. Basic atmospheric science and climate modeling. Exploration of the nature of scientific knowledge. Relationships between scientific knowledge and social and cultural values. Contribution that the social sciences and humanities can make to public debates on climate change. 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement. Same as PHYS 1085.

## EESC *1101 Introduction to Earth Science

1.5 lecture, 3 laboratory; 3 credits

Foundational concepts and skills of Earth science applied to understanding the geological history of the New York City region; minerals; rocks; geological time, fossils, plate tectonics, glaciation.

Minimum of two full-day local field trips required. STEM variant course - Satisfies Pathways Flexible Core Scientific World requirement.

Prerequisite: none.

## EESC *1201 Introduction to Environmental Science

1.5 lecture, 3 laboratory; 3 credits

Introduction to environmental science in urban centers; physical, chemical, biological and human influences on environmental systems; project-based study of a local environmental problem with emphasis on field methods, data analysis and technical communication skills; two field trips required.

Prerequisite: none.

## EESC 2100 Earth Materials

1.5 hours lecture, 3 hours laboratory; 3 credits

Chemical, and physical properties of minerals, rocks and soils with emphasis on applications in the Earth and environmental sciences. Introduction to analysis of Earth materials using transmitted light and X-ray diffraction, and electron-based analysis.

Prerequisite: EESC 1101.

## EESC 2200W Sedimentology

2 hours lecture, 2 hours laboratory; 3 credits Sediments and sedimentary rocks, their conditions of formation, basis of classifications; environments of deposition; methods of mechanical, chemical, mineralogical, graphical, and statistical analysis. Laboratory work will stress analysis of unconsolidated sediments and sedimentary rocks in hand-sample, and includes one or more field trips. This is a writing-intensive course.

Prerequisite: EESC 1101 or EESC 1201
Prerequisite or corequisite: ENGL 1012
EESC 2400 Introduction to Geographic Information System (GIS)
2 hours lecture; 2 hours laboratory, 3 credits
Geographic Information System (GIS) as used in environmental management, archaeology, sociological analysis, business marketing, and land use planning. Basic GIS concepts. Hands-on collection, management, and analyses of data to produce information for better decision making and interpretation. This course is the same as Anthropology 3445

## EESC 2500 Environmental Systems

3 hours; 3 credits
In depth study of the interacting abiotic and biotic components of the natural environment; energy and material flows; biogeochemical cycles; human impacts and alteration of natural system functioning. Case studies of local, urban environments.

Prerequisite: EESC 1201.

## EESC 2600 Statistics and Data Analysis in Geosciences

2 hours lecture, 2 hours lab; 3 credits
Introduction to descriptive statistics in geological and geophysical contexts such as population and samples, random sampling, probability, normal distribution, types of errors; to the science of statistics description. Making inferences from numbers measured on samples, such as linear regression, analysis of variance, multiple
regression, polynomial regression, cluster analysis. Data analysis in earth sciences presented on four different scales (nominal, ordinal, interval, and ratio). Graphical and numerical techniques for representation and analysis. Most examples will be worked using popular software, such as EXCEL and SPSS. STEM variant course Satisfies Pathways Required Core Math and Quantitative Reasoning requirement.

Prerequisite: EESC 1101 or EESC 1201

## EESC 3100 Introduction to Geochemistry

3 hours; 3 credits
Survey of geochemistry including chemical and isotopic abundances; geochemistry of rocks and natural waters; introduction to thermodynamics, crystal chemistry, and organic geochemistry.

Prerequisite or corequisite: EESC 1101 or EESC 1201 and CHEM 1040 or CHEM 1100; or permission of the instructor.

## EESC 3600 Hydrogeology of Water Resources

2 hours lecture, 2 hours laboratory and fieldwork; 3 credits The global hydrologic cycle and its interrelations with climates, soils, and vegetation. Physical properties of surface and groundwater flow. Hydrologic analysis of surface water and groundwater resource management, groundwater geology. Major waste resource quantity and quality issues in the United States. Numerical calculations and problems will be emphasized. Discussion of case studies that describe different types of hydrologic systems and the development and management of groundwater resources. Supervised fieldwork in determining the extent of groundwater contamination.

Prerequisite: EESC 1101 or EESC 1201

## EESC 3820 Aquatic Food Resources: Fisheries, Aquaculture, and Aquaponics

3 hours; 3 credits
Lecture and Lab on environmentally sound (sustainable) food production via aquaculture and its variant, aquaponics. Lectures will consider fisheries historically, and the problems of overfishing, the history and biology of cultured organisms, and aquaculture and aquaponics systems. The Lab portion of the course will utilize AREAC's greenhouse, creating small culture systems, monitoring their performance, analyzing for water quality, as well as troubleshooting and business aspects.

Prerequisites: Earth and environmental science (EESC) 1201; EESC 3610 or EESC3620; and permission of the instructor

## EESC 3975 Structural Geology and Tectonics

1.5 hours lecture, 3 hours laboratory; 3 credits

Mechanical properties of rocks; mechanisms of plate tectonics; plate tectonic environments; rock deformation; folds; faults; joints; tectonic associations of structures; environmental aspects of tectonics and structures. Laboratory work includes structural maps and cross sections, stereographic projections and analysis and documentation of deformed rocks.

Prerequisite: EESC 2100 or permission of the instructor.

## EESC 4010 Field Mapping

1 hour lecture, 4 hours supervised field and laboratory work; 3 credits

Approximately 10 days of supervised field and laboratory work in deformed sedimentary sequences. Field preparation of geologic maps and sections by means of the Brunton compass, topographic base maps and remotely sensed data. Application of GIS. Required final report including maps, sections, description of stratigraphy and structure. Expenses approximately $\$ 1000$

Prerequisite: EESC 1101, EESC 2100, EESC 2400, and EESC 3975

## EESC 4025 Igneous and Metamorphic Petrology

2 hours lecture, 4 hours laboratory; 4 credits
Occurrence, classification, evolution, and origin of igneous and metamorphic rocks; plate tectonic associations; phase diagrams and their use in petrogenesis; origin, evolution, and emplacement of magmas; metamorphic belts; laboratory work includes petrographic study of rock in thin section, hand specimen, and in the field. Laboratory work includes one or more field trips.

Prerequisite: EESC 2100 and EESC 3100.

## EESC 4055 Invertebrate Paleontology

2 hours lecture, 2 hours laboratory; 3 credits Paleobiology, paleoecology, classification, and biostratigraphy of fossil invertebrates. Laboratory work in collection, identification, and preparation techniques. Includes one or more field trips.

Prerequisite: EESC 1101; or BIOL 1001; or permission of the instructor.

## EESC 4060 Stratigraphy and Sedimentary Petrology

2 hours lecture, 4 hours laboratory; 4 credits
Development and history of the stratigraphic column and geologic time scales; principles of stratigraphy; stratigraphic nomenclature; sequences, correlation, and regional geologic maps and graphic representation; application of fossils to stratigraphic interpretation; stratigraphic units of the New York region. Laboratory work will stress petrographic analysis of sedimentary rocks and sequences, and includes one or more field trips.

Prerequisite: EESC 2100 and EESC 2200W

## EESC 4150 General Geophysics

3 hours; 3 credits
Study of the gravitational, magnetic, seismic, and electrical principles involved in geophysics; geophysical exploration; borehole geophysics; well logging; resistivity surveys; earthquakes; structure and composition of the earth's crust and interior; geodesy; submarine geophysics.

Prerequisite: EESC 1101 and PHYS 1100 or PHYS 1150; or permission of the instructor.

## EESC 4175 Natural Resources from Exploration to Sustainable Development

3 hours lecture, 3 credits
Ore genesis, ore deposit models, fossil fuels, exploration methods, resources and reserves, national and global distribution extraction methods, mineral processing, environmental impacts, remediation methods; extraction and sustainable development.

Prerequisites: EESC 1101 or 1201; CHEM 1040 or 1100 or EESC 3100 , or permission of the instructor

EESC 4200 Advanced Experiential Learning in Earth Science

15 hours lecture, 60 hours supervised field and laboratory work, 3 credits
Approximately 10 days of supervised field and/or laboratory work focused on geological topics, including, but not limited to, mapping, stratigraphic analysis, geochemical survey, geophysical survey. Travel and material expenses may be required.

Prerequisite: Permission of the instructor

## EESC 4225 Special Topics in Earth Science

3 hours; 3 credits
A special topic in earth science not covered in the regular curriculum. Topics vary and reflect the interest of students and faculty. Subject matter is announced before registration. Topics include Earth processes, Earth history, Earth materials, technological applications, and contemporary issues. A student may take this course and EESC 4275 at most three times in total, but may not repeat topics.

Prerequisite: EESC 1101, EESC 1201, at least twelve (12) additional credits in Earth and Environmental Sciences courses and permission of the instructor.

## EESC 4250 Environmental Field Investigations

1 hour lecture, 4 hours supervised field and laboratory work; 3 credits
Supervised field and laboratory work focusing on Jamaica Bay, or other aquatic environment. Hydrographic, chemical, and biological data collections, followed by laboratory analysis and data reduction; presentation of results and final report showing spatial and depth distributions. Expenses up to $\$ 1000$

Prerequisite: EESC 1201, EESC 2500, EESC 2200W, EESC 3100, and EESC 3600

## EESC 4275 Meteorology

3 hours; 3 credits
An introduction to weather and its causes: Earth's atmosphere and energy budget; humidity and precipitation; clouds; air pressure and wind; storms and hurricanes; weather forecasting. Climate change predictions considered from geological and historical perspective.

Prerequisite or corequisite: EESC 1101 or EESC 1201

## EESC 4300 Oceanography

3 hours; 3 credits
The integrated science of the world's oceans. Ocean regulation of Earth's climate; the nature of ocean life; spatial and temporal patterns and variability in ocean parameters; ocean biogeochemistry; one or more field trips

Prerequisites: EESC 1201, EESC 2500 or EESC 3100; or permission of the instructor.

## EESC 4310 Coastal Watersheds and Estuaries

3 hours; 3 credits
Global and local changes in coastal watersheds and estuaries; biological, chemical and physical processes and human impacts in coastal watersheds and estuaries; topics include water quality, habitat restoration, sediment contamination and climate change

Prerequisites: EESC 1201, EESC 2500 or EESC 3100; or permission of the instructor

## EESC 4325 Environmental Aspects of Urban Soils

2 hours lecture, 2 hours laboratory; 3 credits
Definition, mineralogical and organic content, varieties, classification, and environmental aspects of soils. Factors affecting soil formation; soil erosion; soil ecology; soil genesis. Influence on ground water. Soil geography, surveys, and land use. Environmental impacts of soils. Field study of urban soils in the New York metropolitan area.

Prerequisite: EESC 2200W and EESC 3100 or permission of the instructor.

## EESC 4335 Environmental Geochemistry

2 hours lecture, 2 hours laboratory; 3 credits
Low-temperature geochemistry and applications to environmental problems; geochemical cycling of nutrients, trace elements and toxic metals; evaluation of geochemical reservoirs; urban geochemical signatures and dynamics; hydraulic fracturing water cycles. Laboratory exercises in geochemical sample collection of waters; sample preparation and instrumental analysis; geochemical interpretation of water analyses. Survey of environmental laws regulating chemical pollutants

Prerequisite: EESC 1101 or EESC 1201 or EESC 2500. Prerequisite or corequisite: CHEM 1040 or CHEM 1100; or permission of the instructor.

## EESC 4350 Sustainable Food Production: Aquaculture, Hydroponics and Aquaponics

3 hours; 3 credits
Lecture and Lab on environmentally sound (sustainable) food production via aquaculture and its variant, aquaponics. Lectures will consider fisheries historically, and the problems of overfishing, the history and biology of cultured organisms, and aquaculture and aquaponics systems. The Lab portion of the course will utilize AREAC's greenhouse, creating small culture systems, monitoring their performance, analyzing for water quality, as well as troubleshooting and business aspects.
Special Fees: Approximately \$100 per student to pay for consumable supplies.

Prerequisites: EESC1201; EESC 4300 or EESC 4310; or permission of the instructor

## EESC 4450 Advanced Experiential Learning in Environmental Science

15 hours lecture, 60 hours supervised field and laboratory work, 3 credits
Approximately 10-12 days of supervised field and/or laboratory focused on environmental topics, including, but not limited to, soils, earth systems, contamination, urbanization, climate, hydrology, and vegetation. Travel and material expenses may be required.

Prerequisites: Permission of the instructor

## EESC 4475 Special Topics in Environmental Science

## 3 hours; 3 credits

A special topic in environmental science not covered in the regular curriculum. Topics vary and reflect the interest of students and faculty. Subject matter is announced before registration. Topics include aquatic science, environmental systems, technological applications, contemporary issues, and other related environmental subjects. A student may take this course and Earth and environmental science 4225 at most three times in total, but may
not repeat topics.
Prerequisite: EESC 1101, EESC 1201, at least twelve (12) additional credits in Earth and Environmental Sciences courses and permission of the instructor.

## EESC 4500 Practicum in Earth and Environmental Science

60 hours supervised laboratory or field work, 2 credits
Supervised practical work in a laboratory and/or field setting; formal report writing.

Prerequisites: Permission of the instructor and chairperson

## EESC 4550 Research Proposal

1 hour lecture, 2 hours lab; 2 credits
Development of independent research proposal; literature searches; literature reviews; development of hypotheses and methodologies.

Prerequisite: Completion of an approved program of advanced Earth and Environmental Sciences Department courses with a GPA of 3.0 or higher, and permission of the instructor and chairperson.

## EESC 4600 Independent Research

Minimum of 9 hours conference and independent work; 3 credits Independent research supervised by a faculty member. Weekly conference. Research report required.

Prerequisite: Completion of EESC 4550 with a grade of B or higher, and permission of the instructor and the chairperson.

## EESC 4650 Presenting Research In Earth and Environmental Sciences

1 hour lecture, 2 hour lab; 2 credits
Principles and practices of presenting original scientific research at scientific meetings; concise technical writing; graphics (maps, graphs, photographs); Powerpoint presentation design; poster design.

Prerequisite: EESC 4600, and permission of the instructor and chairperson.

## EESC 4700 Internships in Earth and Environmental Sciences

120 hours supervised fieldwork, .75 hours seminar; 3 credits Supervised participation in professional activities with public, private or non-profit entity; on-campus seminar meetings; creating a work journal and professional portfolios; internship must be preapproved by department prior to enrolling.

Prerequisite: at least three courses in Earth and Environmental Sciences numbered 2000 or higher and permission of the Chairperson.

## EESC 4750 Advanced GIS and Remote Sensing

2 hours lecture, 2 hours lab; 3 credits
Advanced techniques and modeling applications of ArcGIS including spatial analyst, 3D analyst, and geostatistic analyst; image processing including image enhancement and classification of satellite data using Idrisi and ArcGIS softwares.

Prerequisite: EESC 2400 or permission of the department instructor.

EESC 4800 Seminar

Minimum of 9 hours conference and independent work§; 3 credits
Group study of some fundamental Earth and Environmental
Sciences problem. Thesis or examination.
Prerequisite: completion of an approved program of advanced Earth and Environmental Sciences Department courses and
permission of the chairperson

## Economics

Department office: 217 A Whitehead Hall
Phone: 718.951.5153

## Full-time Faculty

Professors: Doytch, Klein, Uctum
Associate Professors: Fox, Goldberg, Wang
The economics program within the AACSB-accredited Murray Koppelman School of Business at Brooklyn College broadens the professional horizons of students and provides them with the tools required to pursue a career or an advanced degree in economics or a related discipline. The bachelor of arts degree in economics allows students to choose from five concentrations: enterprise and public policy, international economics, financial economics, political economy, and economic analysis.

The economics program gives students the flexibility to choose to specialize in a field in economics or to complete a minor while pursuing a specialization in business, accounting, or a major outside the Economics Department.

The departments of Accounting, Economics, Finance, and Business Management work closely with the Brooklyn College Magner Center for Career Development and Internships. Grants from the Ewing Marion Kauffman Foundation and the Citigroup Foundation have allowed the departments to develop internships at small businesses throughout New York City for students interested in entrepreneurship.

Students who wish to pursue graduate studies may apply to the master's and doctoral degree programs offered by or in conjunction with this department.

## B.A. degree program in economics HEGIS code 2204; SED program code 01889

Department requirements (34-38 credits)
The department chair may allow substitutions for one or more of these requirements consistent with the educational goals of the program.
a. All of the following: Economics 2100, 2200; Economics 3400 or Business 3400 or Mathematics 1501 or 2501 or 3501 or Sociology 2112 or Psychology 3400; Economics 3410 or Mathematics 1231 or Mathematics 1201 or Mathematics 2101.
b. Economics 4400W or Business 4400W.
c. At least one of the following courses: Economics 3102, 3202.
d. One of the following three concentrations:

1. Financial and International Economics:

Any four courses from Economics 3320, 3332, 3342, 3352, 3362, 3370, 3375, 3378.
2. Urban Economics and Public Policy:

Any four courses from Economics 3154, 3212, 3222, 3232, 3242, 3252, 3253, 3254.
3. Economic Analysis:

Economics 3102 and 3202, one of which can be used to satisfy requirement c.
Any three Economics courses from the Financial and International Economics or Urban Economics and Public Policy concentrations.
e. One additional course selected from those listed under cor d, but not used to meet requirements in b) or c) or d) above.

Students considering graduate work in economics are strongly encouraged to take Economics 4422 and the Economic Analysis concentration.
Students must achieve a grade of C- or better in each course submitted in satisfaction of Department requirements a, b, c, d and e, and an average grade of C for courses satisfying said major requirements.

Note: Only courses submitted in fulfillment of requirements b,c,d and e qualify as "advanced courses" in Economics.

Writing-Intensive Requirement:
Students are required to take at least one writing-intensive course (W course).
Residence requirement:
Candidates for a bachelor's degree are required to complete at least 30 credits at Brooklyn College, including: 1, The last 18 credits taken toward the degree; and 2, No fewer than 15 credits in advanced courses in the major department, which must be completed with a grade of C - or higher in each course.

## B.A. degree program in adolescence education: social studies teacher HEGIS code 2201.01; SED program code 26754

Adolescence education (grades 7-12) programs are writing intensive.

## Program requirements

Students who wish to pursue a bachelor of arts degree in Secondary Education for social studies teacher must complete a major in one of the following: Africana studies, American studies, anthropology, economics, history, political science, Puerto Rican and Latino studies, or sociology.

Study must include within the major, or in addition to courses in the major, study in economics, government, and at least 21 credits in the history and geography of the United States and the world, including Secondary Education 3584. Students preparing to become social studies teachers must fulfill the economics and government requirements by taking at least one course (3 credits) from among: History 3345, 3410, 3420, 3424, 3430, $3441,3442,3450,3457$, or a course in Political Science numbered between 3101 and 3160 ; and at least one course ( 3 credits) from among: History 3332, 3470, 3472, 3512 or Economics 2002, 2100, 2200, 3102, 3152, or 3202.

The following pedagogical courses in the Department of Secondary Education: Secondary Education 2001, 2002, 3401, 3402, 4408, 3456, 4482 (total of 28 credits):

Secondary Education 2001, 2002, 3401, 3402. This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.

Secondary Education 3456 may be started after completing Secondary Education 2001 and 2002.
Student teaching: Secondary Education 4401, 4408, and 4482.
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department. Degree programs in adolescence education and include a major in an appropriate department of the college and in the case of social studies may also include an approved selection of interdepartmental courses.

Completion of an adolescence education program as part of a major in English, one of the appropriate social sciences, mathematics, or one of the sciences qualifies students for New York State initial certification in adolescence education for grades 7 through 12.

Students qualifying for the initial certification in adolescence education may obtain an extension to teach English, social studies, mathematics, a modern language, or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

Students must complete 26 credits in the Department of Secondary Education as specified above.

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## Departmental Minor(s)

## Minor in Economics

A program of 12 credits of advanced economics courses. An "advanced" course is defined as any course that may be used to satisfy b), c), or d) in the list of requirements for the B.A. degree program in economics. Students majoring in accounting or business management and finance are eligible for this minor; economics majors are not.

All courses used to satisfy the minor must be completed with a grade of C or higher.

## Interdepartmental Minor(s)

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C - or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Graduate Studies

Graduate economics courses. Undergraduate students whose scholastic work is superior with a background of calculus in high school may be permitted to take graduate courses and apply the credit towards the baccalaureate or masters degree but not both. This will enable advanced students to complete the B.A. and M.S. degrees in four years. Students must consult with the deputy chairperson of Economics prior to registration in their freshman year. The Economics Department, in cooperation with the Department of Business Management, offers a master of science degree program in business economics. Some courses may be creditable toward the CUNY doctoral degree. Courses in accounting may be used to qualify for the C.P.A. examination in the State of New York. For information, students should consult the department's deputy for graduate studies.

## Courses

*Courses marked with an asterisk ( ${ }^{*}$ ) are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in this department for the B.A. degree.
+Economics 2100 and 2200 are required courses for students majoring in economics and accounting. Sophomores may take Economics 2100 as a corequisite course. Juniors and seniors majoring in other departments may enroll in advanced courses without taking Economics 2100, but they must have the necessary background information.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## Macroeconomics

## ECON 2002 Contemporary Problems of the Economy

3 hours; 3 credits
Instability, monopoly, inequality, poverty, development. Topics studied vary with each section and reflect the interests of the students and the instructor. Intended for nonmajors.

## ECON 2100 Elementary Macroeconomics

4 hours; 4 credits
Contemporary economic analysis of the operation of the United States economy. Role of markets and the determination of the overall level of economic activity. Dynamic process of growth, inflation, and international trade. (This course is the same as Business 2100.)

Prerequisite: Satisfying the college readiness requirement in mathematics by a passing score on the CUNY Mathematics Skills Assessment Test or an exemption from taking the CUNY Mathematics Skills Assessment Test. Alternatively, students who have passed the equivalent of Mathematics 1011 (pre-calculus) or higher can register for the class.

## ECON 3102 Intermediate Macroeconomics

## 3 hours; 3 credits

Static and dynamic analysis of national income measurement; aggregate approaches to theories of income; employment, prices, interest rates; public policies for growth and stabilization. (Not open to students who have completed Economics 19.1.)

Prerequisite: Economics 2200 [20.1]; and 3410 [31.1] or Mathematics 1231 or Mathematics 1201, or the equivalent.

## ECON 3152 Theory of Economic Growth

3 hours; 3 credits
Steady state growth equilibria, comparative dynamics, and disequilibrium growth. Post-Keynesian, neoclassical, and neoRicardian models. Production functions and the capital valuation problem; the duality of the growth rate and the profit rate; twosector and multisector models; the golden rule and problems of optimal growth. Critical analysis of growth models. Structural requirements and behavioral conditions for existence and stability of equilibrium. Fundamental question of why economies generate pressures for growth.

Prerequisite: Economics 2200 [20.1] and 3410 [31.1], or the equivalent.

## ECON 3165 American Economic History

3 hours; 3 credits
The nature and sources of American economic growth from the colonial period to the present. The development of colonial economy; economic growth before the Civil War; industrialization of the American economy and the rise of big business; government, business, and labor, including the changing participation of women and minorities in the era of industrial maturity; the creation of a managed economy in the mid-twentieth century. This course is the same as History 3470

Prerequisite: Core Studies 4, or Core Curriculum 1220, or History 3005 , or Economics 2100, or permission of the chairperson.

## Microeconomics

## ECON 2200 Elementary Microeconomics

3 hours; 3 credits
Basic laws and principles of economic science. Value, price, and distribution. Preparation for more comprehensive studies involving application of the tools of analysis to economic problems. (This course is the same as Business 2200.)

Prerequisite: Satisfying the college readiness requirement in mathematics by a passing score on the CUNY Mathematics Skills Assessment Test or an exemption from taking the CUNY Mathematics Skills Assessment Test. Alternatively, students who have passed the equivalent of Mathematics 1011 (pre-calculus) or higher can register for the class.

## ECON 3202 Intermediate Microeconomics

3 hours; 3 credits
Methods and results of economic analysis used in interpretation of economic data and in solution of economic problems. Outstanding exponents of major theoretical approaches.

Prerequisite: Economics 2200 [20.1]; and 3410 [31.1] or Mathematics 1231 or Mathematics 1201, or the equivalent.

## Quantitative and mathematical economics

## ECON 3400 Introduction to Economic and Business

 Statistics4 hours; 4 credits
Descriptive statistics including measures of central tendency, dispersion, and skewness. Probability and theoretical probability distributions including the binomial function and the normal curve. Sampling, estimation, and test of hypothesis. Simple correlation and regression analysis. Applications from social sciences. This course is the same as Business 3400. (Not open to students who are enrolled in or have completed any of the following equivalent courses: Sociology 2112; Psychology 3400.) STEM variant course - Satisfies Pathways Required Core Math and Quantitative Reasoning requirement.

Prerequisite: Satisfying the college readiness requirement in mathematics by a passing score on the CUNY Mathematics Skills Assessment Test or an exemption from taking the CUNY Mathematics Skills Assessment Test. Alternatively, students who have passed the equivalent of Mathematics 1011 (pre-calculus) or higher can register for the class.

## ECON 3410 Fundamental Methods of Mathematical Economics I

3 hours; 3 credits
Mathematical tools necessary for advanced study. Application of differential calculus and matrix algebra to economic analysis. Consideration of static, comparative static, and optimization models. (This course is the same as Business 3410. Not open to students who have completed Mathematics 2101 [10.1].)

Prerequisite: Economics 2200 [20.1] or Business 2200 [20.1].

## ECON 4400W Advanced Economic and Business Statistics

3 hours; 3 credits
Index number construction. Time series analysis. Chi-square, F, and student's t distributions. Advanced topics in statistical inference. Variance, multiple regression, and correlation analysis. Applications
from economics. This course is the same as Business 4400W.
Prerequisite: Economics 3400 [30.2] or Business 3400 [30.2] or Mathematics 3501 [51.1]; and Economics 3410 [31.1] or
Mathematics 1231 or Mathematics 1201 or their equivalent.

## ECON 4422 Fundamental Methods of Mathematical

## Economics II

3 hours; 3 credits
Application of matrix algebra, integral calculus, differential and difference equations, linear algebra, and the calculus of variations to the study of economic analysis. Economic models dealing with dynamic aspects of optimization, maximization, and minimization including problems from mathematical programming, queueing theory, growth, input-output, cyclical models. Intended for prospective graduate students in economics or business.

Prerequisite: Economics 3410 [31.1] or its equivalent.

## Financial and international economics

## ECON 3320 Money and Banking

3 hours; 3 credits
The nature of money, the monetary system, and monetary standards. Commercial banking operations and noncommercial banking institutions. Relationship of money and banking to prices and economic activity. (This course is the same as Business 3320.)

Prerequisite: Economics 2100 [10.1] or Economics 2200 [20.1].

## ECON 3332 Financial Economics

## 3 hours; 3 credits

Theoretical and public policy issues related to the structure and workings of financial markets. Uses microeconomic analysis to assess the effectiveness of various financial instruments in meeting the needs of investors who have varying preferences for risk. Derives and applies a variety of financial-decisions rules, including those associated with asset-pricing and arbitrage-pricing models. Additional topics include: risk and return trade-offs, cost of capital, and capital budgeting.

Prerequisite: Economics 2200 [20.1]

## ECON 3342 Public Finance

## 3 hours; 3 credits

Economics of public finance. Government expenditures, taxation, and debt in relation to efficient resource use, equity in the distribution of wealth and income, stable growth, and related aspects of economic well-being.

Prerequisite: Economics 2200 [20.1].

## ECON 3352 International Macroeconomics and Finance

## 3 hours; 3 credits

The foreign exchange market, international financial markets, and the determination of the equilibrium exchange rate. Price levels and the exchange rate in the long run; output and the exchange rate in the short run; foreign exchange intervention; capital mobility; monetary and asset market approach to the balance of payments; international macroeconomic policy and the international monetary system.

Prerequisite: +Economics 2200 [20.1].

## ECON 3362 International Trade Policy

## 3 hours; 3 credits

Problems of the formation of economic operations. Problems of the acquisition of foreign competition. Problems arising from government policies. Cultural and ethical barriers to trade. Organizational problems of international companies. Problems of communication and control.

Prerequisite: Economics 2200 [20.1].

## ECON 3370 Investment Science

## 4 hours; 4 credits

Net present value, internal rate of return; yield, duration, immunization, and convexity of fixed-income securities; meanvariance portfolio theory, Markowitz model, CAPM, factor models, arbitrage pricing theory; models of asset dynamics, Ito's lemma, options theory, Black-Scholes equation, interest-rate derivatives. (This course is the same as Finance 3370 [Business 3370] and Mathematics 3601.)

Prerequisite: Economics 3400 [30.2] or Business 3400 [30.2] or Mathematics *2501 [8.1] or Mathematics 3501 [51.1]; Economics 3410 [31.1] with a grade of B- or better; Economics 3310 [70.2] or Finance 3310 or [Business 3310].

## ECON 3375 Financial Instruments and their Pricing

4 hours; 4 credits
Definitions of some of the most important derivative securities traded in the financial markets: forward and futures contracts, caplets, caps, swaps, and options (Call, Put, Barrier, Bermudan, Asian, Digital, Exotic). The principles of arbitrage pricing and riskneutral pricing, discrete-time binomial trees. The continuous time Black Scholes model and the Capital Asset Pricing model. The pricing of interest rates in an arbitrage-free framework and important interest rate models. Concentration on stochastic modelling and applications. (This course is the same as Finance 3375 [Business 3375] and Mathematics 4601.)

Prerequisite: Mathematics 3601 or Finance [Business 3370] or Economics 3370.

## ECON 3378 Behavioral Finance and Economics

3 hours; 3 credits
The interaction of human psychology, decision making and financial markets in order to understand how human behavior plays a significant role in finance. Topics covered include: personal financial planning, corporate finance, and portfolio management within the context of behavioral finance and behavioral economics. This course is the same as Finance 3378 and [Business 3378].

Prerequisite: Finance 3310 or [Business 3310] or Economics 3332 [70.8] or Finance 3330 or [BUS 3330]; Economics 2200 [20.1] or Business 2200 [20.1].

## Urban economics and public policy

## ECON 3153 Socialist Thought

3 hours; 3 credits
Various forms of socialism in their historical setting. Ideologies, critiques of capitalism, and programs of change.

Prerequisite: Economics 2200 [20.1].

## ECON 3154 Women and the Contemporary Economy

## 3 hours; 3 credits

History of the socioeconomic position of women; evidence on the changing economic position of women in the post-civil rights era; assessments of the welfare-to-work transition; political economy of marriage and childbearing decisions. (This course is the same as Women's and Gender Studies 3317 .)

Prerequisite: Economics 2100 [10.1].

## ECON 3212 Labor Economics

## 3 hours; 3 credits

Labor force concepts, composition, trends, and measurements. Human resource development problems in relation to population and economic growth. Wage patterns and theories. Characteristic risks and problems of the wage earner. Legislative and private attempts to secure full employment. Insecurity and underutilization of the labor force.

Prerequisite: +Economics 2100 [10.1].

## ECON 3222 Economics of Discrimination

3 hours; 3 credits
Discrimination in labor markets as it applies to sex, race, ethnic, and religious groups. Historical and theoretical analysis of the relationship of discrimination to economic systems, presented from alternative perspectives. Slavery, immigration, unionization, affirmative action, and the problem of quotas.

Prerequisite: Economics 2100 [10.1].

## ECON 3232 Urban Economics

3 hours; 3 credits
Economic basis of the urban economy. Land utilization, land tenure, and land and building income. Ratios of improvement value to site value. Zoning regulations and city planning. Common real estate instruments.

Prerequisite: Economics 2200 [20.1].

## ECON 3242 Industrial Organization

3 hours; 3 credits
Economic analysis of the structure of markets and the behavior of firms. Examination and evaluation of public policy toward business. Topics include pricing strategies, product differentiation, barriers to entry, corporate mergers, research and development, and antitrust legislation and regulation.

Prerequisite: Economics 2200 [20.1]

## ECON 3252 Environmental and Natural Resource

## Economics

3 hours; 3 credits
Economic aspects of pollution and resource conservation. Resource scarcity. Allocation of renewable and depletable resources. Application of environmental and conservation economics to current public policy problems.

Prerequisite: Economics 2200 [20.1] or permission of the chairperson.

## ECON 3253 Economic Geography

3 hours; 3 credits

Spatial distribution of economic activity at the global, regional, and urban scale. Traditional location theory contrasted with political economy, cultural, and institutional approaches. Both quantitative and qualitative methods will be used to investigate all aspects of economic activity in space, including industrial location, agglomeration, globalization and trade, development, and humanenvironment interaction.

Prerequisites: Economics 2200 and 3400

## ECON 3254 Ecological Economics and Sustainable Development

3 hours; 3 credits
The closely intertwined relationship between the human economy and ecological systems. A broad survey of the foundations, key concepts, and methods of ecological economics and sustainable development. We will examine the role of environmental regulation, corporate and private operations, and private-public partnerships in responding to environmental threats and opportunities. We will discuss how businesses and governments can develop sustainable practices. We will address the following fundamental questions: 1 , Is it possible to place a monetary value on nature (or the services that nature provides)? 2, Is it possible to substitute man-made capital for natural capital? I.e., as we degrade the natural environment and exhaust natural resources and produced capital goods compensate for these losses? 3, How can we measure the scale of human activities, their impact on ecosystem state, and determine what level is ultimately sustainable?

Prerequisite: Economics 2200 or Business 2200 and either Economics 3400 or Business 3400.

## ECON 3500 Health Economics and Policy

## 3 hours; 3 credits

Introduction to health economics and public policy. The roles of physicians, hospitals, government, health insurance companies, pharmaceutical companies, and the newly introduced medical exchanges in the delivery of health care. Topics covered include: characteristics of the health care sector of the economy; cost benefit and effectiveness analysis, justifications for government involvement in health care regulation; how government policies and insurance markets determine the allocation of health care resources; financing of health care services; international comparisons; policy issues such as universal health insurance. This course is the same as Business 3500.

Prerequisite: Economics 2200 or Business 2200 or permission of the chairperson.

## Honors and seminars

## ECON 4102 Seminar in Macroeconomics

3 hours; 3 credits
Mathematical and econometric techniques. Course description may be obtained in the department office before registration.

Prerequisite: Economics 3102 [10.2].

## ECON 5102 Independent Research in Macroeconomics

Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Research paper.

## ECON 5112 Independent Research in Macroeconomics

Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Research paper.

Prerequisite: Economics 3102 [10.2].

## ECON 5202 Independent Research in Microeconomics

Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Research paper.

Prerequisite: Economics 3202 [20.2].

## ECON 5212 Independent Research in Human Resources and Economics of Poverty

Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Research paper.

Prerequisite: Economics 3212 [40.1] or 40.4 .

## ECON 5222 Independent Research in Human Resources

 and Economics of PovertyMinimum of 9 hours conference and independent work $\S ; 3$ credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Research paper.

Prerequisite: Economics 3212 [40.1] or 40.4 .

## ECON 5302 Independent Research in Money and Finance

Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Research paper.

Prerequisite: Economics 3320 [70.1].

## ECON 5312 Independent Research in Money and Finance

Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Research paper.

Prerequisite: Economics 3320 [70.1].

## ECON 5322 Independent Research in Economic <br> \section*{Development and Trade}

Minimum of 9 hours conference and independent work $\S ; 3$ credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Research paper.

Prerequisite: Economics 3352 [76.1] or 76.2 .

## ECON 5402 Independent Research in Quantitative and

## Mathematical Economics

Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Research paper.

Prerequisite: Economics 4422 [31.2] or Business 3430 [31.4].

## ECON 5602 Special Topics

3 hours; 3 credits
Topics vary from term to term. Course descriptions may be
obtained from department office before registration. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: permission of the chairperson.

The following inactive course(s) will only be offered if there is sufficient demand: ECON 4410 Advanced Economic and Business Statistics

## English

Department office: 2308 Boylan Hall
Phone: 718.951.5195

## Full-time Faculty

Distinguished Professors: Alterman, Lerner
Professors: Agoos, Bayoumi, Brooks, Davis, Elsky, Entin, Gonsalves, Harrison, Henkin, King, Mancini, Masciandaro,
Natov, Pollard, Rutkoski, Steel, Thien, Tremper
Associate Professors: Acosta, Frydman, Howell, Lutzkanova-Vassileva, Nadell, Phillips, Streiter
Assistant Professors: Burgess, Moody
Lecturers: Minter, Nissenbaum
Distinguished Lecturer: De La Torre
The Brooklyn College English Department, a community of scholars, teachers, and writers, is responsible for many undergraduate programs, from introductory writing courses to a bachelor of arts in English; a bachelor of arts in comparative literature, a bachelor of fine arts in creative writing, and three minors--in English, comparative literature, and journalism. The department also offers a bachelor of arts degree in adolescence education for English teachers as well as a concentration for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades 1-6).

Through reading and research assignments and class discussions, our students learn to appreciate the written word in its many contexts and uses. They learn to correctly and cogently express their ideas in oral and written work. The English Department instills in students an understanding of the beauty and importance of language and literature, from the past to the present, from a multiplicity of traditions and languages (in translation). Students are exposed to various theoretical and critical approaches to the analysis of literary texts.

The English Department endeavors to teach students respect for a plurality of ideas and perspectives in preparation for citizenship in the global community that our world has become. Our graduates find careers in communications and media; journalism and law; in primary, secondary, and post-secondary education; government; and the commercial and nonprofit worlds. Students who wish to pursue graduate studies may apply to the master's and doctoral degree programs offered by or in conjunction with this department.

## English-as-a-Second-Language Program

The Department of English conducts the English-as-a-Second-Language Program.

## Writing across the Curriculum

All majors and minors in the Department of English and the English concentration for majors in early childhood education teacher and childhood education teacher fulfill the writing-intensive course requirement for the College.

## B.A. degree program in comparative literature HEGIS code 1503; SED program code 02047

Program requirements (40-44 credits)
I. English 2120 and 2121 (8 credits)

English 2120 and 2121 are both required. Comparative literature majors should complete either English 2120 or 2121 or be enrolled in one or the other, before continuing in other electives. No ENGL course numbered lower than 2115 may count toward the major.
II. (12 credits) Three of the following: Comparative Literature 3614, 3615, 3616, 3617, 3618.
III. (7-8 credits) A total of two of the following courses chosen from two genres:

The novel: Comparative Literature 3606, 3607, 3609.
Drama: Comparative Literature 3610, 3611.

Other genres: Comparative Literature 3601, 3602, 3603, 3604, 3605, 3608, 3612, 3613, 3624, 3625, 3626, 3627, 3628, 3629.
IV. (3-4 credits) One of the following: Comparative Literature 3613, 3619, 3620, 3621, 3622, 3623, 3624, 3625, 3627, 3629, 36313632.
V. (4 credits) A 4000-level Comparative Literature or English literature seminar.
VI. (6-8 credits) At least six credits in literature courses numbered higher than 2010 in a classical or modern language.

Students who have successfully completed the Communication 1202 and Humanities 1204 seminars of the Special Baccalaureate Degree Program for Adults or Comparative Literature 11 or the approved equivalents for the latter automatically have the prerequisites for any advanced course in comparative literature.

## B.A. degree program in English <br> HEGIS code 1501; SED program code 02043

Program requirements (38-47 credits)

Students may concentrate in the standard English program or in the History and Literature concentration (see "III. Electives" below).
I. English 2120 and 2121 (8 credits)

English 2120 and 2121 are both required. English majors should complete either English 2120 or 2121 or be enrolled in one or the other, before continuing in other electives. No ENGL course numbered lower than 2115 may count toward the major.
II. Fields of Study (14-16 credits)

One course from each of four of the following six fields; two of the courses must be chosen from Fields 1 through 3 and two must be chosen from Fields 4 through 6:

1. Middle Ages: English 3111, 3112, 3520, 4101; Comparative Literature 3614.
2. Renaissance: English 3120, 3121, 3122, 3123, 3124, 3125, 4102; Comparative Literature 3615.
3. Eighteenth Century: English 3131, 3132, 3133, 4103; Comparative Literature 3616.
4. Nineteenth Century and Romanticism: English 3140, 3141, 3142, 3143, 3145, 3151, 3156, 3157, 3158, 3160, 4104, 4107; Comparative Literature 3606, 3617.
5. Modernism: English 2402, 3152, 3153, 3156, 3159, 3160, 3161, 3162, 3163, 3164, 3165, 3170, 3171, 3172, 3173, 3193, 4110, 4107, 4108; Comparative Literature 3607, 3608, 3610, 3618, 3622, 3623, 3624, 3625.
6. Postmodernism and Contemporary Discourses: English 2402, 3154, 3161, 3162, 3163, 3166, 3167, 3174, 3180, 3187, 3191, 3193, 3194, $4105,4107,4109,4110,4111,4112,4113,4114$; Comparative Literature 3609, 3611, 3619, 3621, 3622, 3623, 3625, 4601, 4602.
III. Electives ( $16-23$ credits)

Standard English concentration:
Five additional courses, one of which must be an English or Comparative Literature seminar numbered in the 4000s. One may be in an allied discipline (Africana Studies, American Studies, Art, Classics, History, Modern Languages and Literatures, Music, Philosophy, Puerto Rican and Latino Studies, Communication Arts, Sciences, and Disorders, or any other with permission of the chairperson.
Or: History and Literature concentration
Six additional courses:

1. English 4113;
2. a second course in a student's chosen historical period (from Fields 1-6);
3. a course from the History Department or an American Studies course, cross-listed with History, complementing the two literature courses in the chosen field;
4. English 4114;
5. Either
(a) the one-semester senior thesis (English 5103) and one elective (any field or genre in English or Comparative Literature or a course from an allied department); or
(b) the two-semester senior thesis (English 5104 and 5105).

To qualify for this concentration, students must have a B+ or higher average and obtain permission from the chair or major's counselor. They should seek guidance in choosing their field of study and consult with the counselor on a suitable thesis advisor.

## B.F.A. degree program in creative writing <br> HEGIS code 1507; SED program code 87220

[^1]I. English 2120 and 2121 (8 credits)

English 2120 and 2121 are required. Creative writing majors should complete either English 2120 or 2121 , or be enrolled in one or the other, before continuing in other electives. No ENGL course numbered lower than 2115 may count toward the major.
II. Creative writing courses ( 20 credits)
a) English 2301.
b) One of the following sequences:

1) English 3301, 3302.
2) English $3304,3305$.
3) English 3306, 3307.
c) Two additional creative writing courses in the English Department: ENGL 4301 (the inter-genre creative writing capstone seminar), ENGL 2302, or any of the courses 3301-3307 that has not been used to satisfy requirement (ii)b.
III. Fields of Study (10-12 credits)

One course from each of three of the following six fields; one course must be chosen from Fields 1 through 3 and two must be chosen from Fields 4 through 6:

1. Middle Ages: English 3111, 3112, 3520, 4101; Comparative Literature 3614.
2. Renaissance: English 3120, 3121, 3122, 3123, 3124, 3125, 4102; Comparative Literature 3615.
3. Eighteenth Century: English 3131, 3132, 3133, 4103; Comparative Literature 3616.
4. Nineteenth Century and Romanticism: English 3140, 3141, 3142, 3143, 3145, 3151, 3156, 3157, 3158, 3160, 4104, 4107; Comparative Literature 3606, 3617.
5. Modernism: English 2402, 3152, 3153, 3156, 3159, 3160, 3161, 3162, 3163, 3164, 3165, 3170, 3171, 3172, 3173, 3193, 4110, 4107, 4108; Comparative Literature 3607, 3608, 3610, 3618, 3622, $3623,3624,3625$.
6. Postmodernism and Contemporary Discourses: English 2402, 3154, 3161, 3162, 3163, 3166, 3167, 3174, 3180, 3187, 3191, 3193, 3194, $4105,4107,4109,4110,4111,4112,4113,4114$; Comparative Literature 3609, 3611, 3619, 3621, 3622, 3623, 3625, 4601, 4602.
IV. Additional course requirements ( $6-8$ credits)

Six to eight additional credits in advanced English Department courses. Related courses offered by other departments may be substituted with permission of the English Department chairperson.

## B.A. degree program in adolescence education: English teacher HEGIS code 1501.01; SED program code 26812

The Department of Secondary Education and the Department of English jointly offer a program for students who plan to teach English in grades 7 through 12. Additional information may be obtained from the Department of Secondary Education or the Department of English. Adolescence education (grades 7-12) and special subject programs are writing intensive. Students should consult a counselor as early as possible to plan their program.

## Program requirements (44-50 credits)

Students must complete the following English Department requirements for the B.A. degree program for English teacher (44-50 credits).
I. English 2120 and 2121 (8 credits)

English 2120 and 2121 are required. Majors in the English teacher program should complete English 2120 or 2121 or be enrolled in one or the other, before continuing in other electives. No ENGL course numbered lower than 2115 may count toward the major.
II. Fields of Study (10-12credits)

One course from each of three of the following six fields; one course must be chosen from Fields 1 or 3 and two must be chosen from Fields 4 through 6:

1. Middle Ages: English 3111, 3112, 3520, 4101; Comparative Literature 3614.
2. Renaissance: English 3120, 3121, 3122, 3123, 3124, 3125, 4102; Comparative Literature 3615.
3. Eighteenth Century: English 3131, 3132, 3133, 4103; Comparative Literature 3616.
4. Nineteenth Century and Romanticism: English 3140, 3141, 3142, 3143, 3145, 3151, 3156, 3157, 3158, 3160, 4104, 4107; Comparative Literature 3606, 3617.
5. Modernism: English 2402, 3152, 3153, 3156, 3159, 3160, 3161, 3162, 3163, 3164, 3165, 3170, 3171, 3172, 3173, 3193, 4110, 4108, 4107; Comparative Literature 3607, 3608, 3610, 3618, 3622, 3623, 3624, 3625.
6. Postmodernism and Contemporary Discourses: English 2402, 3154, 3161, 3162, 3163, 3166, 3167, 3174, 3180, 3187, 3191, 3193, 3194, $4105,4107,4109,4110,4111,4112,4113,4114$; Comparative Literature 3609, 3611, 3619, 3621, 3622, 3623, 3625, 4601, 4602.
III. Field Concentration: English Teaching (14-16 credits)

Four courses, one from each of the following groups:
A. Language: English 3520, 3521, 3522, 3523, 3524, or a course in linguistics.
B. Composition: English 2115, 2116, 2301, 2302, 3177, or any other writing-intensive course.
C. Literature of diversity: English 3158, 3160, 3161, 3162, 3180, 3194, 4110, Comparative Literature 3613, 3619, 3620, 3622, 3623, 3624,

3625,3632 or any course in literature and culture.
D. Children's and Young Adult Literatures: English 3189.
IV. English 3122 or 3123 (4 credits)
V. Two additional English Department electives ( $6-8$ credits)

The following pedagogical courses in the Department of Secondary Education: Secondary Education 2001, 2002, 3401, 3402, 4401, 4407, 3456, 4482 (total of 28 credits):

Secondary Education 2001, 2002, 3401, 3402. This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.
Secondary Education 3456 may be started after completing Secondary Education 2001 and 2002.
Student teaching: Secondary Education 4401, 4407, and 4482.
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department. Degree programs in adolescence education and include a major in an appropriate department of the college and in the case of social studies may also include an approved selection of interdepartmental courses.

Completion of an adolescence education program as part of a major in English qualifies students for New York State initial certification in adolescence education for grades 7 through 12.
Students qualifying for the initial certification in adolescence education may obtain an extension to in grades 5 and 6 by taking Secondary Education 3454.
Students must complete 28 credits in the Department of Secondary Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

Students must have a B- in both Secondary Education 2001 and 2002, NYC Department of Education fingerprint clearance, and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

To take Secondary Education 4413 students must have a GPA of 2.75 or higher and permission of the head of the program.
To take Secondary Education 4401, 4407, and 4482 students must have a GPA of 2.75 or higher, a B- or better in both Secondary Education 3401 and 3402, and/or permission of the head of the program.

To take Secondary Education 4401, 4407, and 4482 students must earn a B or higher in Secondary Education 4401, a GPA of 3.0 or higher in their English courses, and the permission of the head of the program.

Students must earn a B- or higher in Secondary Education 4401, 4407 and 4482 and a GPA of 2.75 or higher in their major.

## Departmental Minor(s)

## Minor in Comparative Literature

## Department requirements

At least four courses (12-16 credits) in advanced electives in the Comparative Literature Program with a grade of C or higher in each course. Comparative literature minors should consult with the director for recommendations.

## Minor in Creative Writing

Department requirements (16 credits)

At least four courses and 16 credits in advanced electives in Creative Writing with a grade of C or higher in each course, starting with English 2301 and then three courses from the following list: English 2302, 3301, 3302, 3303, 3304, 3305, 3306, 3307, and 4301.
Creative Writing minors should check the bulletin to see which of these courses are sequenced together, and consult with department counselors for recommendations.

## Minor in English

## Department requirements

A program of four courses (12-16 credits) of advanced electives in the English Department with a grade of C or higher in each course. It is recommended that students meet with a department counselor to plan a coherent program.

Students might choose a sequence of courses constituting a general survey of English and/or American literature; a genre ; (e.g., fiction, poetry, drama); a period (e.g., medieval, romantic, modern); creative writing, expository writing, journalism; or linguistics.

## Minor in Linguistics

A program of 13-16 credits as follows:
Linguistics 2001
Two courses from area 2 of the major.
At least one other course chosen from area 2 and/or area 3 of the major.
Each course must be completed with a grade of $C$ or higher. Courses presented for this minor may not be counted towards the major in any of the departments listed under area 3 of the linguistics major. Students should meet with the program director to plan a program suited to their interests and career plans.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## English

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin.
Students who major in either of these programs and who elect a concentration in English must complete at least 31-35 credits in the English Department with a grade of $C$ or higher in each course. Students must meet with a department adviser to declare their intention to complete this sequence.

## Concentration requirements:

## English 1012.

One course from each of the following four groups:
a) English 3521, 3522, 3524, 3523 or a course in linguistics
b) English 2115, 2116, 2301, 2302, 3177
c) English 3180, 3158, 3166, 3190, 3160, 3161, 3162; Comparative Literature 3619, 3621, 3622, 3623.
d) English 3189

Four advanced English or comparative literature electives (12-16 credits.)

## Department recommendations

Students should consult the deputy chairperson for help in planning a course of study.

## Requirements for departmental honors in English

Fulfillment of the requirements of the B.A. in English or English teacher (7-12) or the B.F.A. in creative writing with a B+ or higher average in all advanced work in the major; completion with a grade of B or higher of one writing-intensive seminar numbered in the 4000s; completion with a grade of B or higher of the Senior Thesis courses English 5103, or 5104 and 5105, also with grades of B or higher. While a student may elect to gain honors credit in a specific elective course, in accordance with the description in the "Honors" section in the Bulletin, such honors credit does not constitute departmental honors, which is awarded only upon completion of the Honors Sequence.

## Requirements for departmental honors in Comparative Literature

Fulfillment of the requirements for the B.A. in comparative literature with a B+ or higher average in all advanced work in the major; completion of Comparative Literature 4601 and 4602 with a grade of B or higher; completion of the Senior Thesis courses English 5103, or 5104 and 5105 , with grades of B or higher. While a student may elect to gain honors credit in a specific elective course in accordance with the description in the "Honors" section in the Bulletin, such honors credit does not constitute departmental honors, which is awarded only upon completion of the Honors Sequence.

## Recommendations for prospective graduate students

Graduate programs in English require a broad background in English and American literature. Prospective graduate students should take a number of courses in English literature of the period before 1800 and a course in literary theory. Prospective graduate students should develop reading knowledge of French or German through at least course 2010

## Graduate Studies

The English Department offers the following graduate degree programs: master of arts in English, master of fine arts in creative writing, and master of arts, English teacher (7-12). Some courses may be credited toward the CUNY doctoral degree. For information, students should consult the department's deputy for graduate studies.

## Learning Center

Help may be obtained in prewriting, outlining, mechanics of writing, proofreading, revising, or developing a format for any paper. Students may also receive help with such specific tasks as writing essays, research papers, résumés, or laboratory reports. Further information may be obtained at the center, 1310 Boylan Hall, or by calling 951-5821.

## Courses

*Courses marked with an asterisk (*) are not counted toward the requirement of no fewer than 33 credits in advanced courses for majors in this department.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## Composition

## ENGL 1001 English Composition A

## 3 hours and conference; $11 / 2$ credits

Workshop in expository writing: strategies of, and practice in, analytical eading and writing about texts. Fundamentals of grammar and syntax. requent assignments in writing summaries, analyses, comparisons of texts, and such other forms as narration, description, and argumentation. Emphasis on writing as a process: invention, revision, editing. (Not open to students who are enrolled in or who have completed English 1010 [1]. Students may not receive credit for both English 1010 [1] and English 1001 [1.11].)

## ENGL 1002 English Composition B

3 hours and conference; $1 / 1 / 2$ credits
Continuation of English 1001 [1.11]. More extensive study of expository writing. Continued emphasis on writing as a process: invention, revision, editing. (Not open to students who are enrolled in or who have completed English 1010 [1]. Students may not
receive credit for both English 1010 [1] and English 1002 [1.12].)
Prerequisite: Students must receive a grade of C - or above in English 1001 [1.11] to be permitted to enroll in English 1002
[1.12]. Students must pass English 1002 [1.12] with a grade of Cor higher to be credited with a course equivalent to English 1010 [1].

## ENGL *1003 Approaches to Learning a Modern Language

3 hours; 3 credits
Analysis of the process of second-language acquisition for the adult language learner and of the relationship between language learning and cultural awareness. Development of practical self-monitoring and self-evaluating strategies to promote successful language acquisition and cultural competence. For students studying or planning to study a modern language, including English at the college level. This course is the same as Modern Languages and Literatures*1.5.

Prerequisite: permission of the chairperson of the Department of English.

## ENGL 1010 English Composition I

## 3 hours and conference; 3 credits

Workshop in expository writing: strategies of, and practice in, analytical reading and writing about texts. Fundamentals of grammar and syntax. Frequent assignments in writing summaries, analyses, comparisons of texts, and such other expository forms as narration, description, and argumentation. Emphasis on writing as a process: invention, revision, editing. Satisfies Pathways Required Core English composition requirement. (Not open to students who have completed English 1.7.)

Prerequisite: Placement in the course on the basis of 480 or higher on the verbal SAT or 75 on the New York State Regents Examination in English, or a score of 56 on the CUNY CATW writing examination.

## ENGL *1012 English Composition II: Seminar in Expository

 Writing3 hours and conference; 3 credits
Writing-intensive seminar focusing on a topic chosen by the instructor. Provides students with an opportunity to explore a particular subject in depth and further develop skills of critical thinking, research techniques, and clear expression necessary for academic writing. Students should take English *1012 [2] directly after completing English 1010 [1]. Topics include: The Fool in Literature; Reading the City; 1960s: Decade of Revolt; Novels of the Jazz Age; Cross-Cultural Writing and the Arts. Satisfies Pathways Required Core English composition requirement.

Prerequisite: Grade of C- or better in English 1010 [1] or placement in the course on the basis of transfer evaluation.

## ENGL 2115 Advanced Exposition and Peer Tutoring

3 hours lecture, 3 hours tutoring; 4 credits Intensive study of and practice in writing the principal rhetorical forms. Training in principles of peer tutoring and three hours of tutoring writing in the Learning Center or other appropriate setting.

Prerequisite: A grade of A in English 1012 or the equivalent and department permission.

## ENGL 2116 Advanced Exposition

4 hours; 4 credits
Intensive study of and practice in essay writing for a variety of audiences and purposes.

Prerequisite: English 1012 [2] or 2.7. Students exempted from English *1012 [2] may waive the English *1012 [2] prerequisite for English 2116 [5.1].

## Creative writing

## ENGL 2301 Introduction to Creative Writing

4 hours; 4 credits
Workshop in writing stories, poems, and short plays.
Prerequisite: English 1010 [1] or 1.2 or 1.7.

## ENGL 2302 Writing Prose Nonfiction

4 hours; 4 credits
Workshop in writing personal essays, biography, and criticism.

Prerequisite: English 1010 [1] or 1.2 or 1.7.

## ENGL 3301 Writing Fiction I

4 hours; 4 credits
Workshop in writing stories. Techniques of narrative. (Not open to students who have completed English 15.)

Prerequisite: English 2301 [11.1].

## ENGL 3302 Writing Fiction II

4 hours; 4 credits
Continuation of English 3301 [15.1].
Prerequisite: English 15 or 3301 [15.1].

## ENGL 3303 Creative Writing Workshop: Young Adult and

 Children's Fiction4 hours; 4 credits
A workshop seminar in the practice of writing and critiquing literature for young people; focus on the construction of plot, voice, character, setting, and dialogue.

Prerequisite: English 2301 [11.1].

## ENGL 3304 Writing Poetry I

4 hours; 4 credits
Workshop in writing poetry. Experiments in form and language.
(Not open to students who have completed English 16.)
Prerequisite: English 2301 [11.1].

## ENGL 3305 Writing Poetry II

4 hours; 4 credits
Continuation of English 3304 [16.1].
Prerequisite: English 16 or 3304 [16.1].

## ENGL 3306 Writing Plays I

4 hours; 4 credits
Workshop in writing plays. Dramatic construction and characterization. (Not open to students who have completed English 17.)

Prerequisite: English 2301 [11.1].

## ENGL 3307 Writing Plays II

4 hours; 4 credits
Continuation of English 3306 [17.1].
Prerequisite: English 17 or 3306 [17.1].

## ENGL 3308 Writing for Musical Theater

4 hours; 4 credits
Workshop in writing the book and lyrics for a one-act musical comedy or for serious musical theater. No knowledge of music is necessary.

Prerequisite: English 2301 [11.1].

## ENGL 4301 Advanced Seminar in Creative Writing

4 hours; 4 credits
Capstone seminar in the craft of creative writing (fiction, poetry, playwriting). Focus on both experimentation and development of
personal style through writing exercises and workshops. Emphasis placed on mutual influences of the three genres. Topics for discussion include: narrative and poetic techniques; writing practices; revision; publishing. Short readings and individual conferences. (Not open to students who have taken English 5301 [69.3] with this topic.)

Prerequisite: English 3302 [15.2], 3305 [16.2], or 3307 [17.2]; or permission of the instructor.

## ENGL 5301 Advanced Tutorial in Creative Writing

Minimum of 9 hours conference and independent work§; 3 credits Writing a substantial piece of prose or poetry such as a short novel, play, or group of short stories, poems, or articles. Students may take this course for credit twice but may not repeat topics.

Prerequisite: English 3302 [15.2] or 3305 [16.2] or 3307 [17.2] and permission of the instructor.

## Journalism

## ENGL 4404 Advanced Multimedia Journalism

3 hours; 3 credits
Advanced techniques in reporting local news stories with video and new technology as it develops. Use of social media.

Prerequisite: English 2401; English 2403 [3407].

## ENGL 4405 History of News: From Colonial Times to the Present

3 hours; 3 credits
Lectures, discussion, readings and films relating to the history of journalism from Colonial times though the present.

Prerequisite: English 1010 [1] or 1.7, and either History 3402 [14] or Core Curriculum 1220 [2.2], or History 3005, or an equivalent course.

## The English language

## ENGL 3520 History of the English Language

4 hours; 4 credits
Origins of the English language and its development to the present.
This course is the same as Linguistics 3027.
Prerequisite: English 1010 [1]

## ENGL 3521 Applied Linguistics

4 hours; 4 credits
Introduction to key issues in the field of applied linguistics, including theories and concepts related to language learning, language analysis, and language assessment presented through the examination of the teaching of English language learners and language minority students. The linguistic, psychological, sociolinguistic, and pedagogical parameters of human language learning; source materials and approaches for investigating language learning processes; bidialectalism, intercultural communication, forensic linguistics, language policy, and discourse analysis. This course is the same as Linguistics 3028.

Prerequisite: English 1010 [1]
ENGL 3522 Practical English Grammar
4 hours; 4 credits

Essentials of the structure and nature of the English language. A systematic study of English grammar: the elements and processes of the sound system, the system of grammatical markers, the syntax and the semantic systems of English.

Prerequisite: Eng. 1010 [1] or 1.7.

## ENGL 3523 Introduction to Semiology

4 hours; 4 credits
The study of semiology as a branch of linguistics. Its influence on the analysis of language, culture, and text. The nature of structures and systems of signs in relationship to literature and culture.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3524 Sociolinguistics

4 hours; 4 credits
The study of language as it is used by various social groups. Language and gender, language and culture. Creole languages, Black English, linguistic change. This course is the same as Anthropology 3390 and Linguistics 3029. Starting Fall 2019 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

Prerequisite: English 1010 [1] or permission of the chairperson.

## ENGL 3525 Introduction to Natural Language Processing

4 Hours; 4 Credits
Introduction to the principles, history, and accomplishments of natural language processing from the perspective of the structure of human language. Overview of the techniques used by natural language processing to deal with the phonetics, phonology, morphology, syntax, and semantics of natural languages. Interaction between ideas in the philosophy of language and developments growing out of natural language processing. Applications of natural language processing to a wide range of realworld contexts. This course is the same as Computer and Information Science 2830 and Linguistics 3023.

Prerequisite: Computer and Information Science *1110 [1.5] (or co-requisite): Computer and Information Science 2210 [11] and Linguistics 2001 [1].

## English literature

## ENGL 2001 Literature, Ethnicity, and Immigration

3 hours; 3 credits
Exploration of ways in which ethnicity, migration, and immigration are represented in literature. Development of students' understanding of aesthetics of literature and acquaintance with new approaches to reading. Topics include literary conceptions of national belonging, ethnic identity, home and family, immigration, memory, and diaspora. (Not open to students who have completed Core Curriculum 3101.) 2017-2018: Satisfies Pathways College Option requirement. Starting Fall 2018 Satisfies Pathways Flexible Core US Experience in Its Diversity requirement.

Prerequisite or corequisite: English 1010 [1].

## ENGL 2002 Ideas of Character in the Western Literary Tradition <br> 3 hours; 3 credits <br> Approaches to the Western Tradition: study of a selection of texts from the Western literary tradition or canon; emphasis on the

connections between the texts, cultural context, and origins of literary canons; examination of change in canons over time in response to social and aesthetic pressures. (Not open to students who have completed Core Curriculum 3102.) 2017-2018: Satisfies Pathways College Option requirement. Starting Fall 2018 Satisfies Pathways Flexible Core Individual and Society requirement.

Prerequisite or corequisite: English 1010 [1].

## ENGL 2003 Italian American Literature and Film

3 hours; 3 credits
Exploration of the possibilities for storytelling in the genres of Italian American literature and film. The focus of discussion is character development, structure, and point of view, as well as the conflict between stereotype and anti-stereotype. (Not open to students who have completed Core Curriculum 3103.) 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement.

Prerequisite or corequisite: English 1010 [1].

## ENGL 2004 Literature and Film

3 hours; 3 credits
Exploration of the intersection of literature and film. Development of students' understanding of aesthetics of language and literature and acquaintance with new approaches to reading. Topics include narrative structure; character; setting; point of view; representation of emotion and thought. This course is the same as Classics 2104. (Not open to students who have completed Core Curriculum 3104.) 2017-2018: Satisfies Pathways College Option requirement. Starting Fall 2018 Satisfies Pathways Flexible Core World Cultures and Global Issues requirement.

Prerequisite or corequisite: English 1010 [1].

## ENGL 2006 Text/Context

## 3 hours; 3 credits

Study of a text in its literary, historical, and cultural contexts across time. Focus on textual analysis; literary, historical, and cultural influences on the production of the text; and responses to the text across time. Reactions to the text in different media. (Not open to students who have completed Core Curriculum 3106.) 2017-
2018: Satisfies Pathways College Option requirement. Starting Fall 2018 Satisfies Pathways Flexible Core Individual and Society requirement.

Prerequisite or corequisite: English 1010 [1].

## ENGL 2007 The Emergence of the Modern

## 3 hours; 3 credits

Study of a series of major works in literature, from the fourteenth to the twentieth centuries, with special attention to the development of secular culture. Attention to the rise of the bourgeoisie, the growth of individualism and of subjectivity, and the transformations in codes of representation. (Not open to students who have completed Core Curriculum 3107.) 2017-2018: Satisfies Pathways College Option requirement. Starting Fall 2018 Satisfies Pathways Flexible Core World Cultures and Global Issues requirement.

Prerequisite or corequisite: English 1010 [1].
ENGL 2008 The Quest for Ethnic, Cultural, and National Identities in Literature
3 hours; 3 credits

A thematic approach to literature. Themes to be chosen range from the global to the local, from the abstract to the concrete. Focus on fostering connections with other disciplines in a manner that enhances students' understanding of the diverse strands that make up communities, traditions, and values. Exploration of how East European, Latin American, and Indian novels from the late 1960s to the present interpret the question of ethnic, cultural, and national identities. (Not open to students who have completed Core Curriculum 3108.) Starting Fall 2018 Satisfies Pathways Flexible Core World Cultures and Global Issues requirement.

Prerequisite or corequisite: English 1010 [1].

## ENGL 2009 Introduction to Literary Studies

3 hours; 3 credits
This course introduces the academic discipline of literary study, involving a threefold emphasis: (1) on the close reading of texts, attending to their sounds and structures, modes and genres; (2) on recognizing literature as a conversation between texts across space and time; and (3) on the history of literary critical methods, terms, and concepts. *English courses numbered lower than 2115 may not be counted toward the English major. Satisfies Pathways Flexible Core World Cultures and Global Issues requirement.

Prerequisite: English 1012, or by permission of the chair of the Department.

## ENGL 2120 Overview of Literary Study I Representative Selections of World Literature

## 4 hours; 4 credits

Studies in literature and culture from the Middle Ages to the Late Eighteenth Century. Studies in the literature and culture of the Middle Ages, the Renaissance, and the eighteenth century. Part I of a two-course general survey and overview with three principal focuses: 1) the major literary and intellectual movements of world literature, in historical perspective, 2) the close reading of texts in the several genres, and 3) literature as viewed through the various lenses of contemporary theory and critical discourses.

Prerequisite: English 1010 [1] or [1.7.]

## ENGL 2121 Overview of Literary Study II: Representative Selections of World Literature

## 4 hours; 4 credits

Studies in literature and culture from nineteenth-century Romanticism to the modernist and postmodernist movements. Part Il of a two-course general survey and overview with three principal focuses: 1) the major literary and intellectual movements of world literature, in historical perspective, 2) the close reading of texts in the several genres, and 3) literature as viewed through the various lenses of contemporary theory and critical discourses.

Prerequisite: English 1010 [1] or 1.7

## ENGL 3111 Medieval English Literature

4 hours; 4 credits
Epic, chronicle, and romance. The Arthurian tradition.
Development of allegorical writing. The lyric.
Prerequisite: English 1010 [1] or 1.7.

## ENGL 3112 Chaucer

4 hours; 4 credits
The Canterbury Tales and such earlier works as The House of Fame and Troilus and Criseyde. Their relation to the language,
literary background, and life of the author.
Prerequisite: English 1010 [1] or 1.7.
ENGL 3120 Poetry and Prose of the Sixteenth Century: The Early Renaissance
4 hours; 4 credits
English poetry from Wyatt through Shakespeare's sonnets. Edmund Spenser. English prose from Thomas More through Richard Hooker.

Prerequisite: English 1010 [1] or 1.7.
ENGL 3121 Poetry and Prose of the Seventeenth Century
4 hours; 4 credits
English poetry from Donne through Marvell. Prose from Francis Bacon through Thomas Hobbes.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3122 Shakespeare I

4 hours; 4 credits
Major Shakespearean plays selected from the chronicles, comedies, and tragedies. Intensive reading.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3123 Shakespeare II

4 hours; 4 credits
Topics in Shakespeare in the plays and nondramatic writings.
Prerequisite: English 1010 [1] or 1.7.
ENGL 3124 English Drama from the Beginnings to 1642, Exclusive of Shakespeare
4 hours; 4 credits
Mystery plays, the revenge tragedy, pastoral comedy, comedy of humors, and the development of blank verse. Such writers as Lyly, Dekker, Marlowe, Jonson, Webster, Beaumont and Fletcher, and Middleton.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3125 Milton

4 hours; 4 credits
Major poetry and prose in the light of the literary background and life of the poet. Intensive readings from Paradise Lost.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3131 English Literature of the Age of Reason

4 hours; 4 credits
Major neoclassical and preromantic literature. Poetry and prose of such writers as Dryden, Pope, Swift, Johnson, Addison and Steele, Burke, and Gray.

Prerequisite: English 1010 [1] or 1.7.
ENGL 3132 English Drama of the Restoration and the Eighteenth Century
4 hours; 4 credits
Comedy of manners and the heroic tragedy; beginnings of bourgeois drama. Plays of such writers as Dryden, Congreve, Wycherley, Farquhar, Goldsmith, and Sheridan.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3133 The Eighteenth-Century Novel

4 hours; 4 credits
Development of prose fiction as the main vehicle for portraying the middle class and its values. Such writers as Richardson, Defoe, Fielding, Sterne, and Austen.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3140 Chief Romantic Poets

4 hours; 4 credits
Growth of romanticism in the poetry of Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3141 Chief Victorian Poets

4 hours; 4 credits
Poetry of Browning, Tennyson, Arnold, and Hopkins studied in detail. Supplementary reading from such poets as the Rossettis, Swinburne, Morris, and Clough.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3142 Major English Novels of the Nineteenth Century

4 hours; 4 credits
Artistic development and growth of the novel as social criticism.
Such writers as Dickens, Thackeray, the Bront's, and George Eliot.
Prerequisite: English 1010 [1] or 1.7.

## ENGL 3143 Thematic Studies in the Nineteenth-Century Novel

4 hours; 4 credits
Study of a topic in either the early or late nineteenth-century novel. Examples of topics include: "Victorian Mystery"; "Domestic
Realism"; "The Marriage Novel"; "The Novel of Social Realism"; "Victorian Fantasy and Fairy Tale." Topic to be selected by instructor.

Prerequisite: English 1010.

## ENGL 3145 British Literature in Transition from 1885 to 1914 <br> 4 hours; 4 credits

Significant developments in the novel, poetry, and drama between the Victorian period and the modern period. Work of such writers as George Moore, Wilde, Shaw, Wells, Hardy, Yeats, and Kipling and of such groups as the Aesthetes, Decadents, Activists, Symbolists, and Imagists.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3171 Modern British Fiction to 1950

4 hours; 4 credits
Development of prose fiction as a vehicle for the examination of self and society. Such writers as Joyce, Woolf, Conrad, Huxley, Lawrence, and Forster.

Prerequisite: English 1010 [1] or 1.7.
ENGL 3172 Modern British Poetry

4 hours; 4 credits
Poetry of such writers as Yeats, Graves, Auden, Lawrence, and Dylan Thomas.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3173 Modern Irish Literature and Culture

4 hours; 4 credits
Irish literature and culture. Yeats, Joyce, Synge, O'Casey, and others. Historical, political, and cultural backgrounds. Irish nationalism, Gaelic Ireland, literary Dublin.

Prerequisite: English 1010 [1] or 1.7.

## Postmodernism and contemporary discourses

## ENGL 3154 Contemporary American Writing

4 hours; 4 credits
Novels, stories, poems, and plays from World War II to the present; such writers as Salinger, Mailer, Ellison, Morrison, Lowell, Plath, Ginsberg, Tennessee Williams; and a sampling of recent work.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3162 Black Women's Fiction

## 4 hours; 4 credits

Black women novelists, short story writers, and essayists. Crosscultural comparisons with African and Caribbean novelists. Readings of selected essays in Black feminist criticism. This course is the same as Africana Studies 3260 and Women Studies 3117.

Prerequisite: English 1010 [1] or 1.7.
ENGL 3166 Contemporary U.S. Women Writers: Diverse Cultural Perspectives
4 hours; 4 credits
Literature of selected contemporary Native American, AfricanAmerican, Latina, Asian-American, and other women writers, analyzed from the perspective of feminist literary theories. A comparative course focusing on the literature of two or more groups. This course is the same as Women's Studies 3115.

Prerequisite: Women's Studies 1001 [12]; English 1010 [1] or 1.7.
ENGL 3174 Contemporary British Writing from 1950 to the Present
4 hours; 4 credits
Plays, novels, and poems of such writers as Beckett, Pinter, Osborne, Behan, Lessing, Anthony Powell, Murdoch, Durell, Spark, Ted Hughes, Charles Tomlinson, Thom Gunn, and Thomas Kinsella.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3180 Literature and Cultural Diversity

4 hours; 4 credits
Analysis of differing uses and evaluation of literature. Focus on standard texts (short stories, plays, novels, and poems) as well as representative works which emerge from the family and home communities of the students and/or different cultures and historical periods.

Prerequisite: English 1010 [1] or 1.7.
ENGL 3187 Women and Literature

4 hours; 4 credits
Sexual roles and the sources of sexual conflict in English and
American literature. Problems of sensibility, style, and audience.
Function of literary images of women.
Same as Women's and Gender Studies 3119.
Prerequisite: one of the following: English 1010 [1] or 1.7.

## ENGL 3191 Literature and Psychology

4 hours; 4 credits
Relationship of literature to psychological theories in specific readings. Freudian, Jungian, and/or other psychological techniques applied, compared, and evaluated as tools of literary criticism. This course is the same as Comparative Literature 3628.

Prerequisite: one of the following: English 1010 [1] or 1.7.

## ENGL 3193 Contemporary Literary Criticism and Theory

4 hours; 4 credits
Major approaches to literature since 1960. Topics may include semiotics, structuralism, post-structuralism, deconstruction, narratology, new historicism, feminist theory, psychoanalytic criticism, Marxism, and social constructionism. This course is the same as Comparative Literature 3626.

Prerequisite: English 1012 [2] or 2.7.
ENGL 3194 Introduction to Postcolonial Literature and Theory
4 hours; 4 credits
Literary works and theoretical paradigms relating to the culture of European imperialism and its aftermath. Diversity of works from many parts of the formerly colonized world to introduce the global significance of postcolonialism. Topics include: race and representation, Orientalism and the production of knowledge, Empire and exoticism, gender and nationalism, and multiculturalism and diasporic identities. This course is the same as Africana Studies 3245 and Comparative Literature 3627.

Prerequisite: English 1012 [2] or 2.7.
ENGL 4109 Seminar in Postmodernism and Contemporary Discourses
4 hours; 4 credits
Study in a genre, theme, or movement in Postmodernism and contemporary discourses with emphasis on intensive writing, critical analysis, and research methodologies. Topic is selected by the instructor. Course description may be obtained in the department office before registration.

Prerequisite: English 1012 [2] or 2.7; English 2121 [52]; one advanced English elective or permission of the chairperson.

## Special studies \& approaches

## ENGL 3157 American Folklore

4 hours; 4 credits
Myths, legends, tales, proverbs, riddles, songs, dances, beliefs, rituals, celebrations, and folk art of American folk groups. Ethnic, regional, and occupational folklore. The relationship of oral folk culture to popular expression and written literature. Independent work in collecting folklore. This course is the same as American Studies 3402.

## ENGL 3158 African-American Folklore

## 3 hours; 3 credits

African-American oral tradition and African-American culture. Survival of the African culture. Oral history, spirituals, folktales, blues, toasts, dozens, etc. Uses of the oral tradition in literature. This course is the same as Africana Studies 3230.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3159 New York City Folklore

## 4 hours; 4 credits

Folklore of the streets and neighborhoods of New York City. The urban environment as a region generating its own folklore and traditions. Customs, language, and symbols of urban life, past and present. Introduction to problems of fieldwork and methods of collecting urban folklore. This course is the same as American Studies 3404.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3165 The Immigrant Experience in Literature, Film, and Photography

4 hours; 4 credits
The experience of immigrant groups as recorded in autobiography, folklore, and fiction. Becoming an American as recorded in photographs and film. Exploring relationships between text and image. This course is the same as American Studies 3304. (Not open to students who have completed American Studies [70].)

Prerequisite: one of the following: English 1010 [1] or 1.7.

## ENGL 3170 Modern Drama to 1950

4 hours; 4 credits
Modern British and American drama. Continental influences.
Prerequisite: English 1010 [1] or 1.7.

## ENGL 3177 Theories and Practice of Composition

4 hours; 4 credits
Workshop in understanding the nature of writing and how to teach it. Writing as a process: invention, revision, editing; effective structures; writing about literature; experimenting with genres; writing as a way of learning. Social and linguistic influences on writing. Responding to other people's work. Frequent in-class writing; several short papers taken through drafts; compilation of a portfolio.

Prerequisite: English 1012 [2].

## ENGL 3181 From Epic Tradition to Epic Vision

4 hours; 4 credits
Western literature illustrating developments in the epic genre from the Middle Ages to the present. Adjustment of the epic tradition to differing cultural values through a continual process of translation, imitation, adaptation, and transformation of epic form and content which has led to expressions of the modern "epic vision." This course is the same as Comparative Literature 3601.

Prerequisite: English 1010 [1] or 1.7.
ENGL 3182 The Lyric Tradition: Imagery, Structure, and Meaning
4 hours; 4 credits

How to read lyric poetry effectively. A comprehensive acquaintance with traditional imagery, traditional versification, lyric structure, lyric "concentration," traditional themes, and
conventional forms (e.g., sonnet, quatrain, couplet). Representative lyrics of the sixteenth to twenty-first centuries, including those that conform to lyric traditions (e.g., Marvell, Frost), rebel against them (e.g., Donne, Eliot), and put both conformity and rebellion in play at once (e.g., Dickinson, Williams). The genre's diversity, aesthetic value, and the values it implies.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3183 The Bible as Literature

4 hours; 4 credits
Representative Biblical selections evaluated by literary criteria. Origin and development of the English Bible as a literary classic.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3184 Comedy

4 hours; 4 credits
The comic mode in dramatic and nondramatic forms of literature. Aesthetic, philosophical, and psychological theories of comedy. This course is the same as Comparative Literature 3604.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3185 Tragedy

4 hours; 4 credits
The tragic mode in dramatic and nondramatic forms of literature. Aesthetic, philosophical, and psychological theories of tragedy. This course is the same as Comparative Literature 3603.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3186 Romance

4 hours; 4 credits
An examination of romance as a literary genre: the historical development of its conventions, narrative formulas, and characteristic themes; its relationships with and contributions to other forms of literature. This course is the same as Comparative Literature 3605.

## Prerequisite: English 1010 [1] or 1.7.

## ENGL 3188 Makings of Pastoral Myth

3 hours; 3 credits
Pastoral, a powerful mode of mythic imagination, studied in its roots and transformations: plots and themes (herdsmen as lovers, rulers, and poets; kings as herdsmen and poets) originating in ancient Mediterranean cultures and still at work in imagination today. Return and change of basic mythemes to meet the challenges of new times and worlds. This course is the same as Classics 3224 and Comparative Literature 3602.

Prerequisite: English 1010 [1] or 1.7 or permission of the chairperson.

## ENGL 3189 Literature for Young People

4 hours; 4 credits
Literature appropriate for students in elementary and secondary schools. Fundamentals of literature and basic reading of interest to young people.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3190 The Literature of Fantasy

4 hours; 4 credits
Fantasy and its many modes, including the gothic tale, the literary fairy tale, the animal tale, surrealism and the absurd, time and space travel, and futuristic fiction. This course is the same as Comparative Literature 3612.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3192 Special Topics in Literature

3 hours; 3 credits
Themes in the literature of different periods or in the work of several authors. Topics vary from term to term. Topic is selected by the instructor. Course description may be obtained in the department office before registration. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: one of the following: English 1010 [1] or 1.7.

## ENGL 3195 Directing Television Adaptation. Analysis and Production

2 hours lecture, 2 hours television laboratory; 3 credits A workshop combining literary and technical skills. In-depth analysis of scenes from critically acclaimed adaptations of literary and dramatic texts. Principles and techniques of directing adaptation for television. Students learn elements of all phases of production: research and interpretation, working with actors, studio production techniques, teleplay director's craft, editing and mixing sound in multi-camera live environment and post production. Students direct their own interpretation of a script provided by professor. For the final common class project students choose one production position, according to their interests and skills. This course is the same as Television, Radio and Emerging Media 3850.

Prerequisite: A course in dramatic literature or Television, Radio and Emerging Media 3824 [24.1] or 3861 [26.1] or 3871 [27.1].

## ENGL 3196 Orality, Literacy, and Computer Technology

3 hours; 3 credits
The evolution from orality to writing, to print culture, to computer technology, and the relationship of each to the cognitive process and human culture. (This course is the same as Communication 3000)

Prerequisite: Communication 1001 [1] and English *1012 [2].

## ENGL 5100 Internship

7 hours field work, 1 hour conference; 3 credits
Students work seven hours a week in editing, technical writing, and report writing, or in allied fields under supervision. Final report based on the internship experience. Students may take this course for credit twice but may not repeat topics.

Prerequisite: 12 credits in advanced English electives and permission of the chairperson.

## ENGL 5101 Independent Research

Minimum of 9 hours conference and independent work§; 3 credits Independent research on a major writer or group of writers or special problem supervised by a faculty member. Approved topic. Periodic conferences. Research paper. Students may take this
course for credit twice.
Prerequisite: English 1012 [2] or 2.7 and permission of the instructor.

## ENGL 5102 Independent Study

Minimum of 9 hours conference and independent work§; 3 credits Independent study of a major writer, group of writers, or special problem supervised by a faculty member. Approved reading. Periodic conferences. Final examination. Students may take this course for credit twice.

Prerequisite: English Prerequisite: English 1012 [2] or 2.7 and permission of the instructor

## American literature

## ENGL 3151 American Renaissance

4 hours; 4 credits
The achievement of Emerson, Hawthorne, Melville, Poe, Thoreau, and Whitman; some attention to the Puritan heritage.

Prerequisite: English 1010 [1] or 1.7

## ENGL 3152 American Realism and Naturalism

4 hours; 4 credits
The passage of American literature into the twentieth century with such poets and fiction writers as James, Dickinson, Twain, Crane, Chopin, Wharton, Dreiser, and Frost.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3153 American Modernism

4 hours; 4 credits
Artistic exploration and experiment, as in the fiction of Stein, Fitzgerald, Hemingway, Faulkner, and Wright, and in the poetry of Pound, W.C. Williams, Eliot, Moore, and Stevens.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3156 Private Lives: American Autobiography

4 hours; 4 credits
Autobiography and its special importance to the process of defining the self in America. Examination of the theme of the New World and the "new" man and the "new" woman. The relation between private identity and national character as revealed in the autobiographical writings of immigrants, workers, and plainfolk. This course is the same as American Studies 3302.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3160 African-American Literature to 1930

4 hours; 4 credits
Literature from the colonial period through the Harlem Renaissance. Slave narratives, rhetoric of abolition, formal and vernacular aesthetics. Such writers as Phyllis Wheatley, David Walker, Frederick Douglass, Harriet Jacobs, Booker T. Washington, Paul L. Dunbar, Charles W. Chesnutt, James Weldon Johnson, W.E.B. Du Bois, Countee Cullen, Jean Toomer, Claude McKay, Sterling Brown, Zora Neale Hurston, Langston Hughes. This course is the same as Africana Studies 3220.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3161 Modern African-American Literature

4 hours; 4 credits
Literature from 1930 to the present. Naturalism and protest, the Black Aesthetic, women's literature. Such writers as Richard Wright, Ralph Ellison, Gwendolyn Brooks, Robert Hayden, James Baldwin, Amiri Baraka, Audre Lorde, Alice Walker, Toni Morrison. This course is the same as Africana Studies 3221.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3163 Brooklyn in Literature

## 4 hours; 4 credits

Selected fiction, drama, and poetry set in various Brooklyn neighborhoods, with emphasis on setting, historical background, and such themes as the assimilation of immigrants and urban alienation.

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3164 Introduction to Italian American Literature

## 4 hours; 4 credits

The struggle and development of a distinctive Italian American tradition in literature. Discussion of language, class, assimilation, gender, literary form, and the search for a usable past.

Prerequisite: English 1010 [1].

## ENGL 3167 Transnational America

4 hours; 4 credits
Literary works, historical documents, and theoretical paradigms that situate U.S. cultural production in relation to places outside its borders, with particular attention to the Western hemisphere. Topics include: globalization, first contact between Europe and the Americas, cultural dimensions of U.S. foreign policy, forms of expression arising from diaspora experience, and the reception of U.S. culture abroad. This course is the same as American Studies 3307.

Prerequisite: English 1010.

## ENGL 3169 Black Theater

3 hours; 3 credits
Lectures, studies and workshops in Black theater. Liaison with professional and community theater. This course is the same as Africana Studies 3225 and Theater 2502.

## Seminars

## ENGL 4101 Seminar in the Middle Ages

4 hours; 4 credits
Study in a genre, theme, or movement in the Middle Ages with emphasis on intensive writing, critical analysis, and research methodologies. Topic is selected by the instructor. Course description may be obtained in the department office before registration.

Prerequisite: English 1012 [2] or 2.7; one advanced English elective, or permission of the chairperson.

## ENGL 4102 Seminar in the Renaissance

4 hours; 4 credits
Study in a genre, theme, or movement in the Renaissance with
emphasis on intensive writing, critical analysis, and research methodologies. Topic is selected by the instructor. Course description may be obtained in the department office before registration.

Prerequisite: English 1012 [2] or 2.7; one advanced English elective, or permission of the chairperson.

## ENGL 4103 Seminar in the Eighteenth Century

4 hours; 4 credits
Study in a genre, theme, or movement in the eighteenth century with emphasis on intensive writing, critical analysis, and research methodologies. Topic is selected by the instructor. Course description may be obtained in the department office before registration.

Prerequisite: English 1012 [2] or 2.7; one advanced English elective, or permission of the chairperson.

## ENGL 4104 Seminar in the Nineteenth Century and Romanticism

4 hours; 4 credits
Study in a genre, theme, or movement in the nineteenth century and Romanticism with emphasis on intensive writing, critical analysis, and research methodologies. Topic is selected by the instructor. Course description may be obtained in the department office before registration.

Prerequisite: English 1012 [2] or 2.7; one advanced English elective or permission of the chairperson.

## ENGL 4105 Seminar in American Literature and Culture

4 hours; 4 credits
Study in a genre, theme, or movement in American literature and culture with emphasis on intensive writing, critical analysis, and research methodologies. Topic is selected by the instructor. Course description may be obtained in the department office before registration.

Prerequisite: English 1012 [2] or 2.7; and one advanced English elective or permission of the chairperson.

## ENGL 4106 Seminar in British and Anglophone Authors

4 hours; 4 credits
Study of an author or authors in British and Anglophone literature with emphasis on intensive writing, critical analysis, and research methodologies. Topic is selected by the instructor. Course description may be obtained in the department office before registration.

Prerequisite: English 1012 [2] or 2.7; one English advanced elective or permission of the chairperson.

## ENGL 4107 Seminar in American Authors

4 hours; 4 credits
Study of an author or authors in Anglophone literature of the Americas with emphasis on intensive writing, critical analysis, and research methodologies. Topic is selected by the instructor. Course description may be obtained in the department office before registration.

Prerequisite: English 1012 [2] or 2.7; one English advanced elective or permission of the chairperson.

## ENGL 4108 Seminar in Modernism

## 4 hours; 4 credits

Study in a genre, theme, or movement in Modernism with emphasis on intensive writing, critical analysis, and research methodologies. Topic is selected by the instructor. Course description may be obtained in the department office before registration.

Prerequisite: English 1012 [2] or 2.7; one advanced English elective or permission of the chairperson.

## ENGL 4110 Queer Literary Studies

## 4 hours; 4 credits

Introduction to the theory and practice of queer literary studies. Focused examination of relevant literary texts from one or more historical and/or national tradition, as well as other genres and media.

Prerequisite: English 1012 [2] or 2.7; one advanced English elective, or permission of the chairperson.

## ENGL 4111 Seminar in Children's and Young Adult <br> Literature

4 hours; 4 credits
Study of a topic or an author of Children's and Young Adult Literature with emphasis on intensive writing-critical and "creative"-on textual and culture analysis, and on methodologies appropriate to research in the literature of childhood. Topic is selected by the instructor.

Prerequisite: English 1012 [2] or 2.7; one advanced English elective, or permission of the chairperson.

## ENGL 4112 Interdepartmental Humanities Seminar

4 hours; 4 credits
A significant recurrent theme in Western literature and philosophy, with emphasis on intensive writing, critical analysis, and research methodologies. Topic is selected by the instructor. Course description may be obtained in the department office before registration. Offered jointly by the Departments of English, Classics, and Philosophy. This course is the same as Classics [74.7], Comparative Literature 4602, Philosophy 4120.

Prerequisite: English 1012 [2] or 2.7; two of the following: English 2120 [51]; English 2121 [52]; one advanced elective in the major field; and permission of the instructor(s) and the chairperson.

## ENGL 4113 Introduction to History and Literature

## 4 hours; 4 credits

An introductory seminar for students in the history and literature concentration. Introduction to the concept of interdisciplinarity and to fundamental methods of analyzing history and literature.

Prerequisite: English 1012.

## ENGL 4114 Theory of History and Literature

4 hours; 4 credits
A capstone seminar for students in the history and literature concentration. Close examination of the methodologies practiced in the study of history and literature. Focus on approaching literary texts in historical and theoretical contexts. Integration of methodologies and independent research resulting in a final project intended as the groundwork for a senior thesis.

Prerequisite: English 4113 or permission of the chairperson.

## ENGL 5600 Independent Research

Minimum of 9 hours conference and independent work§; 3 credits Independent research in a major writer or group of writers or special problem supervised by a faculty member. Approved topic. Periodic conferences. Research paper.

Prerequisite: English 1012 [2] or 2.7 and an average grade of B or higher in a program, approved by the chairperson, of advanced English Department courses and permission of the instructor and the chairperson.

## Honors courses

## ENGL 5103 Senior Thesis

Minimum of 9 hours conference and independent work§; 3 credits Individual study and research under supervision of a faculty member. Students in English 5103 [89] or 5104 [89.1] will select a topic and prepare a research prospectus, outline, and bibliography. Students in English 5103 [89] and 5105 [89.2] will conduct the research and write the final paper.

Prerequisite: Senior standing, an average of B or higher in advanced English Department electives, a grade of B or higher in an English department seminar (English 4106 [70], 4107 [71], 4112
[74.7], 4101 [79.1], 4102 [79.2], 4103 [79.3], 4104 [79.4], 4105 [79.5], 4108 [79.6], 4109 [79.7], or Comparative Literature 4601 [74], 74.9), and permission of the instructor and department chairperson.

## ENGL 5104 Senior Thesis I

Minimum of 9 hours conference and independent work§, 3 credits Individual study and research under supervision of a faculty member. Students in English 5103 [89] or 5104 [89.1] will select a topic and prepare a research prospectus, outline, and bibliography. Students in English 5103 [89] and 5105 [89.2] will conduct the research and write the final paper.

Prerequisite: Senior standing, an average of B or higher in advanced English Department electives, a grade of B or higher in an English department seminar (English 4106 [70], 4107 [71], 4112 [74.7], 4101 [79.1], 4102 [79.2], 4103 [79.3], 4104 [79.4], 4105 [79.5], 4108 [79.6], 4109 [79.7], or Comparative Literature 4601 [74], 74.9), and permission of the instructor and department chairperson.

## ENGL 5105 Senior Thesis II

Minimum of 9 hours conference and independent work§, 3 credits Individual study and research under supervision of a faculty member. Students in English 5103 [89] or 5104 [89.1] will select a topic and prepare a research prospectus, outline, and bibliography. Students in English 5103 [89] and 5105 [89.2] will conduct the research and write the final paper.

Prerequisite: A grade of B or higher in English 5103 [89] or 5104 [89.1] and permission of the instructor and department chairperson.

## Genre courses

## CMLT 3601 From Epic Tradition to Epic Vision

4 hours; 4 credits
Western literature illustrating developments in the epic genre from the Middle Ages to the present. Adjustment of the epic tradition to
differing cultural values through a continual process of translation, imitation, adaptation, and transformation of epic form and content which has led to expressions of the modern "epic vision." This course is the same as English 3181. (Not open to students who have completed Comparative Literature [55].)

Prerequisite: English 1010 [1] or 1.7.

## CMLT 3602 Makings of Pastoral Myth

## 3 hours; 3 credits

Pastoral, a powerful mode of mythic imagination, studied in its roots and transformations: plots and themes (herdsmen as lovers, rulers, and poets; kings as herdsmen and poets) originating in ancient Mediterranean cultures and still at work in imagination today. Return and change of basic mythemes to meet the challenges of new times and worlds. This course is the same as Classics 3224 and English 3188.

Prerequisite: English 1010 [1] or 1.7 or permission of the instructor.

## CMLT 3603 Tragedy

4 hours; 4 credits
The tragic mode in dramatic and nondramatic forms of literature. Aesthetic, philosophical, and psychological theories of tragedy. This course is the same as English 3185. (Not open to students who have completed Comparative Literature [56].)

Prerequisite: English 1010 [1] or 1.7.

## CMLT 3604 Comedy

4 hours; 4 credits
The comic mode in dramatic and nondramatic forms of literature. Aesthetic, philosophical, and psychological theories of comedy. This course is the same as English 3184. (Not open to students who have completed English [58].)

Prerequisite: English 1010 [1] or 1.7.

## CMLT 3605 Romance

4 hours; 4 credits
An examination of romance as a literary genre: the historical development of its conventions, narrative formulas, and characteristic themes; its relationships with and contributions to other forms of literature. This course is the same as English 3186. (Not open to students who completed English 3192 [59] or Comparative Literature 3629 [40.2] in spring, 1991, or spring, 1993.)

Prerequisite: English 1010 [1] or 1.7.

## CMLT 3606 European Novel of the Nineteenth Century

4 hours; 4 credits
Representative works of such authors as Stendhal, Balzac, Flaubert, Zola, Manzoni, Dostoevski, Tolstoi.

Prerequisite: one of the following: English 1010 [1] or 1.7.

## CMLT 3607 Modern European Novel

## 4 hours; 4 credits

European novel from 1900 to 1935. Representative works of such authors as Proust, Gide; Thomas Mann, Kafka, Hesse; Unamuno.
(Not open to students who have completed Comparative Literature 51.)

Prerequisite: English 1010 [1] or 1.7.

## CMLT 3608 Modern Short Story and Novella

4 hours; 4 credits
Comparative study of the shorter forms of prose fiction. Reading and discussion of such works as Gogol's The Overcoat, Dostoevski's Notes from the Underground, Flaubert's A Simple Heart, Mann's Death in Venice, and Kafka's The Metamorphosis. (Not open to students who have completed Comparative Literature 5 or 13.)

Prerequisite: English 1010 [1] or 1.7.

## CMLT 3610 Modern European Drama

4 hours; 4 credits
Development of the drama from 1870 to 1935. Ibsen to the postWorld War I period. Plays by such authors as Ibsen, Strindberg; Hauptmann, Schnitzler, Hofmannsthal, Wedekind, Kaiser, Brecht; Maeterlinck, Claudel, Cocteau; Chekhov, Gorky; Pirandello; Lorca. (Not open to students who have completed Comparative Literature 70.)

Prerequisite: English 1010 [1] or 1.7.

## CMLT 3612 Literature of Fantasy

4 hours; 4 credits
Fantasy and its many modes, including the gothic tale, the literary fairy tale, the animal tale, surrealism and the absurd, time and space travel, and futuristic fiction. This course is the same as English 3190.

Prerequisite: English 1010 [1] or 1.7.

## CMLT 3613 Folk Literature and Fairy Tale

4 hours; 4 credits
Themes, patterns, and structures of folk literature in literate societies of Europe and Asia from the Middle Ages to the present. Literary application of folklore and legendry. Such narrative forms as the fairy tale, the fable, and fabliaux.

Prerequisite: one of the following: English 1010 [1] or 1.2 or 1.7.

## CMLT 3632 African Oral Literature

4 hours, 4 credits
The course explores the oral tradition in Africa. It gives specific attention to its interpretations, its compositions, and its transformation. It introduces the student to poetry, prose, epics, folktales, sagas storytelling, folk drama, drum language praise and freedom songs, contemporary styles of oral literature and the performers who shape these forms. This course is the same as Africana Studies 3201.

Prerequisites: English 1010 [1]

## Period courses

## CMLT 3614 Medieval Literature

4 hours; 4 credits
Readings from (a) medieval epic: The Song of Roland, The Cid, the Nibelungenlied and (b) Arthurian literature: the Welsh Mabinogion, Geoffrey's History of the Kings of Britain, the narratives of Chretien de Troyes and Marie de France, Gottfried's Tristan, and Wolfram's Parzival. Summary accounts of the literary histories of

Iceland, Ireland, Wales, and Provence.
Prerequisite or corequisite: Engish 1010 [1] or 1.7.

## CMLT 3615 Literature of the Renaissance

## 4 hours; 4 credits

Such topics as the beginnings of humanism; Petrarch and Boccaccio, Florentine Platonism; the High Renaissance: Machiavelli, Ariosto, Tasso; the northern Renaissance: Erasmus, Rabelais, Ronsard and The Pleiade, Montaigne. (Not open to students who have completed Comparative Literature 25.)

Prerequisite or corequisite: English 1010 [1] or 1.7.

## CMLT 3616 Baroque and Classicism

4 hours; 4 credits
Survey of the main currents of European literature in the seventeenth and eighteenth centuries. (Not open to students who have completed Comparative Literature 31.)

Prerequisite or corequisite: English 1010 [1] or 1.7.

## CMLT 3617 European Romanticism

4 hours; 4 credits
Origins, development, and characteristics of the Romantic movement. Seminal ideas of the German Romantik. Readings from such authors as Novalis, Kleist, Hoffmann, Pushkin, Gogol, Leopardi, Chateaubriand, Hugo, Musset.

Prerequisite or corequisite: English 1010 [1] or 1.7.

## CMLT 3618 Modernist Movements in Twentieth-Century Literature

4 hours; 4 credits
Importance of such movements as Expressionism, Surrealism, and Futurism in shaping twentieth-century literature. Emphasis on the wider aesthetic, critical, and ideological backgrounds. (Not open to students who have completed Comparative Literature 3628 [45].)

Prerequisite: English 1010 [1] or 1.7.
Postmodernism and contemporary discourses

## CMLT 3609 Contemporary European Novel

4 hours; 4 credits
European prose fiction from 1935 to the present. Representative works of such authors as Sartre, Camus, Robbe-Grillet; Beckett; Moravia; Grass; Solzhenitsyn. (Not open to students who have completed Comparative Literature 52.)

Prerequisite: English 1010 [1] or 1.7.

## CMLT 3611 Contemporary European Drama

4 hours; 4 credits
Development of the drama from 1935 to the present. Plays by such authors as Brecht, Durrenmatt, Weiss; Anouilh, Sartre, Camus, Genet, Ghelderode, Beckett, Ionesco, Arrabal; Betti; Lagerkvist; Mrozek. Contemporary theater theory and practice in the work of such writers as Brecht, Artaud, and Grotowski and by such groups as the Living Theater. (Not open to students who have completed Comparative Literature 71.)

Prerequisite: English 1010 [1] or 1.7.

## CMLT 3619 African Literature

4 hours; 4 credits
Survey of twentieth-century fiction, drama, poetry of sub-Saharan Africa. Works by such authors as Achebe, Ekwensi, Emecheta, Ngugi, Oyono, Laye, Dadie, Clark, Sembene, Senghor, Soyinka. This course is the same as Africana Studies 3205.

Prerequisite: English 1010 [1]

## CMLT 3620 Caribbean Sexualities

4 hours; 4 credits
Sex and sexuality in the Caribbean and its diaspora; exploration of how sexuality intersects with and diverges from culture and nationalism, notions of gender, race, and ethnicity. Social science and literary texts explore a range of experiences from the nineteenth to the twenty-first centuries, including heterosexuality, interracial relationships, homosexuality, love, violence, and desire; critical and theoretical texts examine the structures of gender and sexual relations, and relationships between sex and race. This course is the same as Africana Studies 3246, Caribbean Studies 3118, and Women's and Gender Studies 3118.

Prerequisite: English 1010

## CMLT 3621 Indian Literature

4 hours; 4 credits
Representative works in the context of Buddhism and Hinduism. Readings from the Vedas, epics, the Bhagavad Gita, Dhammapada, classical drama, Panchatantra, Bhakti poetry, and Tagore and other modern authors. (Not open to students who have completed Comparative Literature 75.)

Prerequisite: one of the following: English 1010 [1] or 1.7, or Core Studies 9.

## CMLT 3622 New Literature of Latin America

4 hours; 4 credits
The new Latin American literature from its origins to independence and maturity. Such twentieth-century writers as Carpentier, Fuentes, Garcia Marquez, Guimaraes Rosa, and Paz. Impact abroad of the new masters of Latin American literature: Neruda's on North American poetry, Borges's on the New Criticism, Cortazar's on the cinema. (Not open to students who have completed Comparative Literature 60.)

Prerequisite: one of the following: English 1010 [1] or 1.7, or Core Studies 9.

## CMLT 3623 Caribbean Literature

4 hours; 4 credits
Black culture and writing in the Caribbean. Reflections on alienation and independence. Literary liberation movements, Negrism, Indigenism, and Negritude as first step towards emancipation from a European cultural vision. Writers from the English-, French-, and Spanish-speaking countries will be examined. All readings will be in English. This course is the same as Africana Studies 3240 and Puerto Rican and Latino Studies 3315W. (Not open to students who have completed Puerto Rican and Latino Studies [54].)

Prerequisite: English 1010 [1]
CMLT 3624 Yiddish Short Stories and Poetry in Translation

3 hours; 3 credits
Introduction to East European Jewish culture through Yiddish short stories in translation. Selected works by a variety of authors, including Shalom Aleichem, Isaac Leib Peretz, Shalom Asch, Isaac Bashevis Singer, Itzik Manger, Kadya Molodowsky, Esther Kreitman, and Miriam Ulinower, among others. This course is the same as Judaic Studies 2537.

Prerequisite: English 1010 [1] or 1.7.

## CMLT 3625 Holocaust Literature

3 hours ; 3 credits
Course Description: Literary responses to the Destruction of European Jewry, 1933-1945. Reading diaries, letters, poetry, fiction, reportages, and other contemporaneous documents. Examination of postwar Holocaust literature, including memoirs, fiction, and testimonies. Contrasting contemporaneous works with postwar literary works. All readings are in English or English translation. This course is the same as Judaic Studies 3535.

Prerequisite: English 1010 [1] or the equivalent.

## Interdisciplinary \& thematic studies

## CMLT 3626 Contemporary Literary Criticism and Theory

4 hours; 4 credits
Major approaches to literature since 1960. Topics may include semiotics, structuralism, post-structuralism, deconstruction, narratology, new historicism, feminist theory, psychoanalytic criticism, Marxism, and social constructionism. This course is the same as English 3193.

Prerequisite: English 1012 [2] or 2.7.

## CMLT 3627 Introduction to Postcolonial Literature and Theory

4 hours; 4 credits
Literary works and theoretical paradigms relating to the culture of European imperialism and its aftermath. Diversity of works from many parts of the formerly colonized world to introduce the global significance of postcolonialisim. Topics include: race and representation, Orientalism and the production of knowledge, Empire and exoticism, gender and nationalism, and multiculturalism and diasporic identities. This course is the same as Africana Studies 3245 and English 3194.

Prerequisite: English 1012 [2] or 2.7.

## CMLT 3628 Literature and Psychology

4 hours; 4 credits
Relationship of literature to psychological theories in specific readings. Freudian, Jungian, and/or other psychological techniques applied, compared, and evaluated as tools of literary criticism. This course is the same as English 3191.

Prerequisite: one of the following: English 1010 [1] or 1.7.

## CMLT 3629 Special Topics

3 hours; 3 credits
Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take this course for credit twice, but may not repeat topics. (Not open to students who have completed Comparative Literature 48 for credit twice.)

Prerequisite: English 1010 [1] or 1.7, or permission of the chairperson.

## CMLT 3631 Introduction to Israeli Literature in Translation

3 hours; 3 credits
This course examines Israeli literature from the pre-State period at the turn of the 20th century to the present. It provides an introduction to many of Israel's key writers and literary works, and explores the literary expression of major trends in Israeli culture and politics. Readings include novels, short stories, poetry and drama. This course is the same as Judaic Studies 2540.

Prerequisite: English 1010

## Seminars

## CMLT 4601 Cross-Cultural Seminar

4 hours; 4 credits
An author, period of literature, literary movement affecting two or more countries or cultures, or a literary problem of international scope with emphasis on intensive writing, critical analysis, and research methodologies. Topic is selected by the instructor. Course description may be obtained in the department before registration.

Prerequisite: English 1012 [2] or 2.7; two of the following: English 2120 [51], English 2121 [52], and one advanced elective in the major field,or permission of the chairperson.

## CMLT 4602 Interdepartmental Humanities Seminar

4 hours; 4 credits
A significant recurrent theme in Western literature and philosophy with emphasis on intensive writing, critical analysis, and research methodologies. Topic is selected by the instructor. Course description may be obtained in the department office before registration. Offered jointly by the Departments of Classics, English, and Philosophy. This course is the same as Classics [74.7], English 4112, Philosophy 4120.

Prerequisite: English 1012 [2] or 2.7; two of the following: English 2120 [51];English 2121 [52]; one advanced elective in the major field;permission of the instructor(s) and the chairperson.

## CMLT 5600 Independent Research

Minimum of 9 hours independent work; 3 credits Independent research supervised by a faculty member. Approved topic. Periodic conferences. Report or term paper or written final examination.

Prerequisite: English 1012 [2] or 2.7 and an average grade of B or higher in a program, approved by a department counselor, of advanced comparative literature courses, and permission of the chairperson.

## English as a second language

## ESLR 1001 Summer Institute Workshop: Integrated Reading and Writing

3 hours per day for 20 days; no credit
Integrated reading and writing workshop for ESL students.
Emphasis on rapid acquisition of fluency in reading and writing at the college level in coordination with the theme of a linked course. Summer semester.

Prerequisite: placement by Assessment Test scores and permission.

## ESLR 1002 Reading Workshop

2 hours; no credit
Working with tutors in the ESL laboratory facilities to develop reading skills such as determining the main idea, identifying major details, writing summaries, answering essay questions, and reacting critically to texts.

Prerequisite: Open only to ESL students who have passed the CUNY Writing Test but not the CUNY Reading Test.

## ESLR 1003 Writing Workshop

2 hours; no credit
Working with tutors in the ESL laboratory facilities to develop the ability to write well-organized, well-developed essays with collegelevel content, organization, and grammar. (Not open to students who have passed the CUNY Writing Test.)

Prerequisite: Open only to ESL students who have passed the CUNY Reading Test but not the CUNY Writing Test.

## ESLR 1004 Integrated Reading and Writing: High

## Intermediate Level

7 hours recitation, 1 hour laboratory; 2 credits
Increasing students' abilities in reading and writing at the high intermediate level of ESL through integrating these skills.

Prerequisite: program permission.

## ESLR 1005 Writing: High Intermediate Level

4 hours recitation, 1 hour laboratory; 2 credits
Designed to increase the writing abilities, at the high intermediate level of ESL, of students who have passed the CUNY Reading Test.

Prerequisite: program permission.

## ESLR 1006 Integrated Reading and Writing: Advanced Level

6 hours recitation, 1 hour laboratory; 3 credits
Increasing students' abilities in reading and writing at the advanced level of ESL through integrating these skills.

Prerequisite: program permission.

## ESLR 1007 Writing: Advanced Level

4 hours recitation, 1 hour laboratory; 2 credits
Increasing students' abilities in writing at the advanced level of ESL.
Prerequisite: program permission.

## ESLR 1008 Advanced Reading for ESL Students

3 hours; 1 credit
Advanced reading for ESL students who have reached a minimal competence in writing but need additional work in reading English. Emphasis on the comprehension and analysis of texts relevant to the humanities, sciences, and social sciences. Focus on the development of vocabulary, study skills, and critical thinking.

Prerequisite: one of the following courses: ESL 1004 [14], 1005 [14.1], 1006 [15], 1007 [15.1]; a passing score on the CUNY Writing Test but not on the CUNY Reading Test; and permission from the program.

## ESLR 1009 Oral Communication I

3 hours; 1 credit
Special attention to developing basic skills in interpersonal communication, critical and analytic thinking, and speaking fluency in preparation for speech and listening requirements of regular college courses.

Prerequisite: permission of an ESL counselor.

The following inactive course(s) will only be offered if there is sufficient demand:
ENGL 3130 British Folklore
ENGL 3309 Theater Workshop
ESLR 1010 Oral Communication II

## Film

Department office: 201 West End Building
Phone: 718.951.5664

## Full-time Faculty

Distinguished Professor: Juhasz
Professors: Christman, Danto, Hanlon, Hirsch, Tutak
Associate Professors: Parmar, Voelpel
Assistant Professor: Khan
Lecturers: MacDonald, Snyder
Distinguished Lecturer: Reilly

The Department of Film offers a bachelor of arts in film with five possible concentrations: film studies, film production, documentary film production, screenwriting and industry studies.

During the course of their studies, students develop an understanding of the fundamental processes and aesthetic principles of motion picture production; an awareness of the multiplicity of ways in which technology may be used in the creative process; and an appreciation of cinema as the product of aesthetic, cultural, national, social, and historical influences.

Through its various programs, the department provides students with a solid liberal arts grounding in the history, theory, and practice of filmmaking. In doing so, the department educates individuals to be intellectually aware and fully capable of growing and thriving in a changing, diverse, globalized society.

The theoretical grounding and production experience gained in the film programs provide a starting point for a wide range of careers both inside and outside the film industry as well as for advanced study in many academic disciplines that require critical and creative thinking.

## B.A. degree program in film HEGIS code 1010; SED program code 02023

Students must complete one of the following concentrations.
A. Film studies (33 credits)

All of the following: Film 1101, 3101W, 2115, 2116.
One of the following: Film 3122 or 3130.
Two of the following plus their prerequisites: Film 2114, 2120, 2126, 2128, 2129, 2131.
Four additional three-credit film studies courses numbered 2100 or higher plus any prerequisite of the courses.
B. Film production (39 credits)

All of the following: Film 1101, 1201, 2501, 2401, 3300W, 3200, 3700, 2601, 2701, 1301.

Three additional three-credit film studies courses plus their prerequisites.
C. Documentary production (33 credits)

All of the following: Film 1101, 1201, 1301, 2120, 2201, 2601, 2701, 3101W, 3201, 3701.
One of the following: Anthropology 3180, Art 3167, Film 3202, Philosophy 3315, Sociology 2800.
D. Screenwriting (33 credits)

All of the following: Film 1101, 3101W, 2115, 2116, 1201, 1301, 2301, 3301, 4301.
Students must take two additional advanced film courses, one of which may be substituted from the following: English 3301 or 3306; Television, Radio \& Emerging Media 2616 or 3661 or 3662 or 3850; Theater 1101 or 1003. Screenwriting students are encouraged to select additional electives outside the department from the courses above as well as related writing courses across the curriculum.
E. Industry studies (33 credits)

All of the following: Film 1101, 3101W, 2114, 2115, 2116, 2901, 2902, 1201, 2801, 1301.
One of the following: Film 2127, 4901, 5187.

The department chairperson or designee may allow substitutions consistent with the educational goals of the program for one or more requirements in any concentration.

Students must complete each of the required courses for all concentrations with a grade of $C$ or higher.
A student may not enroll for a third time in any course in which $s /$ he has twice received a grade of D or lower or the administrative grades of W or WU. An exception may be made following written appeal, but only if a student can establish changed circumstances that would permit satisfactory performance in the course.

A student whose complete academic record includes a combination of six or more failing grades and withdrawals may not enroll in any course in the department without the written permission of the chairperson.

All majors are expected to fulfill college-wide requirements, including those in English and the core curriculum, in a timely fashion. Any student who does not demonstrate satisfactory progress toward the completion of these requirements will be prohibited from taking upper-level courses in the major.

Film majors who have received transfer credits from other colleges and who are enrolled in the concentration in film production must complete a minimum of 21 credits in the Department of Film at Brooklyn College. Of these, six credits must be in the area of film studies (film courses numbered 2100 through 2199, 3100 through 3199, and 4100 through 4199). Film majors who have received transfer credits from other colleges and who are enrolled in a concentration other than film production must complete 18 credits in the Department of Film at Brooklyn College. Of these, six credits must be in the area of film studies.

## Certificate program in film - production track HEGIS code 5008; SED program code 87520

## Admission requirements

Those students who do not have a baccalaureate degree must have received a high school diploma or the equivalent for admission to this program and must successfully complete the CUNY Basic Skills Assessment Tests.

Program requirements: Production track (30 credits)

Students must complete a program consisting of Film 1101, 1201, 2501, 2401, 3300W, 3200, 3700, 2601, 2701, and 1301.
The department chairperson or designee may allow substitutions consistent with the educational goals of the program for one or more requirements in either track.

Students must complete each required course with a grade of $C$ or higher except in specific instances in which a grade of $B$ or higher is stipulated. Certificate students who have received transfer credits from other colleges must complete a minimum of 21 credits in the Department of Film at Brooklyn College.

The Department of Film will permit certificate students, on request, to enroll in some prerequisite courses as corequisites.
Students who desire full-time enrollment status in the certificate program must have a plan of study approved by the chairperson of the Department of Film before registering for classes.

## Admission requirements

Those students who do not have a baccalaureate degree must have received a high school diploma or the equivalent for admission to this program and must successfully complete the CUNY Basic Skills Assessment Tests.

Program requirements: Screenwriting track (30 credits)

Students must complete a program consisting of Film 1101, 2115, 2116, 2901, 1201, 1301, 2301, 3301, 4301, and any three-credit film studies course numbered 2100 or higher.

The department chairperson or designee may allow substitutions consistent with the educational goals of the program for one or more requirements in either track.

Students must complete each required course with a grade of $C$ or higher except in specific instances in which a grade of $B$ or higher is stipulated. Certificate students who have received transfer credits from other colleges must complete a minimum of 21 credits in the Department of Film at Brooklyn College.

The Department of Film will permit certificate students, on request, to enroll in some prerequisite courses as corequisites.
Students who desire full-time enrollment status in the certificate program must have a plan of study approved by the chairperson of the Department of Film before registering for classes.

## Departmental Minor(s)

## Minor in Film

Department Requirements
Film 1101 and a program of 12 credits of advanced electives in film, with a grade of $C$ or higher in each course. The department recommends that students confer with a departmental adviser to plan a useful sequence of courses.

## Courses

*Courses marked with an asterisk (*) are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in this department.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## Film studies

## FILM *1101 Language of Film I

## 4 hours; 3 credits

Introduction to films, filmmakers, and the vocabulary of filmmaking. The creation of movies from script to screen. Relation between form and content. Gender, genre, ethnic, and cultural approaches. Analyses and screenings of works by Hitchcock, Welles, and contemporary directors.

## FILM 2112 Literature and Film

4 hours; 3 credits
Investigation of significant films derived from literature through comparison of genres. Defining film as an art form in its relation to a particular literary source. Screening of such works as Ford's The Grapes of Wrath, Welles's The Trial, Bresson's Diary of a Country Priest, Visconti's The Stranger, Lean's Great Expectations, Truffaut's Shoot the Piano Player, Olivier's Henry V, and Kurosawa's Throne of Blood.

Prerequisite or corequisite: Film *1101 [1] or permission of the chairperson.

## FILM 2114 Introduction to Film Genres

4 hours; 3 credits
Introduction to genre as a popular film form and method of analysis. Special emphasis on American film genres.

Prerequisite: Film *1101 [1] or permission of the chairperson.

## FILM 2115 History of Film I

4 hours; 3 credits
Survey of motion pictures from 1895 to 1941. Development of film as an art form and distinctive medium of communication.
Relationship of film to other arts and to social and political climates in which cinematic forms and techniques evolved.

Prerequisite: Film *1101 [1] or permission of the chairperson.

## FILM 2116 History of Film II

4 hours; 3 credits

Motion pictures from 1941 to the present. International nature of cinematic development. Screening of films that illustrate major theories of cinema. Discussion of outstanding directors and critical reactions to their work.

Prerequisite: Film *1101 [1] or permission of the chairperson.

## FILM 2117 Cultural Perspectives in Film

4 hours; 3 credits
Analysis of cultural and theoretical issues in a cross-section of thematically linked historical and contemporary films. Topics may include specific investigations into such issues as censorship, gender, race, ethnicity, and/or sexuality in film. Students may take this course for credit three times but may not repeat topics.

Prerequisite: Film *1101 [1].

## FILM 2118 Current Cinema and Criticism

4 hours; 3 credits
Intensive analysis of contemporary films; study of major trends in contemporary film criticism. Students will be expected to attend assigned screenings at archives, festivals, and theaters.

Prerequisite: Film *1101 [1] or permission of the chairperson.

## FILM 2120 The Nonfiction Film

4 hours; 3 credits
Introduction and overview of the development of a documentary tradition in international filmmaking. Lectures, screenings, and discussions will be geared toward analyzing nonfiction film as a medium of observation, education, persuasion, activism, and aesthetic expression.

Prerequisite: Film *1101 [1] or permission of the chairperson.

## FILM 2121 Italian Literature and Italian Cinema

3 hours; 3 credits
The relationship between Italian literary works and the films they inspired. Course description available in department office prior to registration. This course is the same as Italian 3810. Taught in Italian. (Not open to students who have completed Italian [21].) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Film *1101 [1] and Italian 3610 [17.50] or permission of the chairperson of the Modern Languages and Literatures Department.

## FILM 2124 American Film Comedy

4 hours; 3 credits
Consideration of the masterworks of a number of major silent and sound film comedians and filmmakers. Lectures and class discussions consider such matters as the serious intent of comedy; the connections between comic form and content; the creation and repetition of the personae of major comedians; erotic, aggressive, and infantile dimensions of the comic sensibility. Starting Fall 2019 Satisfies Pathways Flexible Core US Experience in Its Diversity requirement.

Prerequisite: Film *1101[1] or permission of the chairperson.

## FILM 2126 The Director's Cinema

4 hours; 3 credits
Intensive analysis of the style and themes of one major director
(such as Bergman, Fellini, or Hitchcock) or of two directors (such as Renoir and Lang or Eisenstein and Lee). Students may take this course for credit three times, but may not repeat topics.

Prerequisite: Film *1101 [1] or permission of the chairperson.

## FILM 2127 Film Technology and Aesthetics

4 hours; 3 credits
Analysis of a specific film technology and its impact on film form. Students may take this course for credit three times but may not repeat topics.

Prerequisite: Film *1101 [1].

## FILM 2128 National Cinema

4 hours; 3 credits
Survey of a major cinema reflecting the intellectual and artistic traditions of a nation such as India, Australia, or Japan. Students may take this course for credit three times, but may not repeat area studied.

Prerequisite: Film *1101 [1] or permission of the chairperson.

## FILM 2129 Film Genres

4 hours; 3 credits
Studies in genre types and techniques. Narrative structure, theory, popular appeal of archetypal patterns, character stereotypes. Each term focuses on an individual genre (westerns, science fiction, crime). Students may take this course for credit three times but may not repeat topics.

Prerequisite: Film *1101 [1] or permission of the chairperson.

## FILM 2131 Global Cinema

4 hours; 3 credits
Survey of a major cinema tradition that transcends national borders. Topics selected according to regional, political, social, and/or cultural traditions shared by people across the globe. Topics include African cinema, postcolonial cinema, and the cultural exchange between Hollywood and different national cinemas. Students may take this course for credit two times, but may not repeat area.

Prerequisite: Film 1101 [1].

## FILM 2140 History of Animation

4 hours; 3 credits
The history of animation from 1900 to the present. Survey of significant animation techniques and styles. Examination of the historical, cultural, technical, and aesthetic contexts of animated films.

Prerequisite: Film 1101 or permission of the chairperson.

## FILM 2141 Contemporary Animation

4 hours, 3 credits
The study of animation from 1980 to the present. Focus on films that exemplify notable movements and styles. Examination of historical, cultural, technical, and aesthetic contexts of contemporary animated films.

Prerequisite: Film 1101 or permission of the chairperson.

## FILM 3101W Language of Film II

## 4 hours; 3 credits

Close textual analysis of selected films. Detailed examinations of films of contrasting styles; the range of analytic approaches applicable to a given film. Writing-intensive section. (Not open to students who have completed Film 2.)

Prerequisite: Film *1101 [1]; English *1012 [2].

## FILM 3122 Women in Film

4 hours; 3 credits
The various images of women in film from the beginning to the present. Readings and discussions of myths, fears, and fantasies that have led to the production of such images. The star system and its relationship to women performers. Screenings include films made by and about women. This course is the same as Women's and Gender Studies 3150.

Prerequisite: Film *1101 [1] and one advanced film studies course; or permission of the chairperson.

## FILM 3125 Experimental, Underground, and Avant-garde

 Films4 hours; 3 credits
Examination of experiments in film technique, form, and content. Examples for screening drawn from significant works outside the commercial film industry.

Prerequisite: Film *1101 [1] and one additional film studies course.

## FILM 3130 Theory, Aesthetics, and Criticism

## 4 hours; 3 credits

Theoretical writings of Eisenstein, Pudovkin, Kracauer, Arnheim, Bazin, Lacan, Metz, Mulvey, Cavell, and others. Their application in cinema. Writing workshop for students interested in contemporary film criticism, supplemented by historical survey of film criticism in newspapers, magazines, and film journals. Course aims at film scholarship rather than journalistic reviewing.

Prerequisite: Film *1101 [1] and one advanced film studies course; or permission of the chairperson.

## General production

## FILM 1201 Introduction to Production

2 hours lecture, 2 hours laboratory; 3 credits Introduction to fundamentals of film production through demonstrations, lectures, and hands-on use of motion picture cameras, lenses, filters, lighting equipment, film stocks, and sound recording equipment. Individual and group film projects, which are evaluated and criticized.

Prerequisite or corequisite: Film *1101 [1] and 1301 [61], or permission of the chairperson.

## FILM 2201 Documentary Production I

4 hours; 3 credits
Introduction to the fundamentals of documentary production. The course will guide students through the basic three stages of a documentary project: research and development, production, and post-production. This course is the same as Television, Radio and Emerging Media 4827.

Prerequisite: Film *1101 [1], 1201 [40.1], and 1301 [61]; or Television, Radio and Emerging Media 3871 [27.1]; or permission of the instructor.

## FILM 3200 The Thesis Film: Production

2 hours lecture, 2 hours laboratory; 3 credits
Production of a short, advanced-level synchronized sound film from development and preproduction through principal photography. Students work on individual projects, taking turns performing different roles in a film crew.

Prerequisite: Film *1101 [1], 1201 [40.1], 2501 [40.2], 2401 [43], $3300 W$ [46W], 2601 [48], 2701 [55.1], and 1301 [61].

## FILM 3201 Documentary Production II

4 Hours; 3 Credits
Production of an advanced-level documentary thesis film from research and development through pre-production and principal photography.

Prerequisite: Film *1101 [1], 2120 [20], 1201 [40.1], 2601 [48], 2201 [49], 2701 [55.1], and 1301 [61].

## FILM 3202 International Documentary Production

1 hour lecture, 4 hours laboratory; 3 credits
A workshop in directing and producing documentaries outside the United States. Site-based through the College's study abroad program. (This course is the same as Television, Radio and Emerging Media 4849.)

Prerequisite: Film *1101 [1], 1201 [40.1], 2601 [48], 2201 [49], 2701 [55.1], 1301 [61]; or permission of the instructor.

## FILM 4201 Advanced Film Production

4 hours; 3 credits
Preparation and shooting of a film in 16 mm or digital format including synchronized sound, with the choice of working in narrative fiction or documentary mode. Consideration of preproduction requirements, research, script breakdown, budgets, schedules, and actual production logistics leading to completion of principal photography on selected projects.

Prerequisite: Film *1101 [1], 1201 [40.1], 2501 [40.2], 2401 [43], 3200 [46.1], 3300W [46W], 3700 [46.2], 2601 [48], 2701 [55.1], 1301 [61]; approval by the production faculty of the completed sound Qualifiying Film

## Screenwriting

## FILM 1301 Screenwriting I

4 hours; 3 credits
An introduction to the principles of screenwriting with special attention given to traditional cinematic narrative, plot and structure, scene design, and character development. Students learn by screening and discussing relevant short films, writing short screenwriting exercises, and completing a short screenplay.

Prerequisite or corequisite: Film *1101 [1].

## FILM 2301 Screenwriting II

4 hours; 3 credits
An examination of theories and approaches to writing the featurelength screenplay.

Prerequisite: Film *1101 [1], 1201 [40.1], and at least one upperlevel film studies elective; Film 1301 [61] with a grade of B or higher; permission of the instructor.

## FILM 3300W The Thesis Film: Screenplay

4 hours; 3 credits
Workshop in writing short screenplays intended for production in Film 3200 [46.1]. Writing-intensive course.

Prerequisite: Film *1101 [1], 1201 [40.1], 1301 [61]; English 1012 [2].
Prerequisite or corequisites: Film 2501 [40.2], 2401 [43], 2601 [48], 2701 [55.1].

## FILM 3301 Screenwriting III

4 hours; 3 credits
Advanced workshop in writing screenplays. Each student will complete a feature-length script. May be repeated for credit.

Prerequisite: Film *1101 [1], 1201 [40.1], 1301 [61], and at least two upper-level film studies electives; Film 2301 [62.1] with a grade of B or higher; permission of the instructor

## FILM 4300 Advanced Screenwriting: Adaptation

4 hours; 3 credits
Workshop in adapting stories, novels, and plays to screen format.
Students' work is the basis of class discussion. Successful screen adaptations will be screened, read, and discussed.

Prerequisite: Film 1301 [61] or permission of the chairperson.

## FILM 4301 Screenwriting IV

4 hours; 3 credits
Intensive workshop for film majors concentrating in screenwriting.
Prerequisite: Film *1101 [1], 1201 [40.1], and at least two upperlevel film studies courses; 1301 [61], 2301 [62.1],and 3301 [62.2] with a grade of B or higher; or permission of the chairperson.

## FILM 4304 Advanced Screenwriting: Writing the Genre

 Film4 hours; 3 credits
Workshop in techniques and approaches to writing genre films.
Prerequisite: Film 3301 or permission of the chairperson.

## Directing

## FILM 2401 Film Directing Workshop I

2 hours lecture, 2 hours laboratory; 3 credits
Theoretical analysis and practical laboratory application of directing. Students direct and act in prepared scenes. Critique and analysis of the exercises.

Prerequisite: Film 1101, 1201, 1301 or permission of the instructor

## FILM 3401 Film Directing Workshop II

4 hours; 3 credits
Continuation of Film 2401 [43]. Theoretical analysis and practical application of directing. Students direct and act in prepared scenes. Critique and analysis of scenes. (Not open to students who have completed Film 68.2.)

Prerequisite: Film 1101 1201, 1301, 2401 with a grade of B or better, 2501, 2601, 2701, or permission of the chairperson.

## FILM 3402 Acting for the Camera

3 hours; 3 credits
Specialized demands of acting for the camera. Differences between stage and film techniques. This course is the same as Theatre 3410.

Prerequisite: Film *1101 [1], 1201 [40.1], 2501 [40.2], 2401 [43], 1301 [61], and at least one advanced studies course.

Cinematography

## FILM 2501 Cinematography Workshop

2 hours lecture, 2 hours laboratory; 3 credits
Team writing, shooting, editing, and group criticism. Each student works as director, editor, writer, and cinematographer on sequences of 16 mm film. Concept, research, writing, cinematography, editing, and sound. Discussion of problems encountered.

Prerequisite: Film *1101, 1201, and 1301, or permission of the instructor

## FILM 3501 Advanced Cinematography

2 hours lecture, 2 hours laboratory; 3 credits
Lectures, demonstrations, and workshops in equipment and materials used to film motion pictures. Operation and characteristics of cameras, lenses, accessory camera equipment, film emulsions, lighting, and laboratory processing. (Not open to students who have completed Film 50.)

Prerequisite: Film 1101 1201, 1301, 2401, 2501 with a grade of B or better, 2601, 2701 or permission of the professor

## FILM 3502 Advanced Cinematography: Digital Formats

4 hours; 3 credits
Lectures, demonstrations, and workshops in equipment and materials used in digital format motion pictures. Operation and characteristics of cameras, lenses, accessory camera equipment, and lighting.

Prerequisite: Film 1101, 1201, 1301, 2401, 2501 with a grade of B or better, 2601, 2701 or permission of the professor

## Sound

## FILM 2601 Location Sound

2 hours lecture, 2 hours laboratory; 3 credits The fundamentals of sync sound recording. Acoustics, microphones, studio and location recording of dialogue, music, and effects. Hands-on use of professional recording equipment.
Assessment of dramatic and documentary scenes from an audio perspective.

Prerequisite: Film *1101 [1], 1201 [40.1], and 1301 [61], or permission of the chairperson.

## FILM 3601 Sound Design

4 hours; 3 credits
An introduction to sound design theory and practice. The complex interactions between dialogue, music, and effects as well as the aesthetic possibilities of sound will be explored.

Prerequisite: Film *1101 [1], 1201 [40.1], 2601 [48], 2701 [55.1], 1301 [61]; or permission of the chairperson.

## Editing/postproduction

## FILM 2701 Film Editing

2 hours lecture, 2 hours laboratory; 3 credits
Montage and first principles in the art of film editing: time, rhythm, visual and aural relationships. Expressive aspects of the editing process. Interconnection of concept, script, photography, and directing as related to editing. Emphasis on formal instruction in theories and non-linear editing technique using Final Cut Pro.

Prerequisite: Film 1101, 1201, 1301

## FILM 3700 The Thesis Film: Postproduction

2 hours lecture, 2 hours laboratory; 3 credits
Hands-on postproduction workshop enabling the student to complete the short, advanced-level, synchronized sound film begun in Film 3200 [46.1].

Prerequisite: Film *1101 [1], 1201 [40.1], 2501 [40.2], 2401 [43], 3300W [46W], 3200 [46.1], 2601 [48], 2701 [55.1], and 1301 [61].

## FILM 3701 Documentary Production III

4 Hours; 3 Credits
Technical and theoretical principles of non-linear editing for the documentary. Emphasis on developing character and dramatic structure in non-fiction storytelling. Strategies for organizing source material, acquiring archival material, incorporating narration, music, and sound effects. Enables the student to complete the documentary thesis film begun in Film 3201.

Prerequisite: Film 1101, 2120, 1201, 2601, 2201, 2701, 1301, and 3201.

## FILM 3702 Advanced Editing

## 4 hours; 3 credits

Advanced theory and practice in non-linear editing.
Prerequisite: Film *1101 [1], 1201 [40.1], 2501 [40.2], 2401 [43], 2601 [48], 2701 [55.1], and 1301 [61]; or permission of the chairperson.

## FILM 3703 Music for Film

4 hours; 3 credits
Practical and theoretical considerations in composing music for films. Course is taught by a practicing film composer from the Conservatory of Music.

Prerequisite: permission of the director of the Conservatory of Music.

## Producing

## FILM 2801 Film Producing

2 hours lecture, 2 hours laboratory; 3 credits
The process of producing a film from acquisition of the property through distribution. Topics include: selling an idea; working with screenwriters; assembling financing; selecting primary personnel; casting; the production process; and the postproduction process. Hands-on work in breaking down a script, creating a budget,
establishing a shooting schedule, preparing production strip boards and call sheets, negotiating deals, and working (or not) with unions.

Prerequisite: Film *1101 [1], 1201 [40.1], and 1301 [61]; or permission of the chairperson.

## Industry studies

## FILM 2901 The Business of Film

4 hours; 3 credits
The study of film as a commercial enterprise, from Hollywood studios to New York independents, from the international marketplace to ancillary markets.

Prerequisite: Film *1101, 1201, 1301

## FILM 2902 History of the Motion Picture Industry

4 Hours; 3 Credits
Development of motion pictures as an entertainment industry. The structure, the history, and the economics of the movie business. Interdependence of technology, commerce, and social organization. Emphasis on the United States.

Prerequisite: Film *1101 [1]; 1201 [40.1] and 1301 [61], or two film studies courses numbered 2112 or higher; or permission of the chairperson.

## FILM 2923 Master Class: Film Artists

4 hours; 3 credits
Lectures by professionals in such areas of filmmaking as cinematography, editing, directing, art directing, casting, sound, music, screenwriting, special effects, opticals, lighting, costuming.

Prerequisite: Film *1101 [1] or permission of the chairperson.

## FILM 2924 Master Class: Film Producers

4 hours; 3 credits
Lectures by professionals in areas of film production and preproduction including producing, scheduling, budgeting, financing, marketing, advertising, and distribution.

Prerequisite: Film *1101 [1] or permission of the chairperson.

## FILM 4901 Intensive Film Workshop I

9 hours field work plus conferences; 3 credits Intensive workshop for students engaged as interns or apprentices in a museum film study center; at a distribution, marketing, or production office; or on a professional production.

Prerequisite: completion of all Film Department requirements and permission of the chairperson.

## FILM 4902 Intensive Film Workshop II

9 hours field work plus conferences; 3 credits
Intensive workshop for students engaged as interns or apprentices in a museum film study center; at a distribution, marketing, or production office; or on a professional production.

Prerequisite: completion of all Film Department requirements and permission of the chairperson.

## FILM 4903 Intensive Film Workshop III

9 hours field work plus conferences; 3 credits

Intensive workshop for students engaged as interns or apprentices in a museum film study center; at a distribution, marketing, or production office; or on a professional production.

Prerequisite: completion of all Film Department requirements and permission of the chairperson.

## FILM 4904 Intensive Film Workshop IV

9 hours field work plus conferences; 3 credits Intensive workshop for students engaged as interns or apprentices in a museum film study center; at a distribution, marketing, or production office; or on a professional production.

Prerequisite: completion of all Film Department requirements and permission of the chairperson.

## Special topics

## FILM 2191 Special Topics Mini-course

1 hour; 1 credit
Social or aesthetic approaches to film study. Course description may be obtained in the department office before registration. Students may take this course more than once but may not repeat topics.

Prerequisites: Film *1101 [1]; additional prerequisites dependent upon the topic offered.

## FILM 2192 Special Topics Short Course

## 2 hours; 2 credits

Social or aesthetic approaches to film study. Course description may be obtained in the department office before registration. Students may take this course more than once but may not repeat topics.

Prerequisites: Film *1101 [1]; additional prerequisites determined by the topic offered.

## FILM 2193 Special Topics in Film

4 hours; 3 credits
Social or aesthetic approaches to film study. Course description may be obtained in the department office before registration. Students may take this course for credit three times, but may not repeat topics.

Prerequisite: Film *1101 [1] or permission of the chairperson.

## Seminars

## FILM 4188 Seminars in Genres

2 hours lecture, 2 hours screening; 3 credits each term Such limited and concentrated genre areas as Japanese film, Russian film, silent film, American film of the 1930s and 1940s, western, thriller, and comedy. Critical analysis and historical development.

Prerequisite: completion of a program, approved by the chairperson, of advanced Film Department courses.

## FILM 4189 Seminars in Genres

2 hours lecture, 2 hours screening;
Such limited and concentrated genre areas as Japanese film, Russian film, silent film, American film of the 1930s and 1940s,
western, thriller, and comedy. Critical analysis and historical development.

Prerequisite: completion of a program, approved by the chairperson, of advanced Film Department courses.

## FILM 4190 Seminars in Directors

2 hours lecture, 2 hours screening; 3 credits each term The style and vision of important film directors. Such courses as the following are offered, the subject chosen by the instructor: New Wave French film (Godard, Truffaut, Resnais, Rivette, Chabrol, and Rohmer); Italian neo-realism (Rossellini, De Sica, Visconti, and Fellini); cinema of Dreyer and Bergman; cinema of John Ford; cinema of D.W. Griffith; cinema of Jean Renoir; cinema of Bunuel and Bresson; cinema of Godard and Antonioni. Emphasis on the director's controlling vision of a film.

Prerequisite: completion of a program, approved by the chairperson, of advanced Film Department courses.

## FILM 4191 Seminars in Directors

2 hours lecture, 2 hours screening; 3 credits each term The style and vision of important film directors. Such courses as the following are offered, the subject chosen by the instructor: New Wave French film (Godard, Truffaut, Resnais, Rivette, Chabrol, and Rohmer); Italian neo-realism (Rossellini, De Sica, Visconti, and Fellini); cinema of Dreyer and Bergman; cinema of John Ford; cinema of D.W. Griffith; cinema of Jean Renoir; cinema of Bunuel and Bresson; cinema of Godard and Antonioni. Emphasis on the director's controlling vision of a film.

Prerequisite: completion of a program, approved by the chairperson, of advanced Film Department courses.

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Prerequisite: completion of a program, approved by the chairperson, of advanced Film Department courses.

## Independent studies

## FILM 5081 Independent Research

1 hour; 1 credit
Faculty supervised research or fieldwork in an aspect of film. A minimum of three hours of independent work and conference per week.

Prerequisites: Completion of 15 credits of advanced Film Department courses, approval of a specific research project by the supervising faculty member, and permission of the chairperson.

## FILM 5082 Independent Research

1 hour; 1 credit
Faculty supervised research or fieldwork in an aspect of film. A minimum of three hours of independent work and conference per
week.
Prerequisites: Completion of 15 credits of advanced Film Department courses in addition to Film 5081 [81.1], approval of a specific research project by the supervising faculty member, and permission of the chairperson.

## FILM 5083 Independent Research

1 hour; 1 credit
Faculty supervised research or fieldwork in an aspect of film. A minimum of three hours of independent work and conference per week.

Prerequisites: Completion of 15 credits of advanced Film Department courses in addition to Film 5081 [81.1] and 5082 [81.2], approval of a specific research project by the supervising faculty member, and permission of the chairperson.

## FILM 5084 Independent Research

2 hours; 2 credits
Faculty supervised research or fieldwork in an aspect of film. A minimum of six hours of independent work and conference per week.

Prerequisites: Completion of 15 credits of advanced Film Department courses, approval of a specific research project by the supervising faculty member, and permission of the chairperson.

## FILM 5085 Independent Research

2 hours; 2 credits
Faculty supervised research or fieldwork in an aspect of film. A minimum of six hours of independent work and conference per week.

Prerequisites: Completion of 15 credits of advanced Film Department courses in addition to Film 5084 [82.1], approval of a specific research project by the supervising faculty member, and permission of the chairperson.

## FILM 5086 Independent Research

2 hours; 2 credits
Faculty supervised research or fieldwork in an aspect of film. A minimum of six hours of independent work and conference per week.

Prerequisites: Completion of 15 credits of advanced Film Department courses in addition to Film 5084 [82.1] and 5085 [82.2], approval of a specific research project by the supervising faculty member, and permission of the chairperson.

## FILM 5187 Independent Research I

Minimum of 9 hours independent work and conference or class meetings per week§; 3 credits
Research or fieldwork in an aspect of film supervised by a faculty member. Participation in the preproduction, production, and postproduction of an independent film project. (Not open to students who have completed Film 83.)

Prerequisite: completion of 15 credits of advanced Film Department courses and approval of a specific research project by the supervising faculty member and permission of the chairperson.
meetings§; 3 credits
Research or fieldwork in an aspect of film supervised by a faculty member. Participation in the preproduction, production, and postproduction of an independent film project. (Not open to students who have completed Film 83.)

Prerequisite: completion of 15 credits of advanced Film
Department courses and approval of a specific research project by the supervising faculty member and permission of the chairperson; Film 5187 [83.1].

## FILM 5189 Independent Research III

Minimum of 9 hours independent work and conference or class meetings§; 3 credits
Research or fieldwork in an aspect of film supervised by a faculty member. Participation in the preproduction, production, and postproduction of an independent film project. (Not open to students who have completed Film 83.)

Prerequisite: completion of 15 credits of advanced Film
Department courses and approval of a specific research project by the supervising faculty member and permission of the chairperson; Film 5188 [83.2].

The following inactive course(s) will only be offered if there is sufficient demand: FILM 3506 Animation II

FILM 4302 Advanced Screenwriting: Writing the Low Budget Film

## Finance

Department office: 201 A Whitehead Hall
Phone: 718.951.5012

## Full-time Faculty

Professors: Mohanty, Park
Associate Professors: Baek, Glambosky, Lin, Peterburgsky
Assistant Professor: Kang

The finance program within the AACSB-accredited Murray Koppelman School of Business at Brooklyn College offers a bachelor of business administration (B.B.A.) degree in finance. This program will prepare students for finance positions in mutual funds, securities firms, commercial and investment banks, brokerage firms, investment advisory services, and other financial institutions. Graduates with a finance degree may also choose to enter the finance and treasury departments of non-finance corporations, nonprofit institutions, and governmental agencies.

The Finance Department offers a minor in finance and another minor in financial planning. Students who intend to do future graduate study in finance or business are strongly advised to take advanced courses in mathematics, statistics, econometrics, and computer science in their undergraduate programs at Brooklyn College.

Finance courses are taught by dedicated faculty who possess a wide range of scholarly and professional experience. Students will have opportunities to collaborate with finance faculty on various research projects. They will get hands-on experience with the Bloomberg terminals that finance professionals use on Wall Street every day. In addition, faculty members will work closely with the Brooklyn College Magner Center for career development and internships.

The following are two examples of what makes the Brooklyn College Finance Department stand apart from the rest. First, the Finance Department, in collaboration with the Dean of the Koppelman School of Business and the Magner Career Center, offers the Summer Financial Careers Academy program. This is a 2-year program designed to prepare business students to jumpstart a career in the financial services industry. Qualified students who join this program will acquire knowledge of the financial services industry from industry experts before seeking internships at Wall Street firms.

A second experiential learning program offered through the Finance Department is a student-managed hedge fund known as the MD Sass Investment Institute. This institute is designed to provide students with a real-world experience by allowing them to learn how to manage a portfolio of stocks under the supervision of seasoned investment professionals.

## B.B.A. degree program in finance HEGIS code 0506; SED program code 37634

Department requirements (63-65 credits)
A. Business Core ( $45-47$ credits)

Students must complete all of the following:
Accounting 2001 and Accounting 3011 and Accounting 3201, Computer and Information Science 1050 or Computer and Information Science 1115 , Business 2100 or Economics 2100, Business 2200 or Economics 2200, Business 3400 or Economics 3400, Mathematics 1006 or Mathematics 1021, or placement into Mathematics 1011, 1012, 1026, 1201, 1206, or any Mathematics course numbered 2000 or higher, Mathematics 1231, Business 3430 or Computer and Information Science 2531, Business 3100, Business 3200, Finance 3310 or [Business 3310], Philosophy 3314.
B. Required Finance Courses ( 9 credits)

Students must complete all of the following:
Finance 3330 or [Business 3330]; Finance 4300W or [Business 4300W]; and Finance 3311 or [Business 3311].
C. Electives (9 credits)

Students must complete any three of the following:
Finance 3340 or Business 3340; Finance 3377 or Business 3377; Accounting 3021; Finance 5001; Finance 3350; Finance 3380; Finance 3390; Finance 5310; Finance 5330; Finance 5350

To declare a major in Finance, students must have earned a minimum of 30 credits and a cumulative GPA of 2.5 or greater.
To graduate with a BBA in Finance, students:

- must earn a C or better in ACCT 2001; ECON 2100 and ECON 2200; ECON 3400 or BUSN 3400, and MATH 1231
- must earn a grade of C or better in all courses starting with a finance prefix
- must not register in any advance or elective finance course without earning a grade of C or better in all prerequisites - may not take any course with a finance prefix more than two times (this
includes $I N C, W, W N, W U, W F$, and $A B S$ grades)


## Departmental Minor(s)

## Minor in Finance

Department requirements (30 credits)

All of the following: Accounting 2001, Economics 2100 or Business 2100, Economics 2200 or Business 2200, Economics 3400 or Business 3400, Finance 3310, 3311, 3330.

Two of the following: Finance 3340 or 3350 or 3377 or 3390 or 4300 W or 5001 or 5330.

## Minor in Financial Planning

## Department Requirements (30 credits)

All of the following: Accounting 2001, Economics 2100 or Business 2100, Economics 2200 or Business 2200, Economics 3400 or Business 3400, Business 2300, Finance 3310, 3330.
Two of the following: Finance 3340 or 3350 or 5330.

## Courses

## FINC 3310 Principles of Financial Management

3 hours; 3 credits
Understanding the goal and principles of financial management. Time value of money, bond valuation and stock valuation. Capital budgeting methods. Introduction to financial statement analysis, risk and return, asset pricing and capital structure analysis.

Prerequisite: Accounting 2001, Economics 2100, Economics 2200, and Business 3400 or Economics 3400.

## FINC 3311 Strategic Financial Management

3 hours; 3 credits
Focus on strategic corporate finance topics that progress and expand on materials taught in Finance 3310, Principles of Financial Management. Topics include capital structure, equity and debt financing, corporate restructuring, dividend policy, mergers and acquisitions, behavioral finance and international finance. (Not open to students who have completed [Business 3311]).

Prerequisite: [Business 3310] or Finance 3310; Accounting 3011; and Mathematics 1231

3 hours; 3 credits
Characteristics of asset classes, securities, related markets and investment management companies. Principles of investment analysis including risk-return trade-off, asset pricing models, and the efficient market hypothesis. Legal and ethical issues in investment management. Evaluation of the risk-adjusted performance of investment portfolios. Introduction to derivatives, security analysis, and interest rate risk management to help students select electives that present advanced topics in investments. (Not open to students who have completed [Business 3330]).

Prerequisite: [Business 3310] [70.2] or Finance 3310

## FINC 3340 Options, Futures, and Commodities Markets

## 3 hours; 3 credits

Option pricing theories including the no arbitrage principle, the Black-Scholes formula and the binomial model. Stochastic processes, the option Greeks, and the implied volatility. Options trading strategies. Valuation of forwards and futures. (Not open to students who have completed [Business 3340]).

Prerequisite: Finance 3330 or [Business 3330]; and Mathematics 1231

## FINC 3350 Financial Institutions and Markets

## 3 hours; 3 credits

This course uses principles of finance and investments to help students understand modern financial markets and institutions. Central themes are the structure of financial markets, their pricing function, the interaction between financial markets and institutions, macroeconomic conditions, and the process of financial innovation and regulation in these markets. This course guides students through various markets and helps them analyze the asset and liability structures, and operations of financial institutions.

Prerequisite: Finance 3310

## FINC 3377 Global Financial Management

## 3 hours; 3 credits

Major financial decisions faced by managers of multinational corporations. Topics covered include: cross-border capital flows, international financial contagion, global financial regulations, foreign exchange markets, country risk analysis, international portfolio investment, and trade finance. Decisions regarding capital budgeting, trade finance, working capital, capital structure and risk management within the context of international markets for goods and capital. Unique risks encountered in global finance such as political risk, sovereign risk, foreign exchange rate risk, commodity risk, and economic risk; regulatory uncertainly. Case studies will be integrated into the class. (Not open to students who have completed [Business 3377]).

Prerequisite: [Business 3310] [70.2] or Finance 3310 or Economics 3332 [70.8].

## FINC 3380 Fixed Income Securities

## 3 hours; 3 credits

This class introduces students to the valuation and application of fixed income securities and their derivatives. The course topics include bond valuation, measuring price sensitivity, yield curve construction, and risk inherent to fixed income securities such as interest risk, credit risk, and illiquidity risk. Students will learn how to apply analytical tools used in valuation, term structure modeling, and risk management.

Prerequisite: Finance 3330 and Mathematics 1231

## FINC 3390 Financial Modeling

## 3 hours; 3 credits

The course takes a hands-on approach in building financial models for the purpose of financial management and investment valuation. The major topics include portfolio theory, measurements of asset risk and return, asset pricing models and valuation. Students will create numerous financial models, including graphical representations, using software such as Excel with real world data.

Prerequisite: Finance 3311 and 3330

## FINC 4300W Seminar in Business Finance

3 hours; 3 credits
Research, analysis and discussion of case histories in the financing of business, multinational, and not-for-profit enterprises, including study of debt and equity issues in mergers, consolidations, acquisitions, split-ups and expansions. Financing by venture capital, banks, and other financial institutions including underwriters and governmental agencies. Emphasis on alternatives facing financial mangers in decision making under conditions of certainty and
uncertainty. Writing-intensive course. (Not open to students who have completed Economics 80.2 or [Business 4300W]).

Prerequisite: English 1012; FINC 3311; and senior standing.

## FINC 5001 Special Topics in Finance

3 hours; 3 credits
Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take this course twice, but may not repeat topics.

Prerequisite: Finance 3310 and permission of the department chair.

## FINC 5100 Internship: Fieldwork I

9 hours field work; 3 credits
An off-campus internship supervised and approved by a faculty member and will require written assignments and a final report.

Prerequisite: Upper sophomore status and permission of the department chair.

## FINC 5101 Internship: Fieldwork II

9 hours field work; 3 credits
An off-campus internship supervised and approved by a faculty member and will require written assignments and a final report.

Prerequisite: Junior status with at least 6 credits of finance courses and permission of the department chair.

## FINC 5310 Portfolio Management

3 hours; 3 credits
This course presents advanced theories and practices relevant to institutional investors, such as pension funds, extending on the topics introduced in FINC 3330. The course utilizes portfolio theory to understand the facets of the money management industry, modern techniques for optimal portfolio selection, liquidity and fee competition, properties of asset returns, and investment strategies.

Prerequisite: Finance 3330

## FINC 5330 Security Analysis

## 3 hours; 3 credits

Experiential learning of value investing using both long and short positions. Equity valuation models, financial statement analysis for stock valuation, evaluation of company strategies and management, and use of derivatives for portfolio risk management. Evaluation of performance and reporting. Writing comprehensive reports that align with investment thesis. Presentation of investment proposals and feedback by investment professionals

Prerequisite: FINC 3330

## FINC 5350 Financial Institutions Management

3 hours; 3 credits
This course will focus on the financial management and regulation of financial institutions, with a primary focus on commercial banks. Students will be exposed to various forms of risk facing financial institutions and the trade-offs required to balance risks and returns. The course will incorporate modern techniques for asset, liability and risk management. An emphasis will be placed on regulatory issues of capital adequacy and risk management and the impact of the issues on the stability of the financial system. Upon
completion of the course, students are expected to be able to measure and manage various risks faced by large financial institutions.

Prerequisite: FINC 3330

## General Science

Department office: 2606 James Hall
Phone: 718.951.5061

## Concentration(s) for majors in early childhood and childhood education teacher programs

## General Science

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in general science must complete a program of 30 credits in general science and one of the following departments: biology, chemistry, earth and environmental science, physics. A grade of C - or higher is required in each course.

Concentration requirements ( 30 credits):
General Science 5050 or at least one course in science numbered 3000 or above and additional credits in science as described below: At least three credits from two and at least 9 credits in one of the following strands:
Biology: General Science 2020, 2030, Health and Nutrition Sciences 2300, 2301, Anthropology 3440; KINS 3271; or any course in biology. Chemistry: General Science 2020, 2050; or any course in chemistry.
Earth and environmental science: General Science 2030, 2040, 2050; Anthropology 1400; or any course in earth and environmental science. Physics: General Science 2040, 2010; or any course in physics.

The course of study must include at least one of the following courses: General Science 2040, 2010, 2020, 2050.
Twelve elective credits may be chosen from the above areas and from approved Pathways STEM variant courses. Courses in other departments, including Computer Science, Mathematics and Psychology, may be applied to the Concentration with the approval of the Program Coordinator. STEM courses used to satisfy the Required Core, Flexible Core and College Option may also be used toward the concentration.

## Courses

## GSCI 1050 Evidence and Argument in the Natural Sciences

3 credits, 3 hours
Reading and writing arguments from scientific evidence, and presenting such arguments orally and through various media. Examination of scientific writing for the general public arguing for paradigm shifts in the sciences from Galileo to the present. Topics in the physical, life and Earth sciences will be examined. Strategies for researching, reading and writing content in the sciences. This course is the same as Secondary Education 1050.

## GSCI 2010 Light and Visual Perception

2 hours lecture, 2 hours laboratory; 3 credits
An inquiry- and lab-based study of the nature of light; refraction and reflection; geometrical optics; wave properties of light; optical properties of human and animal visual systems.

Prerequisite or corequisite: Mathematics *1401 [1.95].

## GSCI 2020 Chemistry and Biology in Everyday Life

2 hours lecture, 2 hours laboratory; 3 credits
An inquiry- and lab-based study of chemistry and biology in
everyday life; relation to more general scientific principles.
Prerequisite or corequisite: Mathematics *1401 [1.95].

2 hours lecture, 2 hours laboratory; 3 credits
An inquiry- and lab-based study of important aspects of evolutionary paleontology and the history of life as illustrated by the fossil record. Adaptation, size scaling, evolutionary processes, and paleoecology. One required field trip to study modern beach environments and to collect fossils.

Prerequisite or corequisite: Mathematics *1401 [1.95].

## GSCI 2040 Geophysics

2 hours lecture, 2 hours laboratory; 3 credits
An inquiry- and lab-based study of the materials and structure of the earth; physical properties and states of matter, their dependence on temperature and pressure; internal structure of the earth and methods of studying it.

Prerequisite or corequisite: Mathematics *1401 [1.95].

## GSCI 2050 Environmental Studies

2 hours lecture, 2 hours laboratory; 3 credits
An inquiry and data-based study of relationship between global and local environmental issues. The global environmental issues will be presented through a series of lectures while the local issues will be investigated through group projects.

Prerequisite or corequisite: Mathematics *1401 [1.95].

## GSCI 3050 Natural Science in Early Childhood and

## Childhood Education

1 hour lecture, 2 hours laboratory; 2 credits
Science activities, demonstrations, and experiments useful in early childhood and elementary education. Taught in coordination with Childhood and Special Education 3207 or Early Childhood and Art Education 3107. Emphasis on laboratory experiences using nontoxic and familiar objects and materials.

Corequisite: Childhood and Special Education 3207 or Early Childhood and Art Education 3107.

## GSCI 5050 Independent Research

1 hour lecture, 2 hours laboratory or conference; 3 credits Faculty-mentored independent library or laboratory research in one of the science disciplines or an interdisciplinary science. Students will prepare a final project for presentation.

Prerequisite: permission of the General Science coordinator.

## Health and Nutrition Sciences

Department office: 4123 Ingersoll Hall
Phone: 718.951.5026
Full-time Faculty
Professors: Axen, Greene, Mirotznik
Associate Professors: Jiang, Leung, Pouget, Schnoll, Weston, Wong
Assistant Professors: Caviglia, Fuster Rivera, Horlyck-Romanovsky, Koizumi
Lecturers: Cai, Geraghty, Khalfin, Kruszelnicka
The Brooklyn College Department of Health and Nutrition Sciences offers a bachelor of arts degree, which includes concentrations in health and in thanatology, as well a bachelor of science degree with four concentrations: health science, public health, thanatology, and foods and nutrition. The department also offers a minor and a concentration in health and nutrition sciences for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades 1-6).

The B.A. degree, the B.S. concentrations in health science, public health, and thanatology provide students with the conceptual foundation and knowledge necessary to analyze and apply current information concerning health and health care. Students are introduced to and will expand their knowledge of the basic science of health and health promotion; the philosophical underpinnings of health and health care in the U.S.; the multidimensional determinants of health; epidemiology and biostatistics; nutrition; and the provision and organization of health services. Through the selection of elective courses, students are also introduced to a wide variety of content-specific areas, including human sexuality; drugs and alcohol; women's health; children's health; health education and counseling. B.A. students and B.S. students who concentrate in health science, public health, or thanatology are required to complete an internship. Through independent study courses, students also have the opportunity to work on research with a faculty mentor.

The B.A. degree and the B.S. concentrations in health science, public health, and thanatology are designed to provide students with the background to prepare for a variety of academic and career options. Students who complete these programs find work as entry-level administrators, health educators, or researchers within the public or corporate health care sector. Often students continue their education to obtain advanced degrees to pursue such professional careers as physicians, dentists, physician assistants, nurses, occupational therapists, physical therapists, and social workers. The public health concentration in the B.S. degree is designed to prepare students for careers in public health and related fields and will prepare students who wish to pursue graduate studies in public health.

The foods and nutrition concentration in the B.S. degree is an accredited program of the Accreditation Council for Education in Nutrition and Dietetics (ACEND), the accrediting body of the Academy of Nutrition and Dietetics and provides the core knowledge requirements necessary for pre-professional practice.

A solid grounding in the sciences enables students in the foods and nutrition concentration to understand the relationship between food, nutrients, health, and disease. Classroom and fieldwork experiences related to federal and local nutrition programs, nutrition counseling and education skills, food and culture, and food service management are integral parts of this program, as are courses in biostatistics and research design.

The B.S. in exercise science offers two tracks, the fitness professional track and the pre-health professions track. For more on this program see below.

## B.A. degree program in health and nutrition sciences HEGIS code 1299; SED program code 85300

Concentration in community health education awaiting New York State Education Department approval as of spring 2021.
Department requirements ( $43-44$ credits)

All of the following:
Health and Nutrition Sciences 1200 or 2210, 2109W, 2120, 2130, 2140, 3300 or Psychology 3400, and one fieldwork course chosen from Health and Nutrition Sciences 4180 or 4181.

In addition, all students must complete the requirements of the general BA, the concentration in community health education, or the concentration in thanatology (the study of death, dying, and bereavement.

The department chairperson or designee may allow substitutions for one or more course requirements, consistent with the educational goals of the program.

General B.A. in health and nutrition sciences

A minimum of 12 credits from the following courses: Health and Nutrition Sciences 2100, 2111, 2131, 2150, 2170, 2171, 2180, 2181, 2182, 2215, 2220, 2221, 2300, 2301, 3110, 3112, 3161, 3170, 3171, 3230, 3314, 3330.

A minimum of 6 credits from the following courses: Health and Nutrition Sciences 2183, 2212, 3111, 3132, 3150, 3160, 3162, 3180, 3181, 3184, 3186, 3187, 3188, 3505, 4150, 4151, 4152, 4153, 4300, and courses numbered in the 5000's.

Concentration in community health education
All of the following courses: Health and Nutrition Sciences 2183, 3112, 4150, 4152. A minimum of 6 additional credits chosen from HNSC courses 2000-level or higher.

Concentration in thanatology

All of the following thanatology-related courses: Health and Nutrition Sciences 3314, 3180, 3186, 3187. A minimum of 6 credits from the following courses: Health and Nutrition Sciences 3181, 3188, 3171, 5390, Art 3151, Classics 3244 / Religion Studies 3035 / History 3025, Psychology 3260, Sociology 2402

## B.S. degree program in exercise science HEGIS code 1299.30; SED program code 32345

The Exercise Science major offers two tracks. The Fitness Professional Track provides a strong background in exercise testing and exercise training. As such, graduates should be well prepared to enter the fields of fitness and wellness and will also have completed most of the prerequisite courses for various Health Related Professions (e.g., Physical Therapy). The Pre-Health Professions Track is designed for students who intend to enroll in programs to become Health Related Professionals such as Physical Therapists, Occupational Therapists and Physicians Assistants. Although designed to provide the requirements for applying to such programs, the admissions requirements for programs vary and additional classes may be required depending on the chosen career path and institution. Students should consult with the College Health Professions Advisor as well as with advisors from the schools where they intend to apply to ascertain if additional coursework is needed.

Students must have a minimum overall grade point average of 2.5 to declare a major in Exercise Science. Students must maintain a minimum overall grade point average of 2.5 to remain a major in the program. Exercise Science majors must have a grade point average of 2.5 or greater in required Department of Kinesiology coursework to graduate.

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Degree Requirements (57-62 credits)
Fitness Professional Track (57-67.5 credits)
All of the following:
Kinesiology 3000, 3005, 3281, 3285, 3290, 4200W, 4250, 4400, 4402, 4500, 4510, 4520, 4760 (41 credits).
Business 3400 or Economics 3400 or Mathematics 2501 or Psychology 3400 or Political Science 3422 (3 or 4 credits).
Health and Nutrition Sciences }1200\mathrm{ (3 credits).
Chemistry }1100\mathrm{ or both }1050\mathrm{ and }2050\mathrm{ (5 or 7.5 credits).
Physics 1100 (5 credits).
Pre-Health Professions Track (61-62 credits)
All of the following:
Kinesiology 3000, 3005, 3281, 3285, 3295, 4200W, 4760 (23 credits).
Health and Nutrition Sciences 1200 (3 credits).
Chemistry }1100\mathrm{ and 2100 (10 credits).
Physics }1100\mathrm{ and 2100 (10 credits).
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Biology 1001 and 1002 (9 credits).
Business 3400 or Economics 3400 or Mathematics 2501 or Psychology 3400 or Political Science 3422(3 or 4 credits). Psychology 1000 (3 credits).

## B.S. degree program in health and nutrition sciences HEGIS code 1299; SED program code 85301

Department requirements (55.5-78 credits)
Health and Nutrition Sciences 3300 or Psychology 3400.
Biology 1001
A college-wide minimum of 24 credits in advanced courses in one department must be completed at Brooklyn College with a grade of C or higher in each course.

In addition, all students must complete the requirements in one concentration within the B.S. degree: public health, health science, thanatology, or foods and nutrition.

The department chairperson or designee may allow substitutions for one or more course requirements, consistent with the educational goals of the program.

Concentration in public health
Chemistry 1040 or 1100; or both 1050 and 2050.
All of the following: HNSC 1100, 1200 or 2210, 2100, 2109W, 2120, 2130, 2140, 2183, 3112, 3162, 3330, 4152, 4180, 5100.
With consultation with her/his adviser, the student will select 6 credits of electives drawn from other HNSC courses numbered 2000 and over or the following courses from other departments: ANTH 1100, ANTH 3150, ANTH 3135, ECON 3500, EESC 3750, HIST 3478, Kinesiology 3281 (same as Health and Nutrition 2302), Kinesiology 3285 (same as Health and Nutrition 2303), PHIL 3306, PHIL 3316, POLS 1002, POLS 3415, PSYC 1000, SOCY 1101, SOCY 3202, SUST 1001, WGST 3122, WGST 3501.

Concentration in health science

## Biology 1002, 3003, 3004.

Chemistry 1040; or both 1100 and 2100; or 1050, 2050, and 2100. Students considering health professions schools (e.g. medicine, dentistry, physical therapy), will likely need Chemistry 1100 and 2100. In some cases, students may be specifically advised to take Chemistry 1050, 2050 and 2100. Please check with the Pre-Health Professions advisor.

Chemistry 2500; or both 3510 and 3520; or all of the following courses: CHEM 3511, 3512, 3521, and 3522. Some students considering health professions schools (e.g., medicine, dentistry, physical therapy), may need to take Chemistry 3511, 3512, 3521 and 3522. Please check with the Pre-Health Professions advisor.

Health and Nutrition Sciences 2300 and 2301; or 2302 and 2303 or KINS 3281 and KINS 3285.
All of the following: Health and Nutrition Sciences 1100, 1200 or 2210, 2109W, 2120, 2130, 2140, and one fieldwork course chosen from Health and Nutrition Sciences 4180 or 4181.

A minimum of 12 credits from the following courses in Health and Nutrition Sciences: 2100, 2111, 2131, 2150, 2170, 2171, 2180, 2181, 2182, $2215,2220,2221,3110,3112,3161,3170,3171,3230,3314,3330$

A minimum of 6 credits from the following courses: Health and Nutrition Sciences 2183, 2212, 3111, 3132, 3150, 3160, 3162, 3180, 3181, $3184,3186,3187,3188,3505,4150,4151,4152,4153,4300$, and courses numbered in the 5000's.

Concentration in thanatology

Biology 1002, 3003, 3004.

Chemistry 1040; or 1100 and 2100; or 1050, 2050, and 2100. Students considering health professions schools (e.g. medicine, dentistry, physical therapy), will likely need Chemistry 1100 and 2100. In some cases, students may be specifically advised to take Chemistry 1050, 2050 and 2100. Please check with the Pre-Health Professions advisor.

Chemistry 2500; or both 3510 and 3520; or all of the following courses: 3511, 3512, 3521, and 3522. Students considering health professions schools (e.g., medicine, dentistry, physical therapy), will likely need to take Chemistry 3511, 3512, 3521 and 3522 . Please check with the PreHealth Professions advisor.

Health and Nutrition Sciences 2300 and 2301; or 2302 and 2303 or KINS 3281 and KINS 3285
All of the following: Health and Nutrition Sciences 1100, 1200 or 2210, 2109W, 2140, 2120, 2130, and one fieldwork course chosen from Health and Nutrition Sciences 4180 or 4181.

All of the following thanatology-related courses: Health and Nutrition Sciences 3314, 3180, 3186, 3187.
A minimum of 6 credits from the following courses: Health and Nutrition Sciences 3181, 3188, 3171, 5390, Art 3151, Classics 3244 / Religion Studies 3035 / History 3025, Psychology 3260, Sociology 2402.

## Recommendation

Students pursuing a BS with a concentration in health sciences or thanatology who are planning to continue into pre-professional health programs (e.g., nursing, physical therapy, physician assistant), should consider taking HNSC 2302 and 2303 or (KINS 3281 and KINS. 3285) instead of HNSC 2300 and 2301. Many pre-professional programs require two basic courses in anatomy and physiology.

Concentration in foods and nutrition
Students who complete this concentration will meet the requirements for the Didactic Program in Dietetics (DPD). The program meets the standards set by The Accreditation Council for Education in Nutrition and Dietetics (ACEND), the accrediting body of the Academy of Nutrition and Dietetics, and provides the core knowledge requirements necessary for pre-professional practice.

Biology 1002, 3003.
Health and Nutrition Sciences 2300 and 2301; or 2302 and 2303.
All of the following: Health and Nutrition Sciences 2210, 2220, 2221, 2222, 2223, 3210, 3230, 3250, 3270, 4213, 4230, 4240, 4241, 4250, 4300, 5290W.

Chemistry 1040; or both 1100 and 2100; or 1050, 2050, and 2100. Students considering health professions schools (e.g. medicine, dentistry, physical therapy), will likely need Chemistry 1100 and 2100. In some cases, students may be specifically advised to take Chemistry 1050, 2050, and 2100. Please check with the Pre-Health Professions advisor.

Chemistry 2500; or both 3510 and 3520; or all of the following courses: CHEM 3511, 3512, 3521, and 3522. Students considering health professions schools (e.g., medicine, dentistry, physical therapy), will likely need to take Chemistry 3511, 3512, 3521 and 3522 . Please check with the Pre-Health Professions advisor.

## Recommendation

The requirements of ACEND are subject to change. Therefore, students who wish to become registered dietitians should consult with the DPD director in the Health and Nutrition Sciences department to determine minimum requirements. A grade of B or better is required in HNSC 2210. All other required DPD courses must be completed with a grade of $C$ or better. All prospective health and nutrition sciences majors must meet with the undergraduate deputy chair before choosing a program of study leading to a B.S. degree.

## Other requirements

Students must have a minimum grade point average of 2.80 to declare Health and Nutrition Science (foods and nutrition concentration) as their major.

Students must then maintain a minimum grade point average of 2.80 . Students who do not maintain this minimum grade point average will be given an opportunity to raise their GPA to a 2.80 in the next 12 credits. Students who are unable to raise their GPA to a 2.80 after taking 12 additional credits must decide on another major.

Students must receive a minimum grade of B in HNSC 2210, Human Nutrition. Students who do not receive a minimum grade of B in HNSC 2210 must repeat the course the following semester. If the student does not achieve a B in HNSC 2210 after repeating the course, the student must select another major.

Students interested in applying to an accredited dietetic internship program (DI) to become registered dietitians must receive a verification statement from the DPD Director. The verification statement confirms that all DPD requirements have been met.

In order to receive a verification statement upon completion of the DPD, Students are required to receive a minimum grade of B in HNSC 2210 and a minimum grade of C in every other DPD course, as described above.

Students who complete a didactic program in dietetics (DPD) are eligible to apply to a dietetic internship program (DI). Upon completion of the DI students are eligible to sit for the Commission on Dietetic Registration (CDR) Examination. A passing grade on the CDR exam is required for the credential: "Registered Dietitian Nutritionist".

As of January 1, 2024, a graduate degree is required in order to sit for the CDR exam to become a Registered Dietitian Nutritionist (RDN).

## Departmental Minor(s)

## Minor in Exercise Science

## Department Requirements (21 credits)

The minor in Exercise Science prepares students to work with people in a variety of areas related to physical fitness, wellness and human performance. Students prepare by taking core science courses in kinesiology that relate to anatomy, physiology, biomechanics and psychology.

Kinesiology 3281 and 3285.
12 credits from the following: Kinesiology 3150, 3290, 4200W, 4250, 4260, 4400, 4402, 4500.

## Minor in Health and Nutrition Sciences

## Department Requirements

A minimum of 15 credits, including HNSC 1100 and at least four courses of electives in the health and nutrition sciences, each completed with a grade of C or higher. At least one course must be from the following: Health and Nutrition Sciences 1200 or 2210, 2109W, 2120, 2130, 2140, 2300, 2301.

## Minor in Thanatology

## Department Requirements

A minimum of 12 credits, including Health and Nutrition Sciences 3314, and at least three courses from the following: Health and Nutrition Sciences 3180, 3181, 3186, 3187, 3188. Each course must be completed with a grade of C or higher.

## Interdepartmental Minor(s)

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C- or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Health and Nutrition Sciences

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in health and nutrition sciences must complete at least 30 credits in the Department of Health and Nutrition Sciences with a grade of C or higher in each course. Students must meet with a department adviser to declare their intention to complete this sequence.

Concentration requirements
Health and Nutrition Sciences 1100.
Health and Nutrition Sciences 1200, or 2210; 2170; 2150.
Five courses from the following: Health and Nutrition Sciences 1180, 2109W, 2111, 2130, 2131, 2140, 2171, 2180, 2181, 2182, 3110, 3161, 3170, 3230, 3314, 3180, 3181, 3186, 3187, 3188.

One of the following courses: Health and Nutrition Sciences 2183, 3150, 3151, 3184, 4150, 4151, 4152, 4180, 4182.

## Graduate Studies

The Health and Nutrition Sciences Department offers the following graduate programs: master of arts in community health with concentrations in community health education and thanatology; master of science in nutrition; and an advanced certificate in grief counseling.

The department also offers a dietetic internship (DI) accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), the Academy of Nutrition and Dietetics' accrediting agency. For information, students should consult the department's deputy chairperson for graduate studies in nutrition or the DI program director.

## Courses

*Courses marked with an asterisk (*) are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in this department.

Courses marked with a number sign (\#) are applicable to the 60-credit science and mathematics requirement for the B.S. degrees in biology, chemistry, computer and information science (including computational mathematics), earth and environmental sciences, mathematics, physics, psychology. The number sign (\#) does not affect the requirements for the B.S. degree program in health and nutrition sciences.
§Independent work means not less than three additional hours each week of conference, research, reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## Introductory level courses

## HNSC \#*1100 Personal and Community Health

3 hours; 3 credits
Basic health concepts. Personal responsibility for health maintenance and improvement for individuals, families, and
communities. Starting Fall 2019 Satisfies Pathways Flexible Core Scientific World requirement.

## HNSC \#*1180 Death, Life, and Health

3 hours; 3 credits
Individual and societal attitudes concerning death and life. How
attitudes about death influence the quality of life and health. Impact of bereavement on survival and health. Medical concerns in treatment of the terminally ill. Hospices. The living will. Organ transplantation. Impact of technology on the care of the dying.

## HNSC \#1200 Fundamentals of Nutrition

3 hours; 3 credits
Fundamental principles of nutrition as they relate to optimum health of the individual and the family. Social, economic, and educational implications. Evaluation of various mass media relating to the field. This course does not satisfy the department requirement for students majoring in foods and nutrition. (Not open to students who are enrolled in or who have completed Health and Nutrition Sciences 2210 [29].) Starting Fall 2019 Satisfies Pathways Flexible Core Scientific World requirement.

## HNSC *1220 Nutrition and World Hunger

3 hours; 3 credits
Principal elements of food production and distribution. Determinants of the adequacy of the world's food supply. Nutritional consequences of inadequate food supply.

## Basic courses

## HNSC 2100 Introduction to Public Health

3 hours; 3 credits
Examination of the evolution, principles, methods and theories of public health. Critical analysis of public health issues, programs, institutions and professionals. Investigation of public health ethics, law and policy.

Prerequisite: Health and Nutrition Sciences 1100 [6.1]

## Intermediate courses

## HNSC 2109W Principles in Health Sciences

3 hours; 3 credits
Scientific and philosophical bases of health principles. Social conditions influencing health. Principles affecting health programs. HNSC 2109 is the program's writing intensive course.

Prerequisite: Health and Nutrition Sciences 1100.

## HNSC 2111 Health Psychology

3 hours; 3 credits
Contributions of psychology to the promotion and maintenance of health; prevention and treatment of illness; causes and correlates of health, illness, and related dysfunctions. Evaluations of research about psychological contributions to health. (This course is the same as Psychology 3180.)

Prerequisite: Health and Nutrition Sciences 1100 [6.1]; or Psychology *1000 [1.1] and one of the following: Psychology *2100 [10], 2300 [30.2], or 3600 [65.1].

## HNSC \#2120 Introduction to Epidemiology: Laboratory

3 hours recitation, 2 hours laboratory; 4 credits International, national, and local issues in public health; demography; prevention and control of disease; health problems of disadvantaged and displaced people. Laboratory experiences in
data analysis, disease surveillance, investigation of disease outbreaks, and causal analysis of chronic diseases.

Prerequisite: Health and Nutrition Sciences 1100 [6.1].

## HNSC \#2130 Health and Human Ecology

3 hours; 3 credits
Ecological factors of health. Theories of adaptation to a changing environment. Technological advances and environmental reaction. Air, water, noise, and waste pollution. Needs and responsibilities of the individual as a user of the environment.

Prerequisite: Health and Nutrition Sciences 1100 [6.1].

## HNSC \#2131 Environmental Health

3 hours; 3 credits
Environmental factors affecting health; community sanitation; heating, lighting, ventilation; camp, resort, swimming pool, and restaurant sanitation. Local conditions.

Prerequisite: Health and Nutrition Sciences 1100 [6.1].

## HNSC 2140 Introduction to the U.S. Health System and Policy

3 hours, 3 credits
Overview and examination of problems in health care delivery in the United States. Introduction to the fundamental characteristics and organizational structures of the. health system. Study of the historical, political, ethical, and economic, and regulatory aspects of the public and private health systems. Critical evaluation of the quality, organization, and accessibility of health care services, and the role of different agencies and branches of government. Comparison of health care policy and systems in different countries. (Not open to students who have completed Health and Nutrition Sciences 26.)

Prerequisite: Health and Nutrition Sciences 1100 [6.1].

## HNSC \#2150 Fundamentals of Health Counseling

## 3 hours; 3 credits

Role of the health counselor. Application of basic counseling skills to the solution of health problems.

Prerequisite: twelve credits in the department, including Health and Nutrition Sciences 1100 [6.1]; or permission of the chairperson.

## HNSC 2170 Child Development: Typical and Atypical

3 hours, 3 credits
Health perspectives on development of the child from birth through middle childhood with focus on young children. Emotional, physical, and social development. Deviations from normal patterns of development, and study of specific disabilities. Environmental factors of particular importance in guiding growth. Course includes a child observation project.

Prerequisite or corequisite: Health and Nutrition Sciences 1100, or Early Childhood and
Art Education 2003, or Education 2002 completed in Spring 2012
or earlier, or
Psychology*1000.

## HNSC 2171 Family Health and Relationships

3 hours; 3 credits

Family interaction, attitudes, and roles as they relate to major health problems and special needs of individuals throughout the family life cycle. Family health as it relates to and is influenced by other institutions in society.

Prerequisite: Health and Nutrition Sciences 1100 [6.1].

## HNSC 2180 Women's Health: a Feminist Perspective

3 hours; 3 credits
Modern medical systems and women's places as medical workers and consumers of medical services. History of women healers and health workers. Influences of race, class, ethnicity, and sexual preference on illness and treatment of women. Politics of contraception, sterilization, abortion, and childbirth. Self-help care movement. This course is the same as Women's and Gender Studies 3606.

Prerequisite: Health and Nutrition Sciences 1100 [6.1]; or permission of the chairperson.

## HNSC \#2181 Human Sexuality

3 hours; 3 credits
Development of awareness and understanding of one's sexuality. Differences in sexual expression. Relationship between sexuality and health. Effect of sterility, infertility, contraception, and abortion on the individual and on sexual responsibility.

Prerequisite: Health and Nutrition Sciences 1100 [6.1].

## HNSC \#2182 Drugs and Society

3 hours; 3 credits
Exploration of drug use in our society and in earlier cultures.
Nature and effects of various drugs. Psychological, sociological, and legal aspects of drug use abuse.

Prerequisite: Health and Nutrition Sciences 1100 [6.1].

## HNSC 2183 Health Communication

3 hours; 3 credits
The way we create, seek, process, and share information about health, medicine, and the health care system. Intrapersonal, interpersonal, group, organizational, and societal communication. The multidisciplinary nature of health communication. Literature from communication studies and the social sciences. This course is the same as CASD 4666.

Prerequisite: Health and Nutrition Sciences 1100 [6.1] or equivalent.

## HNSC \#2210 Human Nutrition

4 hours; 4 credits
The physiological requirements and functions of protein, carbohydrates, lipids,
and the vitamins and minerals that are determinants of health and disease in humans; the digestion, metabolism and dietary sources of macronutrients; social, psychological and economic forces which affect nutrition and food choice; analysis of food intake and diet adequacy; discussion of current issues in nutrition.

Prerequisite: Biology 1001 or 1080.
Prerequisite or co-requisite: Biology 1002 or 1081.

Integration of basic nutritional concepts with current knowledge of the aging process. Healthy and diseased states as they relate to nutritional needs and consumer concerns.

Prerequisite: Health and Nutrition Sciences 1200 [25.1] or 2210 [29].

## HNSC 2215 Current Concerns in Nutrition

3 hours; 3 credits
Principles of nutrition used to evaluate current issues and controversies. Topics include a basic overview of nutrition and nutrients, fad diets, cholesterol, sugar, megavitamins, nutrition labeling, food additives, health foods, nutrition and drug relationships, mass media and nutrition, and dietary fibers. (Not open to students concentrating in foods and nutrition or to students who have completed Home Economics or Health and Nutrition Sciences 4.)

Prerequisite: Health and Nutrition Sciences 1200 [25.1] or 2210 [29].

## HNSC 2220 Food Science

3 hours; 3 credits
The study of food chemistry and the role of ingredients in food products. The study of the chemical and physical factors that influence food quality and food products. Not open to students who have completed Health and Nutrition Sciences 41, or both 41.1 and 41.2.

Prerequisite: Health and Nutrition Sciences 1200 [25.1] or 2210 [29]. Prerequisite or corequisite: Chemistry *1040 [5].
Corequisite: Health and Nutrition Sciences 2221 [41.4].

## HNSC 2221 Food Science Laboratory

2 hours laboratory; 1 credit
Laboratory experience demonstrating and evaluating the physical and chemical changes to food and food nutritional values in relation to processing, preparation, and storage. (Not open to students who are enrolled in or have completed Health and Nutrition Sciences 41 , or both 41.1 and 41.2).

Prerequisite: Health and Nutrition Sciences 1200 [25.1] or 2210
[29]. Corequisite: Health and Nutrition Sciences 2220 [41.3].
Prerequisite or corequisite: Chemistry *1040 [5].

## HNSC 2222 Foods of Diverse Populations

2 hours; 2 credits
Exploration of foods and foodways of diverse population groups. Examination of the effects of ethnic, geographic (including immigration), ecological and historic factors on foods and foodways.

Prerequisite: Health and Nutrition Sciences 1200 [25.1] or 2210 [29];
Corequisite: Health and Nutrition Sciences 2223 [41.6].

## HNSC 2223 Foods of Diverse Populations Laboratory

2 laboratory hours; 1 credit
Laboratory experience that provides food preparation activities designed to complement Health and Nutrition Sciences 2222,
Foods of Diverse Populations.
Prerequisite: Health and Nutrition Sciences 1200 or 2210.
Corequisite: Health and Nutrition Sciences 2222.

## HNSC \#2230 Introduction to Experimental Foods

1 hour lecture, 4 hours laboratory; 3 credits
Experimental techniques including factors affecting preparation of standard food products and comparative methods and materials.

Prerequisite: Health and Nutrition Sciences 2220 [41.3], 2221
[41.4], 2222 [41.5] and 2223 [41.6].
Prerequisite or corequisite: Chemistry *2500 [50] or 3510 [51].

## HNSC \#2300 Human Physiology

3 hours; 3 credits
Application of physiological concepts to health and life.The mechanism and control systems that allow for functional harmony. Systemic approach to the physiology of bone, muscle, nerve, special senses, circulation, respiration, digestion, metabolism, the endocrine glands, and reproduction. This course is the same as Kinesiology 3271. (Not open to students who are enrolled in or have completed Biology [6.1] or [6.2].) STEM variant course Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: Biology 1001 or 1080, and 1002 or 1081.

## HNSC \#2301 Physiology Laboratory

1 hour lecture, 2 hours supervised laboratory and/or supervised fieldwork; 2 credits
Development of skill in the use of clinical and research apparatus and techniques. Students work with practical electrophysiological measures such as EEG and EKG. Application of material covered in Health and Nutrition Sciences 2300 [22.71]. (Not open to students who are enrolled in or have completed Biology 6.1 or 6.2.)

Prerequisite or corequisite: Health and Nutrition Sciences 2300 [22.71]

## HNSC \#2302 Human Anatomy and Physiology 1

3 hours lecture; 3 hours laboratory; 4.5 credits A foundation in the form and function of the human body. Exploration and development of an understanding of anatomical terminology, basic science foundations, cellular structure and transport, tissues, integumentary system, skeletal system, muscular system and nervous system. This course is the same as Anthropology 3265, Biology 1501, and Physical Education and Exercise Science/Kinesiology 3281. STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: 1) high school chemistry or the equivalent taken within the past five years or satisfactory performance on a chemistry competency test, and 2) high school biology or the equivalent taken within the past five years or satisfactory performance on a biology competency test.
Recommended: College chemistry (introductory/general) and college biology (introductory/general) are recommended before taking this course

## HNSC \#2303 Human Anatomy and Physiology 2

3 hours lecture; 3 hours laboratory; 4.5 credits Introduction to the form and function of the human body. Exploration and development of an understanding of blood, heart, blood vessels, respiratory system, digestive system, metabolism, urinary system, fluid \& electrolyte balance, reproductive system, immune system and development. This course is the same as Anthropology 3266, Biology 1502, and Physical Education and Exercise Science/Kinesiology 3285. STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: One of the following: Anthropology 3265, Biology 1501, Health and Nutrition Sciences 2302, or Physical Education and Exercise Science/Kinesiology 3281.

## HNSC 3110 Contemporary Issues in Public Health and Health Care: Race, Class, and Gender

3 hours; 3 credits
Examination of the influence of race, class, and gender on health and medical care in the United States.

Prerequisite: Health and Nutrition Sciences 1100 [6.1].

## HNSC 3111 Health and Globalization

3 hours; 3 credits
Cross-cultural study of the effects of globalization on the health of contemporary human populations. Assessment of the ways that physiological factors are mediated by cultural and social processes. Problems of social inequality and power on primary determinants of health and health care. International health, human rights and health, AIDS pandemic, health and the environment. (This course is the same as Anthropology 3155.)

Prerequisite: Health and Nutrition Sciences 2109 [21].

## HNSC 3112 Health Activism

3 hours; 3 credits
Health activism as it relates to social justice, health equity and public health. Through the study of health movements on selected topics, students will critically examine the theories, research, processes and tools of health activism. Current topics in health activism will be examined.

Prerequisite: Health and Nutrition Sciences 1100; 2100

## HNSC \#3132 Occupational Safety and Health

3 hours; 3 credits
Occupational safety, health programs, and services; hazards and control procedures; reporting and investigating of industrial accidents; legislation, standards, rules, and compliance procedures in achieving safety for workers.
(Not open to students who have taken Health and Nutrition Sciences 2132.)

Prerequisite: Health and Nutrition Sciences 1100

## HNSC \#3150 Leadership in Health Action Groups

3 hours; 3 credits
Use of groups in influencing health behavior. Dynamics of effective health action groups. Group participation to demonstrate leadership skills, relationships, blocks to effective action. Learning to assess group needs. Capitalizing on individual personalities for change and growth. Ethics of teacher involvement.

Prerequisite: Health and Nutrition Sciences 1100 [6.1]; and completion of 6 credits in advanced courses in health and nutrition sciences.

## HNSC 3160 Physiology of Health and Disease

3 hours; 3 credits
Interdependence and function of body mechanisms in the daily processes of adapting to the stress of life.

Prerequisite: Health and Nutrition Sciences 2300 [22.71] or

Physical Education/Kinesiology 3271.

## HNSC \#3161 Health Appraisal

3 hours; 3 credits
Health problems of children and adults. Theoretical basis for health appraisal and screening. Techniques of health appraisal and screening, recording, interpreting, and counseling about test results; cooperation with public health services; confidentiality and consent; follow-up. Duties and limitations of the health appraiser.

Prerequisite: Health Science 1100 [6.1] or Health and Nutrition Sciences 1100 [6.1] and Health Science 2300 [22.71] or Physical Education/Kinesiology 3271.

## HNSC 3162 Biological Concepts in Public Health

## 3 hours; 3 credits

Explore the biological underpinnings of fundamental public health concerns such as infectious disease, response to environmental contaminants and the impact of behavior. Understand how biological and molecular factors need to be accommodated in public health policy and practice. Examine the impact of the political, ethical and legal issues that arise when confronting the biological basis of disease in populations.

Prerequisite: HNSC 1100, HNSC 2109W, BIOL 1001

## HNSC \#3170 Family Influences on Child Health

3 hours; 3 credits
Parenthood, prenatal care; development and health of the child from birth to adolescence; school environment; physical handicaps.

Prerequisite: nine credits in the department, including Health and Nutrition Sciences 1100. A course in developmental psychology or child development is recommended.

## HNSC \#3171 Health Aspects of Maturity and Aging

3 hours; 3 credits
Development of awareness and understanding of the aging process. Health and health-related needs of the aging. Preventive, restorative, and rehabilitative services for the aged. Health education and long-term care for the disabled.

Prerequisite: nine credits in the department, including Health and Nutrition Sciences 1100 [6.1].

## HNSC 3180 Bereavement

## 3 hours; 3 credits

Theoretical concepts of grief and bereavement. The impact of mourning on the bereavement process. Health implications of incomplete mourning and pathological bereavement. The role of the health care professional and related personnel in providing care. Research to improve care.

Prerequisite or corequisite: HNSC 3314

## HNSC 3181 Children and Death

3 hours; 3 credits
The child's concept of death. Typical childhood coping patterns in response to death of self, family member, friend. Needs of the terminally ill child, the family, and the caregiver. Alternative care settings. Available resources and supports for the health professional.

## HNSC 3184 Health Disparities in the United States: A Multideterministic Perspective

3 hours; 3 credits
A comprehensive, multideterminist perspective of health disparities in the United States. The multiple factors that interact to produce health disparities within populations including access, utilization, and quality of health care services, biological/genetic factors, culture/ethnicity and their impact on health status, environmental and occupational factors that affect health status, lifestyle factors, psychological factors, sociodemographic factors, and socioeconomic status. The student will develop skills necessary to critically review health disparity research, (Not open to students who have taken Health and Nutrition Sciences 2184.)

Prerequisite: Health and Nutrition Sciences 1100.

## HNSC 3186 Principles of Caring for the Terminally III

3 hours; 3 credits
Needs of the dying patient and family. Clinical approaches to care of terminally ill patients and their families. Role of the hospice as an alternative-care setting. Techniques of pain management and palliative care. The role of the health care professional and related personnel in providing care.

Prerequisite or corequisite: HNSC 3314

## HNSC 3187 Trauma and Traumatic Grief

3 hours; 3 credits
A study of trauma and traumatic grief. Evaluation of assessment tools, treatment modalities, and programs of prevention. Identification of the factors influencing the quality of care provided to a traumatized griever. Critique of trauma research study designs and findings.

Prerequisite or corequisite: HNSC 3314

## HNSC 3188 Adolescents, Death, and Bereavement

3 hours; 3 credits
Encounters with death and bereavement during adolescence. Developmental tasks and transitions during adolescence as foundation for understanding adolescent encounters with death and bereavement. Interventions with terminally ill adolescents. Preventive interventions. Assessment of interventions.

Prerequisite or corequisite: HNSC 3314

## HNSC \#3210 Nutritional Chemistry

3 hours; 3 credits
Biochemistry of carbohydrates, lipids, proteins, inorganic salts, enzymes, vitamins, hormones. Bioenergetics and oxidation reactions. Pathways of intermediary metabolism.
(Not open to students who are enrolled in or have completed Chemistry 4580.)

Prerequisite: Health and Nutrition Sciences 2210 and either Chemistry 2500 or 3510.

## HNSC \#3230 Nutrition and Health Across the Lifespan

3 hours; 3 credits
Nutrition and health concepts as they apply to the stages of the life cycle: pregnancy, infancy, childhood, adolescence, adulthood, and older adults

Prerequisite for Nutrition students: Health and Nutrition Sciences 1200 or 2210.
Prerequisite for Health students: Health and Nutrition Sciences 1100 and 1200 or 2210

## HNSC 3250 Institutional Food Service Management

3 hours lecture, 2 fieldwork; 4 credits
Planning, purchasing, storage, preparation, and distribution of food in varied institutional settings. Principles of safety and sanitation in food services. Classic management theory as applied to food service systems. Supervised fieldwork component. (Not open to students who have completed both Health and Nutrition Sciences 66.1 and Health and Nutrition Sciences 66.2. Students who have completed Health and Nutrition Sciences 66.1 may take this course, but will receive only 2 credits.)

Prerequisite: Health and Nutrition Sciences 41; or 41.1 and 41.2; or 2220 [41.3] and 2221 [41.4].

## HNSC 3270 Professional Development in Nutrition and Dietetics

1 hour; 1 credit
An introduction to the profession of nutrition and dietetics which explores practice, leadership, management and professionalism as well as career options. Students will become familiar with current issues and standards of practice, regulation and ethics in the field.

Prerequisite: Biology 1001, 1002, Health and Nutrition Sciences 2210, 2300, 3230, 3250

## HNSC \#3300 Introduction to Biostatistics for the Health Sciences

3 hours; 3 credits
Elementary statistical techniques applied to tests and measurements in health education. Design and evaluation of tests to measure health attitudes, knowledge, and behavior.
Development and use of tests to augment the teaching of health. (Not open to students who are enrolled in or have completed Physical Education/Kinesiology 3075.)

Prerequisite: Nine credits in advanced health and nutrition sciences courses.

## HNSC 3314 Human Encounters with Death and

## Bereavement

3 hours; 3 credits
Individual and societal attitudes concerning death and life. How attitudes about death influence the quality of life and health in the West. Impact of technology on the care of the dying. Medical concerns in the treatment of the terminally ill. The bereavement process. Holistic impact of death and bereavement. (Not open to students who have completed Core Curriculum 3314.) 2017-2018 and 2018-2019 Satisfies Pathways College Option requirement. Starting Fall 2020 satisfies Pathways Flexible Core Individual and Society requirement.

Prerequisite: English 1010 or permission of the department and junior standing.

## HNSC 3330 Public Health Ethics

3 hours, 3 credits
The major ethical concepts in public health ethics, how they were developed, and how they are applied. Identify, articulate and apply ethical principles to practical decision-making issues in public health policy, practice and research.

Prerequisites: HNSC 2100

## HNSC 3505 Sociology of Public Health

3 hours, 3 credits
Examination of the relationship between social, economic, and political systems and population-level patterns of health and illness. How a range of social policies not directly health-related, such as housing, shape health, illness and life expectancy across US populations. Interaction of race, class, gender and other systems of stratification with dynamics of health and illness. This course is the same as Sociology 3505.

Prerequisites: HNSC 1100.
Advanced and specialized courses

HNSC 4150 Techniques of Community Health Education
3 hours; 3 credits
Identification and analysis of various techniques, media, approaches used in community health education. Analysis of health education campaigns.

Prerequisite: twelve credits in advanced courses in the department.

## HNSC \#4151 Sex Information and the Health Professional

3 hours; 3 credits
Developing an awareness of problems inherent in presentation of sex information. Dealing with the phenomena of responsible sexual behavior. Consideration of controversial issues as they relate to the individual, the family, and to community organizations.

Prerequisite: twelve credits in advanced courses in the department; and a grade of C or higher in Health and Nutrition Sciences 2181 [35].

## HNSC \#4152 Program Planning and Community Health Education

3 hours; 3 credits
Introduction to concepts of program planning for health education in the community. Program development, implementation, and evaluation of currently functioning community health education programs.

Prerequisite: Twelve credits in advanced courses in the department.

## HNSC 4153 Lesbian, Gay, Bisexual and Transgender Health

3 hours; 3 credits
Develop an understanding of historical and contemporary health issues facing sexual minorities (Lesbian, Gay, Bisexual, Transgender, Queer). Topics include factors that contribute to negative health outcomes in LGBT populations related to mental health, HIV/STIs, substance use, smoking, certain types of cancer, and victimization. This course is the same as WGST 3608.

Prerequisites: HNSC 1100
Prerequisite or co-requisite: HNSC 2181

## HNSC \#4180 Community Health Service I

6 hours; 3 credits
Supervised fieldwork in a designated health service agency. Conferences with instructor. Report or term project. Either course may be taken alone or first. Students are encouraged to meet with
instructor one term prior to registration to discuss and arrange placement.

Prerequisite: completion of 12 credits in advanced elective courses in health and nutrition sciences with a minimum grade of C , or permission of the chairperson.

## HNSC \#4181 Community Health Service II

6 hours; 3 credits
Supervised fieldwork in a designated health service agency. Conferences with instructor. Report or term project. Either course may be taken alone or first. Students are encouraged to meet with instructor one term prior to registration to discuss and arrange placement.

Prerequisite: completion of 12 credits in advanced elective courses in health and nutrition sciences with a minimum grade of C , or permission of the chairperson.

## HNSC 4182 Health and the Hospitalized Child

2 hours recitation, 4 hours fieldwork; 4 credits
Physical, social, and emotional factors that affect hospitalized children and their families. Application of techniques and skills in dealing with children and health problems. Supervised fieldwork in a hospital setting.

Prerequisite: Health and Nutrition Sciences 3170 [36] and 2150 [37].

## HNSC 4211 Advanced Nutrition I

3 hours; 3 credits
Nutrients involved in the regulation of gene transcription, methylation, the calcium-phosphorus economy, and electrolyte balance. Effects of interactions with other nutrients, genetic polymorphisms, and environmental conditions. The course addresses the same principles as HNSC 4212 Advanced Nutrition II, but applies them to a different set of nutrients.
(Not open to students who have taken Health and Nutrition Sciences 4210.)

Prerequisites: Health and Nutrition Sciences 2210, 3210, 3300.

## HNSC 4212 Advanced Nutrition II

3 hours; 3 credits
Nutrients involved in the antioxidant defense system and in the anabolism and catabolism of macronutrients and molecules derived from them. Effects of interactions with other nutrients, genetic polymorphisms, and environmental conditions. The course addresses the same principles as HNSC 4211, Advanced Nutrition I, but applies them to a different set of nutrients.
(Not open to students who have taken Health and Nutrition Sciences 4210.)

Prerequisites: Health and Nutrition Sciences 2210, 3210, 3300.

## HNSC 4213 Vitamins and Minerals

4 hours; 4 credits
Metabolism and physiological functions of vitamins and mineral elements known to be essential in human nutrition. Utilization of concepts in biochemistry and molecular biology. Clinical effects of levels of nutrient intake.

Prerequisites: HNSC 2210, HNSC 3210 and 3300.

## HNSC \#4230 Community Nutrition Education

3 hours lecture, 2 hours supervised fieldwork; 4 credits
Knowledge of education theories, health behaviors, human and group dynamics, and public policy in dietetics. Application of the principles of nutrition as they relate to the problems of different community groups at the local, national, and international level using nutritional assessment, program planning, education, and program evaluation techniques. Introduction to the public health approach to nutrition. Supervised field observations to study nutrition services in varied communities.
(Not open to students who have completed Health and Nutrition Sciences [45] or [53].)

Prerequisite: Health and Nutrition Sciences 3230 [47].

## HNSC \#4240 Clinical Nutrition I

4 hours; 4 credits
Pathophysiological basis for medical nutrition therapy in specific disease
states; analysis of case studies; theory and application of therapeutic diets.

Prerequisite: Health and Nutrition Sciences 2300, 2210, and 3230; or permission of the chairperson.

## HNSC \#4241 Clinical Nutrition II

4 hours; 4 credits
An introduction to the profession and practice of clinical nutrition and dietetics centered on the nutrition care process: assessment, diagnosis, intervention, monitoring and evaluation. Topics include: screening for nutritional risk; nutritional assessment and evaluation, dietary care planning; enteral and parenteral nutrition; counseling theory and methods; ethics of care; reimbursement for medical nutrition therapy.

Prerequisite: Health and Nutrition Sciences 2300, 2210, 3230 or permission of the chairperson; pre-requisite or co-requisite HNSC 4240

## HNSC 4250 Integrative Nutrition and Functional Foods

## 3 hours; 3 credits

Students will develop a fundamental understanding of the role of Integrative and functional nutrition including complementary modalities, whole foods and plant-based medicines and their effects on health, nutritional status and disease prevention. Students will examine, interpret, and evaluate scientific research for practical application in the field of nutrition and dietetics.

Prerequisite: Biology 1001, 1002, Health and Nutrition Sciences 2220, 2221, 2210, 2300, 3300

## HNSC \#4300 Health Care Structure, Policy and Administration

3 hours; 3 credits
The structure, functions and administration of health care systems in clinical and community settings; health care policy, programs and legislation; health care cost control and reimbursement; managed care and medical homes; interdisciplinary roles of health care professionals; human resource management; management theories and their application in health care.

Prerequisite: For those pursuing the B.A. degree program in health and nutrition sciences or for those pursuing the B.S. degree program in health and nutrition sciences with a concentration in
health science: HNSC 2109 W or 2140
Prerequisite or corequisite: For those pursuing the B.S. degree program in health and nutrition sciences with a concentration in foods and nutrition: HNSC 4230

## Seminars and independent study

## HNSC 5100 Capstone Seminar in Public Health Research

3 hours; 3 credits
Develop a fundamental understanding of research design in public health. Examine, interpret, and synthesize public health literature. Develop an understanding of data collection methods, analysis of data, and reporting of results.

Prerequisite: HNSC1100, HNSC 2100, HNSC 2109W, HNSC 2120, HNSC 3300

## HNSC \#5190 Seminar in Current Literature in Philosophy of Health

3 hours; 3 credits
Exploration of current literature in the philosophy of health as it relates to human development. Project or report.

Prerequisite: eighteen credits in advanced courses in the department and permission of the chairperson

## HNSC \#5191 Seminar in Current Literature in the Science of Health

3 hours; 3 credits
Exploration of current literature in science related to health and human development. Project or report.

Prerequisite: eighteen credits in advanced courses in the department and permission of the chairperson.

## HNSC \#5290W Seminar in Recent Trends in Nutrition

3 hours; 3 credits
Critical survey of current literature in the field. Discussion of concepts of research methodology. Interpretation and application of research findings to the nutritional well-being of individuals and population groups. Writing-intensive course.

Prerequisite: Health and Nutrition Sciences 2300 [22.71] and 3300 [60]; English *1012 [2]. Prerequisite or corequisite: Health and Nutrition Sciences 4240 [54.6].

## HNSC \#5390 Directed Research I

Minimum of 9 hours conference and independent work§; 3 credits Structuring of research topic and completing research in any area within the field of health science: designing, testing, and evaluating research data. Report on term project.

Prerequisite of 5390 [83.1]: completion of an approved program of advanced health and nutrition sciences courses and permission of the chairperson.

## HNSC \#5391 Directed Research II

Minimum of 9 hours conference and independent work§; 3 credits Structuring of research topic and completing research in any area within the field of health science: designing, testing, and evaluating research data. Report on term project.

Prerequisite of 5391 [83.2]: Health and Nutrition Sciences 5390 [83.1] and permission of the chairperson.

## HNSC \#5392 Directed Research III

Minimum of 9 hours conference and independent work§; 3 credits Structuring of research topic and completing research in any area within the field of health science: designing, testing, and evaluating research data. Report on term project.

Prerequisite of 5392 [83.3]: Health and Nutrition Sciences 5391 [83.2] and permission of the chairperson.

## HNSC \#5393 Independent Study in the Health and Nutrition Sciences

6 hours conference and independent work§; 2 credits Independent study in an area of health and nutrition sciences. Conferences. Report or project.

Prerequisite: junior or senior standing and permission of the chairperson.

## HNSC \#5394 Independent Study in the Health and Nutrition Sciences

9 hours conference and independent work§; 3 credits Independent study in an area of health and nutrition sciences. Conferences. Report or project.

Prerequisite: junior or senior standing and permission of the chairperson.

## Kinesiology courses

## KINS 3000 Introduction to Kinesiology

## 3 hours; 3 credits

A professional orientation and introduction to the breadth of the field of physical education, disability sport and physical activity, and exercise science in schools, industry, and community agencies for majors in physical education, disability sport and physical activity, and exercise science. Contemporary, cutting-edge issues related to health and fitness. In-depth consideration of emerging issues such as childhood obesity, physical and cognitive disabilities, built environment, nutrition/diet, drugs/alcohol/tobacco and other such topics that are in health/fitness news and research. A minimum grade of "C" in this course is required of Physical Education and Exercise Science majors for the degree.

## KINS 3005 First Aid and Safety

2 hours; 2 credits
Students develop a working knowledge of first aid methods and techniques and accident prevention. A minimum grade of " C " is required of Physical Education and Exercise Science majors for this course. Certification may be earned.

## KINS 3281 Human Anatomy and Physiology 1

3 hours lecture; 3 hours laboratory; 4.5 credits A foundation in the form and function of the human body. Exploration and development of an understanding of anatomical terminology, chemical, cellular and tissue levels of structural organization and body systems include integumentary, skeletal, muscular, nervous and endocrine systems. Students are required to dissect mammalian specimens. This course is the same as Anthropology 3265, Biology 1501, and Health and Nutrition Sciences 2302. STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: 1) high school chemistry or the equivalent taken within the past five years or satisfactory performance on a chemistry competency test, and 2) high school biology or the equivalent taken within the past five years or satisfactory performance on a biology competency test.
Recommended: College chemistry (introductory/general) and college biology (introductory/general) are recommended before taking this course

## KINS 3285 Human Anatomy and Physiology 2

3 hours lecture; 3 hours laboratory; 4.5 credits Introduction to the form and function of the human body. Exploration and development of an understanding of cardiovascular, immune, respiratory, digestive, urinary and reproductive systems as well as metabolism and fluid and electrolyte balance. Students are required to dissect mammalian specimens. This course is the same as Anthropology 3266, Biology 1502, and Health and Nutrition Sciences 2303. STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: One of the following: Anthropology 3265, Biology 1501, Health and Nutrition Sciences 2302 or Physical Education and Exercise Science/Kinesiology 3281.

## KINS 3290 Applied Musculoskeletal Anatomy

3 hours; 3 credits
Detailed examination of the musculoskeletal system of the human body with a focus on understanding its structure and function in applied settings such as activities of daily living, work, sport and exercise, and rehabilitation. Bone structure, bony landmarks, muscle attachments, muscle actions and resulting motions, and body planes and axes. A minimum grade of C is required of Department of Kinesiology majors for this course. Lab fee applies.

Prerequisite for Exercise Science students: Kinesiology 3281 and 3285, each with a minimum grade of C.

Prerequisite for Physical Education students: Kinesiology 3001
Anatomy and Physiology for Physical Education, with a minimum grade of C .

## KINS 3295 Motor Development and Learning

## 3 hours; 3 credits

Students gain knowledge of motor development and learning and principles. Topics include the processes of skilled motor performance and motor skill acquisition, human motor development from childhood through older adulthood, the influence of perceptual, cognitive, physiological, and social development on motor development. Emphasis is on the practical application of concepts to the teaching of motor skills. A minimum grade of $C$ is required of Department of Kinesiology majors for this course.

Prerequisite for Exercise Science students: Kinesiology 3281 and 3285 , each with a minimum grade of $C$.

Prerequisite for Physical Education students: Kinesiology 3001 Anatomy and Physiology for Physical Education, with a minimum grade of C .

## KINS 4200W Physiology of Exercise

2 hours lecture; 2 hours laboratory; 3 credits
Study of body systems and organs during physical activity with
emphasis on metabolic, cardio respiratory, and body composition parameters. Laboratory experiences employing physiological principles during active participation in exercise are also included. This is a writing intensive course. A minimum grade of C is required of Physical Education and Exercise Science majors for this course. Lab fee applies.

Prerequisite for Exercise Science students: Kinesiology 3281 and 3285, each with a minimum grade of C; English *1012.

Pre-requisite for Physical Education students: Kinesiology 3001 Anatomy and Physiology for Physical Education, with a minimum grade of C; English *1012.

## KINS 4250 Biomechanics

3 hours; 3 credits
The principles that influence human motion. Statics, dynamics, kinematics and kinetics applied to the musculoskeletal system of the human body. Emphasis is placed on developing the ability to analyze human motion with the goal of optimizing human movement performance and identifying mechanical factors associated with musculoskeletal injury. A minimum grade of C is required of Department of Kinesiology majors for this course. Lab fee applies.

Prerequisite for Exercise Science students: Kinesiology 3281 and 3285, each with a minimum grade of C; Kinesiology 3290 (with a grade of C or better).

Pre-requisite for Physical Education students: Kinesiology 3001 Anatomy and Physiology for Physical Education, with a minimum grade of C; Kinesiology 3290 (with a grade of C or better).

## KINS 4260 Advanced Biomechanics for Exercise Science

3 hours; 3 credits
Integration of advanced concepts and relevant scientific information to provide for understanding of biomechanics as it relates to exercise, physical training, and rehabilitation. Within the framework of exercise science, this course provides the student with knowledge that will allow for the assessment of human motion for the purposes of identifying critical factors of performance and injury including persons with a disability. A minimum grade of "C" in this course is required of Department of Kinesiology majors for the degree.

Prerequisite: cumulative GPA of 2.5 or higher and Physical Education and Exercise Science/Kinesiology 4250 (with a grade of C or better) and Physics 1100.

## KINS 4400 Fitness Program Management

## 3 hours; 3 credits

Principles of fitness and health promotion program operation including cost/ benefit and cost/effectiveness, program objectives, content, promotion and implementation, financial and personnel management, and facility planning and design. A minimum grade of " C " is required of Department of Kinesiology majors for this course.

Prerequisite: cumulative GPA of 2.5 or higher and Physical Education and Exercise Science/Kinesiology 4200W (with a grade of C or better).

## KINS 4402 Fitness Assessment and Exercise Prescription

4 hours; 3 credits
Students study the process and procedures of physical fitness
evaluation and prescription. Emphasis is placed on the design of individual and group exercise programs. A minimum grade of " C " is required of Department of Kinesiology majors for this course. Lab fee applies.

Prerequisite: cumulative GPA of 2.5 or higher and Physical Education and Exercise Science/Kinesiology 4200W (with a grade of C or better).

## KINS 4500 Sport and Exercise Psychology

3 hours; 3 credits
Analysis of psychological principles underlying the teaching and performance of physical activity including sport and exercise. A minimum grade of " C " in this course is required of Physical Education and Exercise Science majors for the degree.

Prerequisite: cumulative GPA of 2.5 or higher.

## KINS 4510 Advanced Principles of Physical Activity:

## Cardiovascular/Pulmonary Training

2 hours lecture, 2 hours laboratory; 3 credits
Lecture and practical lab activities focused on advanced principles of physiology as it relates to physical activity and related improvements on the cardiovascular and cardiopulmonary systems. Theoretical and practical exploration of physical activities such as running, swimming, cycling, cross-country skiing and dance on the body's aerobic system are covered. A minimum grade of "C" in this course is required of Department of Kinesiology majors for the degree.

Prerequisite: cumulative GPA of 2.5 or higher and Physical Education and Exercise Science/Kinesiology 4200W and 4250 (with a grade of C or better in each).

## KINS 4520 Advanced Principles of Physical Activity: Strength/ Resistance Training

2 hours lecture, 2 hours laboratory; 3 credits
Lecture and practical lab activities focused on advanced principles of physiology as it relates to physical activity and related improvements on the musculoskeletal system. Theoretical and practical exploration of physical activities such as weight training, free weights vs. machine-based resistance, plyometric training, body resistance, aerobic training (running, swimming, cycling, cross-country skiing and dance) on the body's musculoskeletal system. A minimum grade of " C " in this course is required of Department of Kinesiology majors for the degree.

Prerequisite: cumulative GPA of 2.5 or higher and Physical Education and Exercise Science/Kinesiology 4200W and 4250
(with a grade of C or better in each).

## KINS 4760 Internship in Exercise Science

9 hours; 3 credits
Practical experiences in planning, organizing, assessing, and implementing exercise science programs in various settings. Internship may extend beyond one term. This would require that students complete 300 hours of internship activities

Prerequisites: completion of all required course work and/or permission of undergraduate deputy or chair.

## KINS 4900 Directed Research in Kinesiology

## 6 hours; 3 credits

Individual reading on special topics in health, physical education, recreation, or exercise science. Research may go beyond one term.

A passing grade is required of Department of Kinesiology majors for this course. (Repeatable)

Prerequisites: completion of all required course work, GPA of 3.0 or better and/or permission of undergraduate deputy or chair.

## History

Department office: 1105 Boylan Hall
Phone: 718.951.5303

## Full-time Faculty

Professors: Banerjee, Johnson, Meyer, O'Keeffe, Rawson, Remy, SenGupta, Stern Gabbay, Troyansky, Wills
Associate Professors: Carp, Ebert, Fishman, Mancia, Napoli, Warren
Historians turn our predisposition to explain present events by the past into a formal intellectual tool. The Department of History helps students develop facility with this tool, as they learn to control a body of knowledge and utilize techniques of historical thinking that will serve them well in both professional and civic settings.

The History Department also gives students the opportunity to achieve a broad, authoritative, current understanding of the social, political, cultural, and economic developments that constitute the historical background of the modern world. Students learn to identify significant problems, read evidence critically, organize information coherently, write about it cogently, and think independently. They come to appreciate that while vestiges of the past are all around us, history is what we write, not just what is "out there." Its uses are multiple, some are present-minded, but others involve an appreciation of the past for its own sake.

The department offers a bachelor of arts degree in history, a bachelor of arts in adolescence education for social studies teachers, and a concentration for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades 1-6). The distribution requirements of the major--as well as individual courses--emphasize both historical content and skills and provide a diverse regional, cultural, and chronological scope. A minor in history is also available, as is a minor in archival studies and community documentation that affords opportunities to train in oral history and to undertake practical work in a variety of repositories and cultural institutions.

Students have opportunities to work closely with a faculty whose members have won recognition for both teaching and scholarship and are eager to advise student research and to recommend internship programs to facilitate professional development.

Many of the department's graduates become schoolteachers. Others prepare for careers in the worlds of business and public service. Students who wish to pursue advanced studies may apply to the master's and doctoral degree programs offered by or in conjunction with this department.

## Department counseling

History Department counselors are available on a regular basis to all students for advice on majors, programs, and career opportunities. Prospective majors are urged to consult a department counselor as soon as possible to plan a balanced program.

## B.A. degree program in history HEGIS code 2205; SED program code 02106

## Department requirements (36 credits)

1: General Surveys (3 credits). Students must take three credits in one of the following three courses: HIST 1101, HIST 1201 or HIST 1202 to satisfy this requirement.

2: History 2001W: The Historian's Craft (4 credits). History 2001W is a prerequisite for all history courses numbered in the 4000s.
3: Lower Division courses (at least 21 credits), including at least three credits in each of the following geographic regions a), b), c), and d). Within the specific geographic regions listed below, all students majoring in History must take at least one course from before 1500 from among the following: HIST 3001, 3002, 3003, 3015, 3021, 3022, 3023, 3024, 3025, 3030, 3031, 3033, 3040, 3044, 3050, 3070, 3090, 3100, 3101, 3102, $3103,3310,3317,3323,3352,3530,3532,3536,3560$.
a) European history
b) Transnational and comparative history
c) United States history
d) African, Asian, Caribbean, Latin American, and Middle Eastern history.

And any three additional courses, excluding HIST 1101, HIST 1201 and HIST 1202.
4: Upper Division courses (8 credits). Eight credits in upper-division, 4000-level courses with a grade of C or higher in each course. One of these courses must be a colloquium.

History majors fulfilling program requirements described in earlier Bulletins should validate their programs with a department counselor at the time they declare the major. With permission of the chair, one course taken outside the department may count towards the major. With permission of the chair, in consultation with the department, a course taken in History may be substituted for another, where warranted and for distribution purposes,

## B.A. degree program in adolescence education: social studies teacher HEGIS code 2201.01; SED program code 26754

Adolescence education (grades 7-12) programs are writing intensive.

## Program requirements

Students who wish to pursue a bachelor of arts degree in Secondary Education for social studies teacher must complete a major in one of the following: Africana studies, American studies, anthropology, economics, history, political science, Puerto Rican and Latino studies, or sociology.

Study must include within the major, or in addition to courses in the major, study in economics, government, and at least 21 credits in the history and geography of the United States and the world, including Secondary Education 3584. Students preparing to become social studies teachers must fulfill the economics and government requirements by taking at least one course ( 3 credits) from among: History 3345, 3410, 3420, 3424, 3430, $3441,3442,3450,3457$, or a course in Political Science numbered between 3101 and 3160 ; and at least one course ( 3 credits) from among: History 3332, 3470, 3472, 3512 or Economics 2002, 2100, 2200, 3102, 3152, or 3202.

The following pedagogical courses in the Department of Secondary Education: Secondary Education 2001, 2002, 3401, 3402, 4408, 3456, 4482 (total of 28 credits):

Secondary Education 2001, 2002, 3401, 3402. This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.

Secondary Education 3456 may be started after completing Secondary Education 2001 and 2002.
Student teaching: Secondary Education 4401, 4408, and 4482.
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department. Degree programs in adolescence education and include a major in an appropriate department of the college and in the case of social studies may also include an approved selection of interdepartmental courses.

Completion of an adolescence education program as part of a major in English, one of the appropriate social sciences, mathematics, or one of the sciences qualifies students for New York State initial certification in adolescence education for grades 7 through 12.

Students qualifying for the initial certification in adolescence education may obtain an extension to teach English, social studies, mathematics, a modern language, or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

Students must complete 26 credits in the Department of Secondary Education as specified above.

[^2]
## Departmental Minor(s)

## Minor in Asian Studies

Department requirements
Twelve credits chosen from the courses of two or more departments as specified below.
No more than six credits in languages may be used toward the minor.
Each course must be completed with a grade of C- or higher. At least six of these credits must be completed at Brooklyn College.
Courses presented for this minor may not be counted toward the major in any of the participating departments.
American Studies 1001
Anthropology and Archeology 2140, 3260, 3155, 3185
Business 3170, 3175, 5000, 5001.
Film 2128, 3202.
Health and Nutrition Sciences 7162 X (can be taken for undergraduate credit with permission of chairperson).
History 3534, 3530, 3535, 3536, 3538, 3532, 3543.
Modern Languages 2810, 2020, 2030, 2431-2437, 3610, 3615, 3616, 3640, 3645, 3710, 3662, 5070.
Chinese 3910 or English 3192
Philosophy 3307, 3722
Political Science 3308.
Religion 3020, 3040
Sociology 2601
Communication Arts, Sciences, and Disorders 1619.
Theater 3505.

## Minor in History

## Department Requirements

A minimum of 12 credits in history, each completed with a grade of $C$ or higher. At least six of these credits must be completed at Brooklyn College. Students should meet with a History Department counselor to plan a program suited to their individual interests or career plans.

## Interdepartmental Minor(s)

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C- or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

# Concentration(s) for majors in early childhood and childhood education teacher programs 

## History

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in history must complete 30 credits in the History Department with a grade of C or higher in each course. Students must meet with a History Department adviser to declare their intention to complete this concentration. They should also meet with an adviser in the School of Education regarding the appropriate sequence of teacher education courses.

Concentration requirements:
History 3320 or 3336 and either History 3480 or 3485.
One course in European history chosen from the following: History 3001, 3002, 3003, 3010, 3015, 3020, 3031, 3033, 3040, 3044, 3050, $3070,3090,3101,3102,3103,3104,3207,3206,3208,3209,3210,3212,3220,3230,3231,3241,3242,3243,3252,3254,3261,3290$, 3332.

Two courses in transnational and comparative history chosen from the following: History 3310, 3315, 3320, 3323, 3325, 3330, 3332, 3335, 3336, 3337, 3339, 3345, 3350, 3390, 3512, 3543, 3550, 3561.

Three courses in United States history chosen from the following: History 3323, 3403, 3404, 3405, 3406, 3410, 3412, 3413, 3414, 3416, $3418,3420,3424,3430,3435,3440,3441,3442,3450,3452,3453,3462,3470,3472,3475,3476,3478,3479,3490,3455,3485$.

One course in African, Asian, Caribbean, Latin American, and Middle Eastern history chosen from the following: History 3100, 3515, 3517, $3530,3532,3534,3536,3538,3543,3545,3550,3560,3561,3590$.

At least one course from among the courses above should be from before 1500 C.E..

## Department honors

Honors in history are recommended by vote of the department faculty members. To be considered for honors in history, a major must achieve a 3.5 index in history courses and complete at least 3 credits of honors work. The History Department gives a number of awards to outstanding and deserving students every year. Details are available in the History Department office and from department counselors.

## Recommendation for prospective graduate students

History majors who intend to continue their studies at the graduate level should develop reading comprehension at Level 4 or above in at least one foreign language pertinent to their field. It is also strongly advised that prospective graduate students in history complete at least one seminar in addition to other requirements.

## Candidates for law, business, or journalism school

History students preparing for a career in law, business, or journalism should consult a department counselor about courses especially relevant to those fields.

## Graduate Studies

The History Department offers a master of arts degree program in history. Some courses may be creditable toward the CUNY doctoral degree. For further information, students should consult the department chairperson or deputy chairperson for graduate studies. A Graduate Bulletin may be obtained in the Office of Admissions.

## Courses

## Required courses for history majors

HIST 2001W The Historian's Craft: Theories and Methods

4 hours; 4 credits
The nature, variety, and use of historical sources; the development of history as a profession; leading theories of history; recent trends and controversies in historical scholarship; basic techniques of
critical reading, research, and historical writing; taking notes and preparing bibliographies. History 2001W [10.W] or History 10 is a prerequisite of all history courses numbered in the 4000s and 5000 s with the exception of History 4100 [69.1], 4200 [69.2], 5100 [78.1], and 5101 [78.2]. Writing-intensive course.

Prerequisite: English 1012 [2]; and Core Studies 4 or Core Curriculum 1220 [2.2] or History 3005. or History 3401 or History 3402.

## Lower division courses

## General Surveys

## HIST 1101 The Shaping of the Modern World

3 hours; 3 credits
A history of modernity since 1500: from Europe's expansion and the emergence of the Atlantic world to a global society. Early modern societies, cultures, and state structures. Effects of trade, colonialism, and slavery. Enlightenment and revolutions. Comparative industrialization and urbanization. Nationalism, internationalism, and totalitarianism. Demography, environment, and gender. Satisfies Pathways Flexible Core World Cultures and Global Issues requirement. Not open to students who have completed CORC 1220.

## HIST 1201 American Pluralism to 1877

## 3 hours; 3 credits

American history to 1877. Political and economic developments from the colonial origins of American institutions through the Revolutionary era and the periods dominated by Federalism, Jeffersonianism, and Jacksonianism. Consideration of the issues of the Civil War and the Reconstruction era. Satisfies Pathways Flexible Core US Experience in Its Diversity requirement.

## HIST 1202 American Pluralism Since 1877

## 3 hours; 3 credits

The history of the United States from the end of Reconstruction to the present, emphasizing the varying experiences and contributions of diverse populations living in the United States.
"Diversity" in this course comprises race, ethnicity, class, religion, citizenship status, as well as the population diversity tied to region, economic and political culture, language, and more. Starting Fall 2018 Satisfies Pathways Flexible Core US Experience in Its Diversity requirement.

## Ancient, medieval \& early modern history

HIST 3001 Mediterranean and European Cultures to 1500
3 hours; 3 credits
Development of Mediterranean and European cultures from earliest origins to beginnings of early modern European colonization. Cross-cultural exchange, roles of religious traditions; rural environment and economy; role of marginalized populations, gender dynamics, arts, literature, philosophy; cultural revivals.

## HIST 3002 Women, Gender, and Sexuality in Europe to 1800 <br> 3 hours; 3 credits <br> History of women, gender, and sexuality in Europe from antiquity

through the early modern era based on literary, theological, historical, artistic, and theoretical sources. Course will ask questions like: how did early European societies understand and use the categories female and male? Was premodern Europe tolerant of homosexuality? How did Christian practices both solidify and undermine gender norms? How did the history of gender and sexuality shape the formation of European societies, cultures, and polities, and give way to the institutions and ideologies of later European institutions and hegemonies?

## HIST 3003 War and Peace: from Antiquity to 1815

3 hours; 3 credits
History of war from antiquity through 1815, principally in the Western world. Technology of war and military organization; war and society; participants' experience of war, from generals to footsoldiers; philosophical, historical, and literary discussions of war; foundations of pacifist theories and theories of limited war.

## HIST 3015 The Rise of Macedon

3 classroom hours plus conference and independent research; 4 credits
Rise of Macedon, from feudal state to world power. Development of government and society. Political and military developments under Philip II and Alexander the Great. Cultural exchange under Alexander. Focus on archaeological, epigraphic, and literary evidence. Emphasis on research methodologies. This course is the same as Classics 4011.

Prerequisite: English 1012 or permission of the chairperson.

## HIST 3021 Ancient Greece to the Death of Alexander the Great

3 hours; 3 credits
A historical survey covering the beginnings of Greek culture; the development of the polis system; the rise and fall of the Athenian empire; federalist impulses of the fourth century; and the conquests of Alexander the Great. Topics such as religion, economy, social structures, art and architecture are also addressed. This course is the same as Classics 3301.

Prerequisite: English 1010 or permission of the chairperson

## HIST 3022 The Hellenistic World

3 hours; 3 credits
The history, culture, and art of post-classical Greek antiquity, focusing especially on the time frame between Alexander the Great and Cleopatra VII. Analysis of how the ancient world changed with Alexander and his successors, especially on the political, social, and cultural transformations that came with a multicultural world; changes in the religious landscape; gender roles; literary forms; and state formation. This course is the same as Classics 3302.

Prerequisite: English 1010 or permission of the chairperson

## HIST 3023 Rome: From its Origins to the Death of Julius Caesar

3 hours; 3 credits
A historical survey covering the foundations of the city of Rome, especially its relationship with other Italic and Mediterranean culture groups; the rise and fall of the republican constitution; imperialism; and social structures. Topics such as religion, economy, art and architecture are also addressed. This course is the same as Classics 3303.

Prerequisite: English 1010 or permission of the chairperson

## HIST 3024 Rome: From Julius Caesar to Constantine

3 hours; 3 credits
A historical survey covering the Roman civil wars that led to the Principate (Imperial Period), Julio-Claudian Period and subsequent Dynasties, finishing with crises of the third century CE, the transformation into the divided Dominate (post 284 CE) and finally reunified and re invented under Constantine. The diversity of the Roman experience across its vast geographical territory, different ethnic and religious groups, and social hierarchies is emphasized. This course is the same as Classics 3304.

Prerequisite: English 1010 or permission of the chairperson

## HIST 3025 Death and Afterlife in the Ancient World

3 hours; 3 credits
The world of antiquity seen through a cultural history of ideas and practices relating to death and the afterlife in the ancient world. Mortuary practices and beliefs promulgated by populations in Egypt, Mesopotamia, Ancient Israel, Greece, Rome, Syria, North Africa and Asia Minor from the second millennium B.C.E. through the sixth century C.E. Covers: (1) the ancient context out of which notions about the afterlife emerged (2) cross-cultural developments, which resulted in ideas about death and the afterlife more familiar from Judaism and Christianity. Direct engagement with primary source materials through visits to local cemeteries, museums, and through individual research. This course is the same as Religion 3035 and Classics 3244.

## HIST 3030 Ancient Egypt

3 Hours; 3 Credits
Exploration of Egypt and how Egyptologists have constructed Egypt's history from both textual and archaeological sources. Predynastic Period (Ca. 3700-3032 BC) and the Early Dynastic Period (Ca. 3032-2707 BC) through ceramics, tools, art, and architecture; Old Kingdom (2707-2216 BC) through hieroglyphs; Egyptian history recounted in royal inscriptions, temple wall texts, biographies of high officials, and administrative documents; classical Egyptian civilization through Alexander's conquest of 332 BC; field study at Brooklyn Museum Egyptian collection.

## HIST 3031 Medieval Europe

3 hours; 3 credits
The study of the Middle Ages, from 300 C.E. to 1500 C.E. Topics include the birth and development of Christianity and Islam; agricultural and commercial revolutions; the invention of the university; the creation of the modern notion of romantic love; medieval contributions to modern ideas about race; the development of the nation-state; the extensive collaboration and tension between Christians, Jews, and Muslims in the Mediterranean; the origin of the first pogroms; and the formation of a globalized world with international trade routes. Ultimately, we will ask the question: how was the medieval world essential to the development of our modern ideas and institutions?

## HIST 3033 Medieval Christianity

3 hours; 3 credits
A course on the development of Christianity from its earliest days until the Protestant Reformation (ca. 1500 C.E.). With the help of
historical, literary, musical, and artistic sources, we will investigate not only religious developments of the premodern world, but also how those developments had wide-ranging ramifications on the way that future world history unfolded.

## HIST 3040 Early Modern Europe

3 hours; 3 credits
The history of Europe from 1350 to 1789. For a long time, Early Modern Europe has been glorified as a time of "renaissances," scientific and religious "revolutions," and overall "Enlightenment." After all, this period saw the print revolution, tremendous developments in art-making, and huge transformations in civic culture. But the early modern world also created systems of race, slavery, capitalism, and colonialism that would last for centuries. This class will determine how (and whether) we can reconcile these two polarities.

## HIST 3044 Religious Change in Early Modern Europe

## 3 hours; 3 credits

Between the advent of printing, the Copernican Revolution, the origins of capitalism, the development of university thought, and the "discovery" of the New World, early modern Christians began to reconsider their religious beliefs, practices, doctrines, and institutions. This course will study the period between 1450 to 1650 C.E., including the Protestant Reformations; the Catholic Reformation; Radical Reformers; colonization, evangelization, and Inquisition; witchcraft and the supernatural; the fate of religion in the 'scientific' and 'enlightened' early modern period.

## HIST 3050 England from the Wars of the Roses to the Glorious Revolution

3 hours; 3 credits
Wars of the Roses; Henry VIII's diplomacy, marriages, and break with Rome; Elizabeth I; the Spanish armada; Elizabethan culture; Stuart succession; English civil war; execution of Charles I; Oliver Cromwell and the Puritan revolution; the Restoration; the "Glorious" Revolution of 1688.

## HIST 3070 History of Russia to the Great Reforms

3 hours; 3 credits
History of Russia (750-1856). Pre-modern Russia; Mongol conquest and rule; early-modern Muscovy; the birth of Russian autocracy under Ivan IV; imperial expansion and westernization under Peter I; war, conquest, and enlightened absolutism under Catherine II; economic, social, and political development between the Napoleonic and Crimean wars. Special focus on serfdom; social estates, and the Russian intelligentsia.

## HIST 3080 Love, Death, and Magic in Europe, 1500-1800

3 hours; 3 credits
Topics in the social and cultural history of early modern Europe. Love, death, and magic are the three chief themes that will provide our focus. Historical demography, social structure, family and household, economic growth and crisis, popular religion and culture, witchcraft, violence, and revolt. Profound transformations in how people lived, thought, and behaved. Social historical background and classic microhistories. History of private life, love and sexuality, the ages of life, and death. History of witchcraft. Enlightenment, popular science, mesmerism, culture, and
revolution.
Prerequisite: English 1010 or permission of department.

## HIST 3090 Special Topics in Ancient, Medieval, and Early Modern History

3 hours; 3 credits
Topics vary from term to term. Course descriptions may be obtained from the undergraduate deputy before registration. Students may take this course for credit twice, but may not repeat topics.

## HIST 3101 Medieval Jewish History

3 hours; 3 credits
Medieval Jews and their interaction with the Christian and Muslim worlds. Crusades, blood libels, and expulsions; philosophers, Talmudists, and religious debaters; forced converts, moneylenders, and courtiers. This course is the same as JUST 3035.

## HIST 3102 Mystics, Pietists, and Heretics: Early Modern Jewish History

3 hours; 3 credits
Intellectual and cultural history of the Jews from the expulsion of Spanish Jewry in 1492 to the French Revolution in 1789; JewishChristian interaction; the Marrano Diaspora; Messianism; influence of the Renaissance, Reformation, and absolutism on the development of Jewish culture. This course is the same as Judaic Studies 3036.

## HIST 3103 Kabbalah and Messianism

## 3 hours; 3 credits

Kabbalah (a form of Jewish mysticism emerging during the Medieval period) and various influential messianic ideologies and movements during the early modern and modern eras. Central doctrines of Kabbalah and geographic and social contexts of the evolution of mystical ideas and messianic trends. Factors that led to their popularization. This course is the same as Judaic Studies 4034.

## HIST 3104 The Hasidic Movement: Its History and <br> Literature

3 hours; 3 credits
Eighteenth-century Jewish pietistic and revivalist movement that became the prevailing mode of life for much of nineteenth-century Eastern European Jewry. Explores the historical development of this movement and focuses on its central mystical doctrines and literature. Considers various historiographical approaches to Hasidism, the vehement opposition to it, and the often controversial role of messianism. This course is the same as Judaic Studies 3037.

## Modern European history

## HIST 3206 Women, Gender, and Sexuality in Europe from 1800

3 hours; 3 credits
History of women, gender, and sexuality in Europe from the era of revolution, industrialization, and demographic transition to the present. How did gendered notions of humanity play out in forms of political representation, the nature of the workplace, and the
structure of the state? What were the implications for family life and social organization? How did sexual identities and the life course evolve in modern and postmodern societies? This course is the same as Women's and Gender Studies 3224.

## HIST 3208 The Ordeal of Europe, 1880-1945

## 3 hours; 3 credits

Europe from the rise of the new imperialism to the end of World War II. Second industrial revolution. Cultural revolt and intellectual ferment. The two world wars and inter-war instability. Bolshevik revolution, Soviet Russia, and the origins of the Cold War. Nazism and Fascism.

## HIST 3209 Europe Since 1945

3 hours; 3 credits
The history of Europe since the end of World War II, including the reconstruction of war-torn societies, the separate development of eastern and western European nations, the impact of the Cold War, the domestic effects of decolonization, the development of a European Union. International social issues, such as the rise of feminism, the new immigration, and changing class structures will be emphasized.

## HIST 3210 Terrorism in Modern Europe

3 Hours; 3 credits
Beginning with the French Revolution, this course will study both state-sponsored terror and terrorist movements in Europe. Topics will include definitions of terrorism, anarchism, Nazi and Soviet terror, modern separatist movements, domestic terrorism, and an examination of the West and Islamic fundamentalism.

## HIST 3212 The Jews in Modern Europe

3 hours; 3 credits
From the shattering Messianic movement of 1666 to the establishment of the state of Israel. Impact on modern Jewish history of emancipation, the Enlightenment, anti-Semitism, Reform Judaism, assimilation, and Zionism.

## HIST 3220 England from the Age of Revolution to the Welfare State

3 hours; 3 credits
Development of British civilization and institutions from the early eighteenth century to the present. Eighteenth century political stability and overseas expansion; the industrial revolution; the growth of empire; democracy, feminism, socialism, and unionism; the two world wars; decolonization.

## HIST 3230 The French Revolution and its Legacies

3 hours; 3 credits
The French Revolution and how it has been interpreted and remembered over two centuries. After an introduction to the society, culture, and politics of the Old Regime, an exploration of events and historiographical controversies of the Revolutionary and Napoleonic period, 1789-1815. Importance of the Revolution in the history of liberty, equality, nationalism, terror, gender, race, and human rights. Contexts in European, Atlantic, Caribbean, and world history.

## HIST 3231 Modern France

## 3 hours; 3 credits

Social, cultural, and political history of France from 1789 to the present. Cycles of revolution and reaction, labor, gender, the role of French culture in the world, experiences and memories of war, the impacts of empire, decolonization, and migration, and the place of France in the construction of Europe.

## HIST 3241 Modern Germany: 1870 to the Present

## 3 hours; 3 credits

German history from national unification under Bismarck through political division after Hitler and reunification in 1989. Wilhelmine Empire, Weimar Republic, Nazi dictatorship. Germany's role in European affairs and in the origins of the two world wars. Reconstruction after 1945, divergent development of the two Germanies, politics of reunification. Germany and European Union.

## HIST 3242 Nazi Germany

3 hours; 3 credits
History of Nazi Germany (1933-1945). Ideological origins of National Socialism. Hitler's ascent to and consolidation of power. Significance of the exile experience. Social consensus in Germany behind National Socialism. World War II and origins of the Holocaust. The Nazi "new order" in Europe and collaboration. Resistance to National Socialism. Postwar trials and the public memory of Nazi Germany after 1945.

## HIST 3243 History of the Holocaust

3 hours; 3 credits
Genocide against the Jews of Europe under the Nazi German regime; historiography of genocide and the Holocaust; roots of anti-Semitism; rise of Nazis and anti-Jewish policies; Jewish responses to intensifying persecution, confiscations, forced emigration, slave labor, extortion, ghettos, concentration camps, and systematic mass murder; collaboration by non-Germans; Jewish resistance and rescue operations; Allied and Soviet policies and actions; fate of other groups targeted by the Nazis; reactions of post-World War II survivors; war crime trials at Nuremburg; genocide after the Holocaust precedent. This course is the same as Judaic Studies 3050.

## HIST 3252 Russia from the Era of Great Reforms to the USSR's Collapse

3 hours; 3 credits
Reforms of the 1860s and 1870s. Industrialization and its effects in undermining the basis of the Russian social order. Russian Revolution of 1917. Economic, social, political development of Soviet Russia.

## HIST 3254 The Soviet Union as Multiethnic Empire

3 hours; 3 credits
The history of the Soviet Union as a multiethnic empire, 19171991. Topics include Soviet nationality policy; the construction and evolution of the Soviet state and its constituent socialist republics; the evolution and variation of governmental approaches to managing and "Sovietizing" non-Russian citizens; the "everyday life" of non-Russian peoples throughout the empire; ethnic discrimination, conflicts, and deportations within the Soviet Union; the elevation of Russia as the "first among equals;" and the
fracturing of the Soviet Union in 1991 along national lines. Emphasis will be placed on the geographic and cultural diversity of the Soviet Union as whole.

## HIST 3290 Special Topics in Modern European History

3 hours; 3 credits
Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take this course for credit twice, but may not repeat topics.

Transnational and comparative history

## HIST 3255 The Soviet Union and the World

3 hours; 3 credits
The history of the Soviet Union in its global contexts. Emphasis on Soviet foreign relations, citizen diplomacy, and Soviet perspectives on the international conflicts and collaborations that shaped the twentieth century. Exploration of how people, ideas, goods, and expertise traveled across Soviet borders and circulated within and beyond the twentieth-century's "socialist world." Study of the global dimensions of the October Revolution, Stalinist industrialization, World War II, the Cold War, and the Soviet Union' s demise. Alternatively, may satisfy requirements in Transnational and Comparative History.

## HIST 3310 Ancient Mediterranean Religions

3 hours; 3 credits
Religious developments and conflicts. Intersections of ancient Judaisms, Christianities, state religions, mystery cults and other belief systems in the Ancient Mediterranean. This course is the same as Classics 3237.

## HIST 3315 The History of Christianity

## 3 hours; 3 credits

A cultural history of Christianity from the first century to the present. Using scripture, theology, literature, art, archaeology, and music as sources, we will investigate the place of Christian culture in the history of world civilization. This course is the same as Studies in Religion 3050.

## HIST 3320 The History of Childhood

3 hours; 3 credits
Children's place in society and thought from antiquity to the present. Drawing from a variety of written, material, and visual sources, topics will include the history of child-rearing practices; childhood disease and mortality; the political status of children; the education of children; the place of children in religious practice, in the culture of the family, and in the societal conception of women and gender; the development of children's rights under the law; literary and philosophical ideals of childhood; and the historiography of childhood studies.

## HIST 3323 The Atlantic World 1492-1713

3 hours; 3 credits
Slavery and the slave trade. Comparative early origins of Spanish, Portuguese, Dutch, French and English colonial development in the Caribbean and American mainland from Columbus to the Treaty of

Utrecht. Alternatively, may satisfy credit requirements in African, Asian, Caribbean, Latin American, Middle Eastern History.

## HIST 3325 Slavery in the Atlantic World

## 3 hours, 3 credits

Slavery in the Americas from an Atlantic perspective (including developments in Africa and Europe) from the fifteenth century until abolition. Slavery in Mediterranean Europe, the changing nature of slavery in Africa, the slave trade, the economics of slavery, the plantation system, daily life among slaves and slave owners, slavery and race, hegemony, resistance, slave revolts, the Haitian Revolution, abolition in the Americas, and post-emancipation challenges.
Alternatively, may satisfy credit requirements in African, Asian, Caribbean, Latin American, Middle Eastern History.

## HIST 3328 History of Sexuality in the Americas

3 hours; 3 credits
Sexuality in practice and thought in North and South America since colonial times. Continuities, commonalities and differences from cultural, geographic and temporal perspectives, looking at the effects of major social movements including nationalism, industrialization and globalization. Use of secondary sources and a wide variety of primary sources from Inquisition documents to Flapper films. Theory and historical contextualization. This course is the same as Women's and Gender Studies 3238.

## HIST 3330 The Modern City in the Western World

## 3 hours; 3 credits

An exploration of city development in the West, from the Enlightenment to the present, and its transformative effect on the lives and thought of urban dwellers. Topics include the impact of industrialization, the built environment, class and gender relations, population growth, and utopian projects, as well as perceptions of the city and the emergence of modern sensibilities and culture.

## HIST 3332 Comparative Industrialization, Late 18th to Early 20th Centuries

3 hours; 3 credits
Origins and development of global industrialization. Effect of technological development and industrial processes on the organization of business and work, social classes and relations, gender expectations and family life, governmental roles and political movements, rural and urban environments, cultural beliefs/rituals and the production of art; competition and global consumption, colonization and commodification of resources, products, and peoples; imperial designs, colonial critiques, and global warfare. Alternatively, may satisfy credit requirements in European History.

## HIST 3335 History of Feminism

3 hours; 3 credits
Definitions of feminism; feminists in the Renaissance and early modern Europe; feminist demands arising from the French Revolution; early radical feminism in the United States, France, and the Germanies; liberal and Marxist feminism; women's movements from the 1850s to World War I in the West; the development of women's movements outside of Europe and America; imperialism, feminism, and national independence; the "second wave": women's
liberation movements since 1968. This course is the same as Women's and Gender Studies 3230.

## HIST 3336 The Home and the World: Gender, Family, and Nation-State-A Cross-Cultural Perspective

3 hours; 3 credits
Exploration of gender, family, and households, and their connection with nation and state formation; social construction of gender, different forms of families and households, class-caste-racial hierarchies, the life-course, sexualities, gender, labor, and family inequalities across time in various geopolitical contexts, sociocultural and political-economic processes. This course is the same as Women and Gender Studies 3338 and Children and Youth Studies 3338.

## HIST 3337 Gender, Race, and Empire (19th-20th centuries)

3 hours; 3 credits
Traces intersection of gender, race, and empire in regulation and maintenance of European, particularly British, colonies in different parts of Asia and Africa. Race and gender specific ideologies introduced by colonial regimes and their impacts on native populations in a comparative framework; connections between women and imperialism; involvement and activism of European and American women with nationalist and women's questions in South Asia and beyond. This course is the same as Women's and Gender Studies 3333.

## HIST 3339 History of the Future

3 hours; 3 credits
Perceptions and visions of the future in Western culture from the scientific revolution to present as developed through science fiction, utopian literature, world's fairs, movies, and the field of future studies. Major themes include science and technology, socialism, war, cities, the environment, and the relationship between history and prophecy.

Prerequisite: English 1010 or permission of department

## HIST 3345 The United States and the Middle East

3 hours, 3 credits
History of U.S. diplomacy and interaction with the nations and peoples of the Middle East and North Africa, from the 19th century to the present.

## HIST 3350 The Palestinian-Israeli Conflict, 1881-present

3 hours; 3 credits
Roots of the conflict, from Eastern Europe to Ottoman Palestine; transformation from Ottoman civil conflict to national struggle; founding of the Israeli state and transfer of the Palestinian population; the Arab-Israeli conflict and roots of peacemaking; return of the Palestinian-Israeli conflict, Oslo Accords and failure; Second Intifada; the conflict in literature, music, and film. Alternatively, may satisfy credit requirements in African, Asian, Caribbean, Latin American, Middle Eastern History.

## HIST 3352 Islamic Perspectives on Reason, Science and, Culture

3 hours; 3 credits
Islamic classical and contemporary thinkers on a broad range of
topics, including the compatibility of religion and science, reason and revelation, and Islam and women's and minority rights, among others. This course is the same as RELG 3020.

## HIST 3360 Main Currents in Contemporary World History

## 3 hours; 3 credits

The history of the major world regions and their interrelationship since 1945. Breakdown of the wartime alliance; confrontation between the West and the Soviet system; the era of the cold war and peaceful coexistence. The end of colonial rule and the rise of new states in Asia and Africa. Historical context of modern revolutions and wars, and political and economic changes.

## HIST 3370 Myth and Memory in Modern World History

3 hours; 3 credits
The uses and abuses of history in politics and culture worldwide since the 19th Century. The meanings and practices of collective memory, the politics of memory, memorialization, and coming to terms with the past in historiography, politics, diplomacy, law, and popular culture.

## HIST 3371 What is Fascism?

3 hours; 3 credits
Fascism in an international context from its origins in the 19th Century to its contemporary manifestations; topics include contested definitions, the roots of fascism, how fascist regimes come to power, how fascist regimes rule, fascism as a form of imperialism, fascism's gender dynamics, the aesthetics of fascism, antifascism, the fate of fascism after World War II, and fascism in contemporary Europe and the Americas.

## HIST 3372 The Imperial World at War

3 hours; 3 credits
A history of global conflict between imperial states from the late 1800s through the 1980s; topics include competition for colonies and regional conflicts in the Caribbean, Africa, Europe, and Asia; World War I and World War II as instances of conflict between imperial states; decolonization as an extension of the age of global imperial wars.

Prerequisite: English 1010 or permission of the chairperson

## HIST 3373 Religions of India, China and Japan

## 3 hours; 3 credits

Development of Hinduism, Buddhism, Confucianism, and Daoism, with emphasis on origins, teachings, and role in culture. Unique features of Eastern spirituality through comparison with the Abrahamic traditions and secular societies. Consideration of the practice of these religious traditions within contemporary United States. This course is the same as RELG 3005.

## HIST 3390 Special Topics in Transnational and Comparative History

3 hours; 3 credits
Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take this course for credit twice, but may not repeat topics.

## United States history

## HIST 3410 American Constitutional History

## 3 hours; 3 credits

Colonial origins of the ideas and forms of American constitutional development. Drafting and establishment of the Constitution. Study of its changing interpretation in the context of changing global political, economic, and social conditions of the nineteenth century and twentieth century, particularly concerning class, race, and gender. Evolving concepts of federalism and liberty.

## HIST 3412 Afro-American History

3 hours; 3 credits
Origins and development of American thought on the role of Blacks in American history. Consideration of such topics as African heritage, Blacks in the plantation society, slavery and the American idea of equality, Black Reconstruction, rise of Jim Crow, the myth of white supremacy, and the nature and origins of the Black revolution. Colonial era to the present.

## HIST 3413 African American History through 1865

3 hours; 3 credits
African Americans from the era of the Atlantic slave trade through the Civil War. Topics include the African origins of African Americans, defining African Americans, the slave trade, free Blacks in antebellum America, role of gender and class, Black family and community, origins of the black church, slavery, resistance and abolitionism. This course is the same as Africana Studies 3120.

## HIST 3414 African American History From 1865

3 hours; 3 credits
African Americans since the end of the Civil War. Topics include Blacks and Reconstruction, Blacks and Redemption, "The Nadir," emigration and colonization, the Great Migration, Blacks in World Wars I and II, Marcus Garvey, Blacks and the Great Depression, and the Civil Rights and Black Power movements. This course is the same as Africana Studies 3121.

## HIST 3416 Religious Experience in America

3 hours; 3 credits
Development of major American religious traditions, from indigenous practices, through traditions of early America, religious experiences of immigrants to America, and the interface between religious movements and the civil rights struggle, to the present. This course is the same as American Studies 3106.

## HIST 3418 Daughters of the Promised Land: Women in American History

3 hours; 3 credits
The history of women in the United States, with emphasis on the last two centuries. Gender intersections with race, class, and ethnicity in the areas of work, personal relationships, and control over reproduction. Women in organizations of labor, religion, and politics, including the feminist movements. Changing images of women.

3 hours; 3 credits
Explores the colonial origins of American society and shows how a broad array of peoples encountered one another in different regions of North America. Religion and power, warfare and slavery, civilization and wilderness, province and empire, with a particular focus on English-speaking settlements from the 1660s to the end of the Seven Years War in 1763. Examines the ways in which historians and historical actors have interpreted the events of the colonial period.

## HIST 3420 The Revolutionary Generation

3 hours; 3 credits
The era of the American Revolution and the early national period as observed through the lives of representative men and women. War, loyalism, and republicanism. The establishment of the Constitution and the emergence of political parties. Cultural and social life of the new nation.

## HIST 3424 American Military History to 1900

3 hours; 3 credits
This course explores the military history of the British-American colonies and the United States through the end of the nineteenth century. Through lectures, reading, and discussions, we will discuss civilian-military relations; the role of culture and social hierarchies in wartime; the effects of war on the home front; professionalization, recruitment, and mobilization; imperial ambitions, strategies, and tactics; technology and logistics; and the commemoration of war. We will examine the ways in which historians and historical actors have interpreted this subject.

## HIST 3430 Civil War and Reconstruction

3 hours; 3 credits
History of the U.S. Civil War and its meaning for the debate over states' rights as well as citizenship. Slavery as the mark of southern distinctiveness; westward expansion; new forms of mass politics, and economic and cultural changes within northern society that shaped antislavery. The impact of class, gender, and racial affiliations. Reconstruction as America's "unfinished revolution."

## HIST 3435 The Frontier in American Culture

3 hours; 3 credits
The nineteenth and twentieth-century American West in history and myth. Emphasis on the development of the frontier myth through literature, dime novels, films, and other forms of popular culture. The relationship between myth and history; the development of the western hero; the role of race, gender, and violence. This course is the same as American Studies 3102.

## HIST 3440 The Long Gilded Age, 1865-1930

## 3 hours; 3 credits

Incorporation and commodification of American life. Completion of continental communications and transportation networks; expansion and incorporation of agriculture, business, consumption, government, labor, manufacturing, and technology; Immigration and internal migration; rise of the city, the West, and the "New" South; speculation, monopoly behavior, progress and poverty, and systematic philanthropy; political protests and reform movements for civil rights, equality, conservation, health and safety and
"scientific" management"; imperialism, global war, and the return to
"normalcy."

## HIST 3441 Twentieth-Century America: 1914-1945

3 hours; 3 credits
United States history from the Wilson presidency through the U.S. entry into the Korean War and the onset of McCarthyism: consolidation of progressivism and the Wilson presidency; entry into World War I and the Wilsonian agenda; the rise of the corporatist state; the United States and the world of the 1920s; clashes of culture in interwar America; the Depression and the emergence of a Democratic majority; the importance of dissenters; Franklin Roosevelt and American reform; the battle over the role of the Supreme Court; the United States and World War II; postwar politics; nuclear weapons and the militarization of the Cold War.

## HIST 3442 Twentieth-Century America: 1945-present

## 3 hours; 3 credits

The Korean War and American society; nuclear weapons and U.S. foreign policy; McCarthyism and the culture of the Cold War; the presidency of Dwight Eisenhower; the emergence of the civil rights movement; liberalism and the dilemmas of the 1960s; Lyndon Johnson and the Great Society; the United States in Vietnam; the counterculture and student dissenting movements; 1968 and the collapse of the New Deal coalition; Richard Nixon and Watergate; environmentalism, feminism, and new social movements; the revitalization of American conservatism; the Reagan presidency; the intersection of law and politics; the United States after the Cold War.

## HIST 3450 United States Foreign Relations since 1898

3 hours; 3 credits
The emergence of the United States as a major world power; the debate over imperialism; progressivism and U.S. foreign policy; Wilsonianism; the United States and the 1920s world; the Depression and American foreign policy; the debate over isolationism and presidential power; the United States and World War II; the onset of the Cold War; the militarization of the Cold War; nuclear weapons and U.S. foreign policy; Kennedy and Latin America; Vietnam and the collapse of the liberal consensus; Richard Nixon and detente; American foreign policy in an age of uncertainty; Ronald Reagan and the politics of anticommunism; beyond the Cold War. Special attention will be paid to the viewpoints presented by dissenters on both the right and the left.

## HIST 3452 Americans at War in the 20th and 21st Century

3 hours, 3 credits
Exploration of the relationship between war and American society and culture in the 20th and 21st century, using fiction, film, memoir and oral history, primary source materials and monographs. Evolving demographics of the military, changing military experience, debates about American wars and warriors, the impact of war on the "home front."

## HIST 3453 The US and the Vietnam War

## 3 hours; 3 credits

Historical background to the war in Vietnam; The French War in Indochina; origins of American involvement; conscription and issues of race, class, and ethnicity in the armed forces; strategy and tactics, 1965-1973; origins and growth of the antiwar movement;
the Pentagon Papers and the role of the media; representations of the war in film, music, fiction, and personal memoirs; remembering the war in oral history.

## HIST 3454 Mini-Course: Veterans, Memorials and American Memory <br> 1 hour; 1 credit <br> Exploration of the relationship between war and memory in the United States since 1865. Using films, fiction and other forms of documentary evidence, the course investigates the various ways public and private memory of war has shaped and been shaped by American social discourse about topics such as gender, race, politics, psychiatry and popular culture.

## HIST 3455 Immigration and Ethnicity in American History

3 hours; 3 credits
History of immigration to America from the first European settlers to the present. Old and new waves of immigrants; immigration and citizenship in the age of Revolution; the rise of nativism; immigration policy; assimilation, ethnic resilience, and cultural hegemony in immigrant communities; the impact of race on ethnic identities; culture, politics, work, and gender in immigrant communities; post-World War II immigrants, migrants, and refugees; America's newest immigrants.

## HIST 3460 The Public and the Past: Encountering History Outside the Classroom

3 hours; 3 credits
Introduction to the field of public history. Films, television, living history, archives and archaeology; local and business history.

## HIST 3462 American Popular Culture

3 hours; 3 credits
Introduction to the history and interpretation of American popular arts and culture. Popular music, theater, radio, film, television, and advertising. Popular expressions as shapers and reflectors of American ideas about nationalism, class, gender, ethnicity/race, region, and generation. This course is the same as American Studies 3406.

## HIST 3470 American Economic History

## 3 hours; 3 credits

The nature and sources of American economic growth from the Colonial period to the present. The development of colonial economy; economic growth before the Civil War; industrialization of the American economy and the rise of big businesses, government, business, and labor, including the changing participation of women and minorities in the era of industrial maturity; the creation of a managed economy in the mid-twentieth century.

## HIST 3472 American Dreams and Realities

4 hours; 4 credits
Interdisciplinary exploration of the dreams, myths, realities, and illusions of inclusion that have guided the American experience. Background and historical amnesia about indigenous displacements, settler colonialism, the after-lives of Atlantic world slavery, and the nation's founding ideals, documents, and class-
based distinctions; capitalism, war, empire, and the realities of immigrant America; historical exclusions and the struggle for racial, ethnic, and gender inclusions in the economic, political, social, and cultural life of the United States; capitalist competition, white privilege, the myths of meritocracy and the "self-made" American, and the realities of the working poor; psychological consequences of "failing" in American society; status consciousness/anxiety and the overworked, over-extended, and sleep-deprived American. Students will complete a semester-long, collaborative research project focused on the everyday lives of ordinary Americans via archives both digital and physical, field work involving sites of history making and memory, and/or the creation of oral history collections. This course is the same as American Studies 3108.

## HIST 3475 American Environmental History

## 3 hours; 3 credits

Interactions among humans and natural environments from precontact to the present. Attention to ecological change, uses of the environment, and human ideas about nature. Native American approaches to the natural world; environmental impact of European colonization; rise of industrial cities; romanticism; conservation and preservation; impact of the automobile; environmentalism and environmental justice.

## HIST 3476 Cities and Nature in American History

3 hours plus conference; 3 credits
Interactions between urban societies and the natural environment in United States history. Attention to early urbanization and industrialization; the relationship between city and country; the development of pastoral parks and suburbs; pollution, public health, and environmental justice; sprawl.

## HIST 3478 Medicine and Health in American History

3 hours, 3 credits
History of medicine and health in North America (1492-present, with emphasis on 1840-present); intersection of medicine and American culture; development of medical ideas and practices in the United States; interplay among individuals, groups (social, governmental, professional) and factors enhancing or undermining health; economic forces shaping the practice of medicine; impact of changing medical ideas on public issues; impact of changing medical ideas on private attitudes; shifting notions of responsibility for "good health."

## HIST 3479 Bad Habits: Defining and Controlling the "Minor Vices" in Twentieth-Century America

3 hours, 3 credits
The history of changing definitions of "minor vices" in the modern United States (1840-present); the social costs of addictive, dangerous, or economically non-productive behaviors; emphasis on "moral panics" concerning behavior of adolescents and young adults; smoking, drinking, and drug-taking, "inappropriate" movies, comic books, music, sexual activities, video-gaming and internet; commercial forces shaping and promoting the "bad habits" for profit; regulatory solutions to behavioral choices; underlying assumptions about children's purity and susceptibility.

## HIST 3480 The History of New York City

3 hours; 3 credits

New York City from its origins to the present. Amerindian inhabitants before the European invasion; Dutch and English imperial periods; the American Revolution; slavery; mercantilism and capitalism; immigration, ethnicity, and neighborhood; ruling and working classes; parks and recreation; housing and architecture; crime and violence;the fiscal crisis of the 1970s.

## HIST 3485 Brooklyn History

## 3 hours; 3 credits

The history of Brooklyn with an emphasis on the period from Consolidation to the present. The Lenape and early settlers; culture and community in rural Brooklyn; preindustrial Brooklyn, New York's "first suburb," industrialization and work in the nineteenth century; the Consolidation and urban growth; the borough's icons: The Brooklyn Bridge, Coney Island, and the Brooklyn Dodgers; immigration, ethnic succession, and race relations; deindustrialization and the post-World War II economic, political, and cultural landscape. Students will explore various methodological tools for the study of local history and will use Brooklyn as their laboratory for examining its history and conducting research.

## HIST 3490 Special Topics in American History

3 hours; 3 credits
Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take this course for credit twice, but may not repeat topics.

## African, Asian, Caribbean, Latin American, Middle Eastern history

## HIST 3100 Ancient Jewish History

3 hours; 3 credits
Religious beliefs and political institutions from Saul and David until the destruction of the First Temple. Second Temple Israel under Persians, Greeks, and Romans. The Maccabean uprising, the authors of the Dead Sea Scrolls and other varieties of Judaism, the rise of Christianity, the revolts against Rome, and the victory of Rabbinic Judaism. Alternatively, may satisfy credit requirements in Ancient, Medieval, and Early Modern European history.

## HIST 3317 The Shaping of the Islamic World: From Origins to Modernity

3 hours; 3 credits
A survey of the major historical developments and religious themes within the Islamic tradition from its origins to the present day. Topics include the Qur'an and its interpretation, Islamic law, theology, Sufism, and the Caliphate. The course raises broader theoretical questions including the nature of reason and revelation, science and religion, and politics and religion. This course is the same as Religious Studies 3006. Alternatively may satisfy credit in Ancient, Medieval and early modern European History.

## HIST 3510 Colonial Latin America

3 hours; 3 credits
Latin American history from 1492 to 1880. Discovery and conquest of America; Spanish and Portugese organization of government, church, and economic institutions. Colonization, settlement, and expansion of frontiers. Economic evolution of colonial America. Rise of the cities of Latin America. Education,
universities, secular culture, and the Enlightenment. Reform movements of the eighteenth century. Background of the movements for independence. Establishment of modern nation states.

## HIST 3512 Modern Latin America

3 hours; 3 credits
Latin America since 1880. Growth of selected countries: Argentina, Brazil, Chile, Cuba, and Mexico. Regionalism, dictatorship, land reforms, and constitutional issues. Growth of nationalism, liberalism, dictatorships, and democracy from the standpoint of local conditions, domestic history, and inter-American and world politics.
(Not open to students who have completed History 66.2.).
Alternatively, may satisfy credit requirements in Transnational and Comparative History.

## HIST 3515 The History of Caribbean Societies from the European Conquest to the End of Slavery

3 hours; 3 credits
Conquest and settlement by the European powers in the sixteenth and seventeenth centuries. European rivalries; rise of the sugar economy and slavery as a socioeconomic system. Comparative development of the English, French, and Spanish slave-holding colonies. The Haitian Revolution; the abolition of the slave trade and emancipation in the British colonies; the Ten Years' War and Emancipation in Cuba.

## HIST 3517 History of the Modern Caribbean

3 hours; 3 credits
Historical forces in the evolution of Caribbean nations from the nineteenth century to the present. Includes material on Cuba, the Dominican Republic, Guyana, Haiti, Jamaica, Trinidad-Tobago among other nations. Concentrates upon national and international factors influencing each society as well as comparative analysis.

## HIST 3530 Land of the Dragon Throne: Imperial China and its Origins

3 hours; 3 credits
Chinese civilization from its Neolithic beginnings through the late sixteenth century C.E. The earliest Yellow River civilizations, beginnings of royal institutions, foundations of Chinese religion, the cultural, social, and economic revolution of the Warring States, the establishment and evolution of the imperial state, China and Inner Asia, the spread of Buddhism, the growth of commerce, the flourishing of art and literature, the social order and ideology of the late empire.

## HIST 3532 Mysticism, Magic, and Ritual in Ancient China

## 3 hours; 3 credits

The history of Daoism, the indigenous religion of China, from ancient times to the fifth century C.E. The roots of Daoism in ancient Chinese shamanism. Early mystical practices such as meditation, spirit journeying, macrobiotic diet, sexual yoga. The classical philosophy of Laozi and Zhuangzi. The political Daoism of the late Warring States and Han. The Daoist rebellions of 184 C.E. Magic and ritual practices of the Daoist church. Medieval Chinese alchemy. This course is the same as Religion 3040.

## HIST 3534 Revolutionary China

## 3 hours; 3 credits

Origins, development, and present state of the Chinese revolution. Social and ideological patterns in the breakdown of the Confucian order. The Revolution of 1911. Urban nationalism and the warlords. Rise of the Guomindang and the Communist Party. The Japanese invasion, Maoist ideology, and the Communist conquest. The People's Republic since 1949. Political, social, economic and ecological crises in the struggle to modernize. China's global impact.

## HIST 3535 People's China

3 hours; 3 credits
History of China, from the early Republic through the present. Topics include: New Culture Movement; founding of the Chinese Communist Party; World War Two; founding of the People's Republic of China; Great Leap Forward; Cultural Revolution; reforms under Deng Xiaoping; Tiananmen Square movement; and restructuring of the CCP in the 21st century.

## HIST 3536 Land of the Rising Sun: Ancient and Medieval Japan

3 hours; 3 credits
Japanese civilization from prehistoric times to the late sixteenth century. Earliest Neolithic civilizations on the Japanese archipelago. Beginnings of agriculture and bronze technology. Cultural interaction with mainland Asia. Development of imperial institutions and Shinto. Adaptation of Buddhism, development of indigenous Buddhist schools (Nichiren, Zen). Evolution of Japanese literature, drama, and art. Rise of the samurai.

## HIST 3538 Modern Japan

## 3 hours; 3 credits

Development of Japan as a modern nation. Tokugawa origins of modern institutions; emergence of the imperial state in the Meiji period; expansion on the Asian continent; nationalism, liberalism, and militarism between the wars. Destruction in World War II; recovery and the rise to affluence. Japan as a post-industrial power; its regional and global influence.

## HIST 3543 The Jewel in the Crown: British Imperialism and Indian Nationalism

3 hours; 3 credits
The decline of the Mughal Empire and the competition for succession won by the British East India Company; the structure and ideology of the Raj; social, economic, and cultural changes during the Raj including the role of race and the changing place of women. Rise of Indian nationalism and Muslim separatism viewed from above and below. Leadership, organization and ideology of early nationalists and the Congress party under Gandhi. Partition and independence of India, Pakistan, and Bangladesh.
Alternatively, may satisfy credit requirements in Transnational and Comparative History.

## HIST 3545 Women in Indian History (1800-Present)

3 hours; 3 credits
Traces continuities and changes in women's lives in the geopolitical area of South Asia, mainly India, from the nineteenth century to the present. Effects of British colonial rule on different groups of
women; women's question and nationalism; construction and transformation of gender roles; women's involvement in organizational activities, freedom struggles and other resistance movements; women and partition of India and Pakistan; women in family and state; contemporary issues related to democracy, women's rights, uniform civil code, and others. This course is the same as Women's and Gender Studies 3332.

## HIST 3548 Gandhi, India, and the World

3 hours; 3 credits
Life and political career of Mohandas Karamchand Gandhi in South Asian politics against British colonial rule and his legacy for India and the modern world. Analysis of Gandhi's writings, ideas, and philosophies of non-violence, self-reliance, civil disobedience, and moral discipline. Exploration of scholarly debates surrounding Gandhi and the significance of his movement and methods for the modern world.

Prerequisite: History 3543 (Jewel in the Crown: British Imperialism and Indian Nationalism) preferred.

## HIST 3550 History of the Middle East in the Twentieth Century

3 hours; 3 credits
Ottoman and colonial heritage of the Middle East; competing ideologies; oil and its impact, origins and development of the ArabIsraeli conflict; Iran under shahs and clergy; roots of radical nationalism in Turkey, Egypt, Iraq, and Syria, sectarianism and class conflict in Lebanon; Islamic reform and revivalism; changing role of women and minorities. Alternatively, may satisfy credit requirements in Transnational and Comparative History

## HIST 3552 The Sephardic Heritage

3 hours; 3 credits
The Jewish experience in Muslim countries. Analysis of the Jewish communities in all aspects of life and the upheaval caused by their mass emigration, particularly to Israel and the United States. This course is the same as Judaic Studies 3405.

## HIST 3554 From Empire to Nation-State: the Emergence of Modern Turkey 1800-present

3 hours; 3 credits
Emergence of the "modern" Ottoman State; implementation and repercussions of "tanzimat" reforms; transformation from "subjects" to "citizens"; the Young Ottoman movement and the rise of Islam as an ideology; roots of the Young Turk revolution and introduction of parliamentary politics; World War One and its aftermath; the founding of the modern Turkish state and the period of Mustafa Kemal Ataturk; the multi-party system and breakdown of political stability; movement to capitalism; the Kurdish question; and the bid to join the European Union.

## HIST 3557 Narratives of Turkey: Making Histories and Memories

4 hours; 4 credits
Four week summer study abroad in Turkey. Topics include nationalism, nation building, historical memory and narratives, imperialism, government, correlation between arts and nationalism.

## 3 hours; 3 credits

Themes in the history of Africa south of the Sahara from earliest times to 1800. Salient themes include Nile Valley civilizations, trans-Saharan trade, early social and economic systems, West African states, especially the Empire of Mali, Islamic influences, state formation, Swahili coastal city states, and Indian Ocean trade. Origins, development, and consequences of the Atlantic slave trade. This course is the same as Africana Studies 3101.

Alternatively, may satisfy credit requirements in Transnational and Comparative History.

## HIST 3561 Contact, Contest and Independence: Africa Since 1800

## 3 hours; 3 credits

Themes drawn from all regions of the continent of Africa south of the Sahara from 1800 to the present. The Islamic revolutions, the Zulu Empire and political evolution in South Africa, the rise of legitimate trade, the impact of European missionaries and explorers, imperialism, the colonial state, nationalist independence movements, and post-independence challenges. This course is the same as Africana Studies 3102. Alternatively, may satisfy credit requirements in Transnational and Comparative History.

## HIST 3590 Special Topics in Asian, Caribbean, Latin American, and Middle Eastern History

3 hours; 3 credits
Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take this course for credit twice, but may not repeat topics.

## Upper-division courses

## HIST 3500 Conservation and Preservation of Library and

 Archival Materials3 hours; 3 credits
A basic overview of the preservation of documents, books, photographs, and other paper-based materials, as well as digital collections. Through a hands-on experience in the college's book and paper conservation laboratory, students will learn to analyze the condition of paper artifacts, investigate varied treatments and re-housing options, apply different conservation methods and techniques, and understand the critical role of conservation and preservation in libraries and archives. Does not count towards the History major or the History minor

## HIST 3501 Introduction to Archival Management

## 3 hours; 3 credits

The role of the archivist in historical research. Theoretical and historical basis of archival management. Types of archives. Applications of modern archival practices. The Brooklyn College archives will serve as the student's laboratory.

Prerequisite: Core Curriculum 1220/History 3005 or permission of the undergraduate deputy.

## HIST 4001 Colloquium in the History of Religion

## 4 hours; 4 credits

Colloquium on the history of religious beliefs, organizations, and communities in historical context. Topics vary from term to term. Course descriptions may be obtained from undergraduate deputy
before registration. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: History 2001W; junior or senior standing; and permission of the undergraduate deputy.

## HIST 4002 Colloquium in History and Biography

4 hours; 4 credits
The individual life in relation to historical change. Topics may include the life of the revolutionary, the hero in history, collective biography, and the biographer as historian.

Prerequisite: History 2001W; junior or senior standing; and permission of the chairperson.

## HIST 4003 Colloquium in Social History

4 hours; 4 credits
Colloquium on the history of classes, groups, and mass movements in history. Topics vary from term to term. Course descriptions may be obtained from undergraduate deputy before registration. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: History 2001W; junior or senior standing; and permission of the undergraduate deputy.

## HIST 4004 Colloquium on Historical Writing

4 hours; 4 credits
Colloquium focused on the history of historical writing from antiquity to the present day; particular historical methodologies and disciplines, such as microhistory, the history of emotions, spatial history, visual history, Subaltern studies, history of feminism, etc. Topics vary from term to term. Course descriptions may be obtained from undergraduate deputy before registration. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: History 2001W; junior or senior standing; and permission of the undergraduate deputy.

## HIST 4005 Colloquium in Political History

4 hours; 4 credits
Colloquium on the history of states, governments, politics, diplomacy, parties, war/warfare, and political institutions in human history. Topics vary from term to term. Course descriptions may be obtained from undergraduate deputy before registration. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: History 2001W; junior or senior standing; and permission of the undergraduate deputy.

## HIST 4006 Colloquium in Cultural and Intellectual History

4 hours; 4 credits
Colloquium on the history of ideas, mentalities, and concepts in their cultural context. Topics vary from term to term. Course descriptions may be obtained from undergraduate deputy before registration. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: History 2001W; junior or senior standing; and permission of the undergraduate deputy.

HIST 4007 Colloquium on the History of Women, Gender, and Sexuality
4 hours; 4 credits

Colloquium on the history of women, gender, and/or sexuality. Topics vary from term to term. Course descriptions may be obtained from undergraduate deputy before registration. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: History 2001W; junior or senior standing; and permission of the undergraduate deputy.

## HIST 4008 Colloquium in Public History

4 hours; 4 credits
Colloquium on public history, on the wide range of locations where history is produced and consumed outside of the classroom. Topics vary from term to term. Course descriptions may be obtained from undergraduate deputy before registration. Students may take this course for credit twice, but may not repeat topics.

Prerequisites: History 2001W; junior or senior standing; and permission of the undergraduate deputy.

## HIST 4009 Colloquium in Environmental History

4 hours; 4 credits
Colloquium on the relationship between human culture and the natural environment over time. Topics vary from term to term. Course descriptions may be obtained from the undergraduate deputy before registration. Students may take this course for credit twice but may not repeat topics.

Prerequisites: History 2001W; junior or senior standing; and permission of the undergraduate deputy.

## HIST 4010 Colloquium in Global History

4 hours; 4 credits
Thematic consideration of history in global contexts. Topics may include approaches to writing global history, globalization and the local, humanity and the environment, climate change and its consequences, patterns of human migration, economic systems, science and systems of knowledge, imperialism, and the circulation of ideas, technologies, religions, plant and animal species, and diseases.

Prerequisites: History 2001W; junior or senior standing; and permission of the undergraduate deputy.

## HIST 4011 Colloquium in Economic History

4 hours; 4 credits
Colloquium on historical modes of production, distribution and exchange, and forms of work, consumption, technology and innovation. Other themes include the creation of wealth and hierarchies. Topics vary from term to term. Course descriptions may be obtained from the undergraduate deputy before registration. Students may take this course for credit twice but may not repeat topics.

Prerequisites: History 2001W; junior or senior standing; and permission of the undergraduate deputy.

## HIST 4012 Colloquium in Race and Racism

## 4 hours; 4 credits

Colloquium on "race," defined broadly to include tropes of difference (often rationalized by physiognomy) that shaped the distribution of power within and across different societies, geopolitical locales, and cultural contexts over time. Its intersection with other discourses (that is, languages and institutions) of unequal relations, including class, gender, sex, sexuality, nationality,
and religion. Histories of resistance from "the bottom up." Topics vary from term to term. Course descriptions may be obtained from the undergraduate deputy before registration. Students may take this course for credit twice but may not repeat topics.

Prerequisites: History 2001W; junior or senior standing; and permission of the undergraduate deputy.

## HIST 4200 Oral History Theory and Practice

## 4 hours; 4 credits

Theory of and fieldwork in oral history interviewing. Preparing for, conducting, and transcribing oral history interviews. Reviewing legal and ethical issues. Analyzing the relationship between history and memory. Studying the use of life history narratives in print, film, television, radio, exhibitions, performance, community history projects, and the classroom.

Prerequisite: Permission of the instructor.

## Seminars, internships and independent studies

## HIST 5200 Independent Study

Minimum of 12 hours conference and independent work; 4 credits Individual study supervised by a faculty member. Approved topic and readings. Weekly conference. Final examination or paper. Students may take this course twice for credit but may not repeat topics.

Prerequisite: History 2001W; junior or senior standing; and permission of the faculty member and undergraduate deputy.

## HIST 5900 Internship in Public History I

9 hours of fieldwork; 3 credits
Applied training in such areas of public history as archival and museum management, mounting historical exhibits, and collection classification. To be pursued in conjunction with an institution outside the college under the supervision of a History Department liaison. A written report is required.

Prerequisite: History 3460, History 3501, History 4008, or permission of the undergraduate deputy.

## HIST 5901 Internship in Public History II

9 hours of fieldwork; 3 credits
Applied training in such areas of public history as archival and museum management, mounting historical exhibits, and collection classification. To be pursued in conjunction with an institution outside the college under the supervision of a History Department liaison. A written report is required.

Prerequisite: History 3460, History 3501, History 4008, or permission of the undergraduate deputy.

## HIST 5905 Internship

9 hours of fieldwork; 3 credits
Applied training in history at historical sites other than archives. Internships at off-site institutions that allow for supervised projects in museum management, historical exhibit creation, oral history, and collection development. Supervision by a full-time faculty member of the Brooklyn College History Department and the cooperating institution required.

Prerequisite: History 2001W, and permission of the undergraduate deputy and/or the chair of the History Department,
and the cooperating institution.

## Honors courses

## HIST 5300 Independent Research

Minimum of 12 hours conference and independent work; 4 credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Thesis or research paper. Students may take this course twice for credit but may not repeat topics.

Prerequisite: History 2001W; junior or senior standing; and permission of the faculty member and undergraduate deputy.

## Honors Academy

Department office: 2231 Boylan Hall
Phone: 718.951.4114
The Brooklyn College Honors Academy houses six programs, which are the William E. Macaulay Honors College, the Scholars Program, the Coordinated B.A.-M.D. Program, the Coordinated Engineering Honors Program, the Mellon Mays Undergraduate Fellowship, and the Minority Access to Research Careers (MARC) Program. The Honors Academy serves outstanding students by helping them develop their potential for lifelong learning and accomplishment in their field of choice. The academy provides a coherent curriculum relevant to the needs of more than six hundred students. It offers closely monitored internships, small class sizes, and a collaborative community of well-matched students. Our graduates pursue advanced degrees and go on to become doctors, engineers, university professors, and prominent individuals in their field of choice.

## Scholars Program requirements

In addition to completing the requirements for a baccalaureate degree, the following requirements must be met.

1. A grade point average of 3.50 or higher
2. Completion of each of the following with a grade of B or higher
a. SPCM. 3150
b. SPCM. 3185
c. Two of the following courses in sections designated for students enrolled in the Scholars Program: CLAS. 1110; PHIL. 2101; ANTH. 3135; HIST. 3005; CORC. 3314.
d. Honors work in three additional courses not offered to satisfy requirements b or c. Each of these courses may be in either category 1 or 2 below.
(1) An honors course ( 5000 level).
(2) An honors project in a regular (no-Scholars Program) course.
e. Students who have not already taken ENGL 1010 and 1012 enroll in sections designated for the Scholars Program.
3. Completion of a senior thesis. The topic of the senior thesis and the thesis itself must be approved by the Scholars Program director and a thesis advisor.

## Courses

## Honors Academy Research Coloquium

## HARC 3062 Introduction to Scholarly Disciplines

3 hours; 3 credits
Topics relating to established academic disciplines, their history, characteristic methods of inquiry, current issues and trends; analysis by collaborative working groups. Oral and written reports; lectures by faculty from diverse disciplines; students choose mentors and outline research projects with guidance from the instructor, colloquium director, and chairperson of the major department.

Prerequisite: permission of the Honors Academy Research director.

## HARC 3073 Critical Analysis in Scholarship and Research

## 3 hours; 3 credits

Reexamines disciplines studied and used in the junior year from the standpoint of philosophy of knowledge; foundational and historical criticism of the concept of scholarly discipline; diversity of disciplinary expressions for knowledge; dynamics of change. Approach is through collaborative inquiry, essays, and oral reports.

Prerequisite: permission of the Honors Academy Research director.

## 3 hours; 3 credits

Reexamines academic discipline, research, and teaching from the standpoint of society; professionalization and institutionalization of academic life; economic, political, social implications, and constraints; public and private funding; stresses of paradigm maintenance and change on institutions and individuals; rhetoric and writing; pedagogy and curriculum; ethics and credibility.

Prerequisite: permission of the Honors Academy Research director.

## William E. Macaulay Honors College

## MCHC 1001 Seminar I: The Arts in New York City

3 hours; 3 credits
Interdisciplinary study based on performances and exhibitions in the arts, using New York City's cultural institutions as resources for aesthetic experiences and opportunities for research, interpretation, and creative work. Intersections among cultural events in the city and academic readings and writings. The nature of narrative as it is expressed in literature as well as in various other media: opera, popular music, dance, theater, and pictorial art; high as well as folk art, classical as well as contemporary forms. Satisfies Pathways Flexible Core Creative Expression requirement.

Prerequisite: acceptance into the Macaulay Honors College at Brooklyn College.

## MCHC 1002 Seminar II:The Peopling of New York City

3 hours; 3 credits
Students investigate the role of immigration and migration in shaping the city's identity past, present, and future. Topics include the factors that have driven and drawn people to New York since the seventeenth century; the different ways that religion, race, gender, and ethnicity have shaped immigrant encounters with the city; the formation and social organization of well-known immigrant communities such as the Five Points, the Lower East Side, Little Italy, Harlem, Chinatown, Astoria, Flushing, and East Flatbush; the impact of newcomers on urban culture and politics; and the continuing debates over assilimation and Americanization. Extensive in-class reading and writing assignments in conjunction with site visits to the Tenement House Museum, Ellis Island/Castle Garden, Weeksville, and other places. Satisfies Pathways Flexible Core US Experience in Its Diversity requirement.

Prerequisite: MCHC 1001.

## MCHC 2001 Seminar III: Science and Technology in New York City

3 hours; 3 credits
Scientific and technological topics that have had an impact on contemporary New York; environmental issues in New York City and communication techniques required to present these issues; the scientific method, energy, spatial and temporal localization of environmental issues, epidemiology, Internet, visualization and mapping. Satisfies Pathways Flexible Core Scientific World requirement.

Prerequisite: MCHC 1001 and MCHC 1002.

## MCHC 2002 Seminar IV: Shaping the Future of New York City

3 hours; 3 credits
The ongoing interplay of social, economic, and political forces that shape the physical form and social dynamics of New York City. Topics include certain important historical junctures and major economic development initiatives that illustrate how decisions are made and power is distributed in the city; New York City in the larger context of the region, the nation, and the world; institutional agents of change in the city-federal, state, and city government, public authorities, private sector interests, community boards, and community-based organizations-and the roles people take or are given in the decision-making processes of government; inequality and its relationship to race, class, and gender. Satisfies Pathways Flexible Core Individual and Society requirement.

Prerequisite: MCHC 1001, MCHC 1002, MCHC 2001.

## Scholars Program

## SPCM 3150 Interdisciplinary Topics

## 3 hours; 3 credits

This course addresses issues of an interdisciplinary character. Questions of methodology will be raised as an essential aspect. Topics vary from term to term. Course descriptions may be obtained in the Scholars Program office. Students may take this course three times but may not repeat topics.

Prerequisite: good standing in the Scholars Program or permission of the director of the Scholars Program.

3 hours; 3 credits
A series of lectures in one or more fields by faculty and invited guests. The colloquium is led by a faculty coordinator and is intended to be responsive to areas of student interest. Each student is expected to present one piece of original work. This course may be repeated once with the permission of the director of the program.

Prerequisite: acceptance of the qualifying paper and satisfactory standing in the Scholars Program.

## Coordinated B.A.-M.D. Program

## INDS 4101 Biomedical Research Experience I

1 hour lecture, 6 hours fieldwork; 3 credits Introduction to the fundamentals of research in a clinical context. Elements of the research process, including hypothesis formation, study design, subject selection, variable conceptualization and operationalization, data collection and analysis, including the use of biostatistical methods. Special attention to the features of conducting research in a clinical setting including: issues of informed consent, patient confidentiality and privacy, and research ethics.

Prerequisite: Completion of 60 credits; a 3.2 GPA; Chemistry *1100 [1] (or 1050 [1.1] and 2050 [1.2]) and 2100 [2]; or Chemistry *1040 [5]; Biology *2073 [17], 2074 [17.1], 1072 [29], 2071 [29.1], and 1071 [34.1] or Biology *1080 [3] and 1081 [4]; permission of the program coordinator.

## INDS 4102 Biomedical Research Experience II

Minimum 9 conference hours plus 6 hours weekly fieldwork; 3 credits
Biomedical research in a clinical setting, utilizing concepts of study design, subject selection, variable conceptualization and operationalization, data collection and analysis. Special attention will be given to the unique features of conducting research in a clinical setting including issues of informed consent, patient confidentiality and privacy, and research ethics.

Prerequisite: Interdisciplinary Studies 4101 [73] and permission of the program coordinator.

## INDS 4200 Seminar: Health Care in the Inner City

2 hours lecture and a minimum of 7 hours conference and independent work; 3 credits
Interdisciplinary study of health-care crises in the inner city. Guest lecturers will discuss the medical issues.

Prerequisite: junior or senior standing in the B.A.-M.D. Program

The following inactive course(s) will only be offered if there is sufficient demand:

## Interdisciplinary Studies

Department office: 3208 James Hall
Phone: 718.951.5771
Interdisciplinary studies courses approach learning by employing the research and methodology of more than one discipline. Students who take interdisciplinary studies courses become adept at a key measure of critical thinking: the ability to integrate the knowledge and perspectives of different sources to arrive at a better understanding of complex problems and issues.

Interdisciplinary studies include courses that are open to the general student population as well as courses associated with the First College Year program.

Faculty: from the departments of the College.

## Courses

Interdisciplinary Studies courses are scheduled at various times depending on student and program demands.

## INDS 1001 Minicourse in Special Topics

1 hour; 1 credit
Lecture and discussions on topics involving more than one department or program. Course meets for 15 irregularly scheduled hours, including lectures and a final examination. Students may take this course for credit four times, but may not repeat topics. Specific prerequisites may be added depending on the subject matter and level of the topic.

INDS 1011 Foundations for College Success and Lifelong

## Learning

1 hour lecture, 1 hour activity; 1 credit
Examination of the psychological, sociocultural, and educational
components in the growth and development of the college student.
Analysis of values and goals in relation to self-direction.
Consideration of available options.
Prerequisite: Passing scores on CUNY ACT Assessment tests in
reading and writing.

## The following inactive course(s) will only be offered if there is sufficient demand:

INDS 2012
Italians in America
INDS 2025 Italian-American Relations: Foreign Relations, Migration, Commerce

## Judaic Studies

Department office: 3111 James Hall
Phone: 718.951.5229
Full-time Faculty
Professors: Flatto, Shapiro
Associate Professors: Amanik, Brodsky

Born in the ancient Middle East, Jewish civilization has flourished in a variety of forms and places for more than three thousand years. The Department of Judaic Studies introduces students to this fundamental component of worldwide civilization. The department's faculty members are scholars committed to rigorous teaching and research. Their areas of specialization include the ancient and modern Middle East, Jewish thought and religious law, the Hebrew Bible and Talmudic literature, the French Jewish experience, East European Jewry, Hasidism, the Holocaust, Jewish women's history, music, and literature, and the folk customs and cultures of various groups of Jewish people.

The department offers a bachelor of arts and a minor in Judaic studies, a minor in Hebrew, and a concentration in Judaic studies for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades 1-6). Our courses and programs reflect the chronological scope and geographic diversity of the Jewish experience, with particular emphasis on its intellectual, religious, and social history, based on the analytic study of primary sources.

To promote access to Jewish literature, which is also studied in translation, Hebrew and Yiddish courses are offered. Students are also urged to study Arabic, Spanish, and other languages to facilitate access to primary sources. In addition, the department actively promotes the study of Brooklyn's numerous Jewish communities. Students are encouraged to pursue research under the guidance of one of the department's professors.

Judaic studies students are eligible for a variety of honors, both departmental and collegewide. Students may apply for a paid annual Steiner Summer Internship at the National Yiddish Book Center in Amherst, Mass., as well as for internships at the Museum of Jewish Heritage and the Center for Jewish History in New York City. Those interested in pursuing intensive Yiddish studies during the summer are encouraged to apply for scholarships to the Yiddish programs at New York University, Tel Aviv University, the University of Paris, or the University of Vilnius (Vilna) in Lithuania. Top students in the department are eligible for funding to visit Israel for further studies or research.

Our graduates go into a variety of careers in education, research, social work, policy planning in the private and public sectors, diplomacy, and government. A bachelor's degree in Judaic studies provides excellent preparation for graduate and professional studies in law, business, religion, the sciences, and medicine. Students who wish to pursue graduate studies may apply to the master's program offered by this department.

## B.A. degree program in Judaic studies <br> HEGIS code 0309; SED program code 01977

Department requirements (27 credits)
Majors must take 15 credits from the chronological periods, in sequential order:
Ancient ( $3-6$ credits), then Medieval/Early Modern ( $3-6$ credits) and next Modern ( 6 credits). Afterwards, they take 1 upper level thematic course, the Critical Issues in Judaic Studies Colloquium, and the Senior Thesis.

1. All majors and minors must take the introductory course JUST 2545 first (a student who tests out must instead take a course in the Ancient or Medieval periods). JUST 3025 is an optional gateway course which can count toward the minor or major but does not fulfill the distributional requirements listed below (in 2 and 3 ).
2. Majors must take 15 credits from the three chronological periods, in sequential order: Ancient ( $3-6$ credits), then Medieval/Early Modern ( $3-6$ credits) and next Modern ( 6 credits). Afterwards, they take 1 upper level thematic course, as well as the Colloquium in Critical Issues in Judaic Studies, and the Senior Thesis. Majors take six credits in two chronological periods and three credits in the third, in the following order (or in a different order if the student receives permission from the Chair):
A. Ancient period: JUST 3012 required (JUST 3019/HIST 3310 can be taken instead with the approval of the Chair). JUST 2545 is the prerequisite for JUST 3019/HIST 3310, or for: JUST 3014, 3015, 3023, or 4024.
B. Medieval/Early Modern period: The first course must be JUST 3035 or 3013. After that students may choose any of the following for their second course in this rubric: 3013, 3033, 3035, 3036, or 4034.
C. Modern period: Any two of the following courses in modern Jewish history: JUST 3011, 3013, 3016, 3031, 3037, 3047, 3048, 3050, 3115, $3405,3465,3485,3489,4020,4054$, or 4195.
3. After completing the above, majors must take at least one upper level course in each of the following categories (9 credits):
A. Thematic courses: JUST 2537, 2540, 3017, 3020, 3038, 3046, 3206, 3535, 4017, 4018, or 4435.
B. JUST 4920 Colloquium in Critical Issues in Judaic Studies, as prerequisite for the Senior thesis, and should be taken as a Lower Junior.
C. Senior thesis, JUST 5531 W or 5532 W (or JUST 5581 or 5582 with permission of Chair), should be taken as an Upper Junior or Lower Senior.
4. US Yeshiva Transfer Credits will not count towards the major. Students who receive the full 27 Israel Yeshiva Transfer Credits upon completion of the capstone course would have a head start toward the major/minor since 3 of the Yeshiva transfer credits would count toward the 12 credit JUST Minor, and 9 transfer credits would count toward the 27 credit major. The rest of the transfer credits will be awarded as electives that do not count toward the major or minor. The capstone course will count toward the major. To serve as a capstone course, the course must be a Judaic Studies (JUST) course (or relevant advanced HEBR or RELG course substituted by the chair); it must be at least three credits; and students must receive at least a B in the capstone course to receive Yeshiva Transfer Credits. Pathways courses count towards the major/minor but not as a capstone course.

With permission of the chairperson of the Department of Judaic Studies, the student may substitute up to three relevant courses as needed to replace any of the above courses.

## Departmental Minor(s)

## Minor in Hebrew

## Department Requirements

Twelve credits in courses in Hebrew numbered 3111 or higher with a grade of C or higher. Minors in Hebrew should consult with the department chairperson.

## Minor in Judaic Studies

Department Requirements
Twelve credits of advanced courses in Judaic studies. Each course must be approved by the department chairperson and completed at Brooklyn College with a grade of C or higher.

## Interdepartmental Minor(s)

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C- or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307;

Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Judaic Studies

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in Judaic studies must complete at least 30 credits in the Judaic Studies Department with a grade of C or higher in each course. Students must meet with a department adviser to declare their intention to complete this sequence.

## Concentration requirements:

Students must take three courses from section 2 of the Judaic Studies major: One course from rubric 2A (Ancient period); one course from rubric 2B (Medieval/Early Modern period); and one course from rubric 2C (Modern period).

The remaining 21 credits can be taken as electives from any other Judaic Studies courses.
Students with 27 yeshiva/seminary transfer credits may use 9 of those credits to meet the requirements for the concentration.

## Department recommendations

The related courses listed at the end of the department section are strongly recommended for Judaic studies majors.

## Department honors

To qualify for honors in Judaic studies, a student must complete Judaic Studies 5531 W or 5532 W or 5581 or 5582 with a grade of B or higher.

## Graduate Studies

The Judaic Studies Department offers a master of arts in Judaic studies and graduate courses for students in other fields. For information, students should consult the department chairperson.

## Courses

*Courses marked with an asterisk ( ${ }^{*}$ ) are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in this department.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## JUST 1025 The Jewish Diaspora

3 hours; 3 credits
Comparative study of cultures by exploring Jewish diaspora, the cultures in which Jews found themselves, and variations in development as a result of location. Influences, differences, and similarities of immigrant and local populations. (Not open to students who have completed Core Curriculum 3205 or JUST 3025.) 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement. Starting Fall 2019 qualifies as an Inter-

Cultural Competency (ICC) course for Pathways College Option purposes.

## JUST 1145 Classical Jewish Texts: Moving Toward Modernity

3 hours; 3 credits
Exploration of masterpieces of Jewish literature. Various genres of Jewish writings, including biblical, rabbinic, poetic, philosophical, mystical, and kabbalistic. Examination of the extent to which
modern Jewish literature adapted and/or broke away from earlier classical genres/ A particular focus on the writings (and/or films) of Sholom Aleichem, Woody Allen, Ahad Ha'am, and I. B. Singer. (Not open to students who have completed Core Curriculum 3111 or JUST 2545.) 2017-2018 Satisfies Pathways College Option requirement. 2018-2019 Satisfies Pathways Flexible Core World Cultures and Global Issues requirement and College Option requirement. Starting Fall 2019 Satisfies Pathways Flexible Core World Cultures and Global Issues requirement.

## JUST 2017 Jewish Approaches to Ethical Issues

3 hours, 3 credits
This course surveys the Jewish approaches to leading moral issues including: truth and lying; self-sacrifice, martyrdom and suicide; the just war; abortion; euthanasia; capital punishment; sexual ethics and morality; and business ethics. In each class we will examine the classical Jewish sources (Bible, Talmud, medieval codes) pertaining to an ethical issue and discuss the range of ethical positions that may be based on the sources. (Not open to students who have completed JUST 4017.) Starting Spring 2021 Satisfies Pathways Flexible Core Individual and Society requirement.

## JUST 2047 American Jewish History

## 3 hours; 3 credits

Broad survey of American Jewish history from the 1650s to the Twentieth Century. Developments in political, cultural, economic, and religious life. Interactions with Jewish communities throughout the world and other ethnic and religious communities in the United States. (Not open to students who have completed JUST 3047.) Starting Spring 2021 Satisfies Pathways Flexible Core US Experience in Its Diversity requirement.

## JUST 2085 Jews of New York

3 hours; 3 credits
Local history and structure of New York's Jewish communities from the seventeenth century to the present. Interactions with other ethnic, immigrant and religious communities in the city and influences upon New York's political, cultural and economic life. (Not open to students who have completed JUST 3485.) Starting Spring 2018 Satisfies Pathways Flexible Core US Experience in Its Diversity requirement.

## JUST 3624 Yiddish Short Stories and Poetry in Translation

3 hours; 3 credits
Introduction to East European Jewish culture through Yiddish short stories in translation. Selected works by a variety of authors, including Shalom Aleichem, Isaac Leib Peretz, Shalom Asch, Isaac Bashevis Singer, Itzik Manger, Kadya Molodowsky, Esther Kreitman, and Miriam Ulinower, among others. (Not open to students who have completed JUST 2537.) This course is the same as Comparative Literature 3624.

## JUST 4027 Mishnah

3 hours; 3 credits
Reading and analysis of select passages from the Mishnah, the first code of Rabbinic Jewish law, dating to the 2nd to 3rd centuries CE, out of which all subsequent Rabbinic law developed. The Mishnah reflects major concerns of Judaism in antiquity including agricultural, marital, and business law, rules regarding the sabbath
and holidays, sacrifices, purity, and impurity. Training in Rabbinic dialects of Hebrew. Texts will be read in the original Hebrew. Students may take this class for credit multiple times but may not repeat topics. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes. This course is the same as HEBR 4027.

Prerequisite: None, but the student should speak with the instructor or chairperson to assess that the course is at the right level for the student.

## Judaic Studies

## JUST *1001 Introduction to Judaic Studies

3 hours; 3 credits
Survey of basic concepts, terminology, facts of the Jewish experience for students with little background in Judaic studies. Cultural, religious, historical highlights; relations with other religions and cultures. (Not open to students who are enrolled in or have completed Judaic Studies 3012, 3013, or the equivalent.)

Prerequisite: English 1012 or equivalent.

## JUST 2510 Introduction to the Hebrew Bible (Old Testament/TaNaKh)

3 hours, 3 credits
Broad survey of the Hebrew Bible from Genesis through Chronicles, from creation through the Persian period. Introduces students to the Patriarchal narratives, historical kingdoms of Israel and Judah, laws of ancient Israel, poetry, and wisdom literature that have had an outsized impact on culture the world over.

## JUST 2539 Golems, Dybbuks and the Supernatural in Modern Jewish Literature and Culture

3 hours, 3 credits
Classic works of Jewish literature and film featuring the supernatural from the medieval period to the present. Examination of these works' historical and social contexts. Exploration of literary concepts, including the "uncanny" and the "fantastic."

## JUST 2540 Introduction to Israeli Literature in Translation

3 hours; 3 credits
This course examines Israeli literature from the pre-State period at the turn of the 20th century to the present. It provides an introduction to many of Israel's key writers and literary works, and explores the literary expression of major trends in Israeli culture and politics. Readings include novels, short stories, poetry and drama. This course is the same as Comparative Literature 3631.

Prerequisite: English 1010

## JUST 3011 Land and Cultures of Israel

4 hours; 4 credits
Survey of the history and culture of Israel. Its socio-economic and political structure, including: kibbutzim, relationship between church and state, Ashkenazim and Sephardim, conflict between Jews and Arabs, the role of the military, the labor movement, and the relationship between Israel and the Diaspora.

## JUST 3012 Jewish Religion and Tradition

3 hours; 3 credits

Survey of major developments in Jewish culture and tradition from the biblical period in the ancient Near East to the medieval period. Rabbinic Judaism. Jewish sectarianism; the impact of Christianity and Islam on Jewish life.

Prerequisite: English 1012 or equivalent.

## JUST 3013 From Ghetto to Emancipation

3 hours; 3 credits
Study of major developments of Jewish culture, tradition, and history from the medieval period to the early Twentieth Century. Transformations and continuities in traditional Jewish life. Sabbatianism. Hasidism. Haskalah. Zionism. Emergence of Reform and Conservative movements.

Prerequisite: English 1012 or equivalent.

## JUST 3014 Introduction to the Talmud

3 hours; 3 credits
Survey and analysis of select passages from the Talmud, the major repository of Jewish legal and ethical teaching. Readings reflect major concerns of Judaism in antiquity, such as the obligation to study the Torah, to care for the needy, and to promote justice. (Not open to students who have completed Judaic Studies 19.)

Prerequisite: Judaic Studies 3012 [12] or permission of the chairperson.

## JUST 3015 Introduction to the Midrash

3 hours; 3 credits
Survey and analysis of select passages from the Midrash, the major repository of Jewish thought and biblical commentary of the Rabbis of the Mishnaic and Talmudic periods

Prerequisite: English 1012 or equivalent.

## JUST 3016 Modern Jewish Biographies

## 3 hours; 3 credits

Biographical studies of modern influential Jewish figures in the fields of politics, science, philanthropy and the arts. May include Einstein, Freud, Marx, Szold, Kafka, Chagall, and others. Biographical works as historical source and genre.

Prerequisite: English 1012 or equivalent.

## JUST 3017 The Jewish Woman

## 3 hours; 3 credits

The role of the Jewish woman in religion and history. The status of a woman in Jewish Law. Different roles of the Jewish woman in the Sephardic and Ashkenazic communities. Jewish responses to the feminist movement.

## JUST 3020 Gender in Classical Jewish Texts

3 hours; 3 credits
This course will explore the role of gender in classical Jewish texts from the Bible to the Mishnah, Talmud, Midrash, and the Zohar, with a particular emphasis on Talmud and Midrash. From the creation story to homoeroticism, gender ambiguity, and marital law, this course will cover a range of topics looking at biblical and rabbinic Judaism through the lens of gender theory. This course is the same as Women's and Gender Studies 3222.

## JUST 3021 Tower of Babel: Syriac Christianity in Its Babylonian and Rabbinic Contexts

3 hours, 3 credits
Introduction to Syriac Literature and Syriac Christianity through the Seventh Century CE. Survey of Syriac Literature of the first seven centuries CE and of the basic history and concepts of Syriac Christianity. Texts will be read in translation. Same as RELG 3011.

## JUST 3022 Searching for God: Ancient Greeks, Jews, and Christians

3 hours; 3 credits
History of theology in the Mediterranean basin from ancient through medieval periods. Same as CLAS 3022, PHIL 3729, and RELG 3022.

## JUST 3023 Introduction to the Bible and Apocrypha

3 hours; 3 credits
As introduction to the content, formation, transmission, and interpretation of the Bible and the Apocrypha from antiquity through the Middle Ages. Topics include the canon of the Bible; Aprocrypha and Pseudepigrapha; biblical versions; Dead Sea scrolls and the Bible; and biblical interpretation.

Prerequisite: English 1012 or equivalent.

## JUST 3031 Modern Jewish Thought

3 hours; 3 credits
Significant works in modern Jewish thought. Modernization of society and its impact on Judaism considered through the works of such thinkers as Moses Mendelssohn, Samson R. Hirsh, Martin Buber, J.B. Soloveitchik, A.J. Heschel, and others. (Not open to students who have completed Judaic Studies 18.2 or 53.)

## JUST 3033 Maimonides: Philosopher, Legalist, Physician

3 hours; 3 credits
Readings from Maimonides' philosophical, ethical, and legal writings. Impact on medieval Jewish and Christian thought and the Jewish legal system.

## JUST 3035 Medieval Jewish History

## 3 hours; 3 credits

Medieval Jews and their interaction with the Christian and Muslim worlds. Crusades, blood libels, and expulsions; philosophers, Talmudists, and religious debaters; forced converts, moneylenders, and courtiers. This course is the same as History 3101.

Prerequisite: English 1012 or equivalent.

## JUST 3036 Mystics, Pietists, and Heretics: Topics in Early Modern Jewish History

3 hours; 3 credits
Explores aspects of the intellectual and cultural history of the Jews from the expulsion of Spanish Jewry in 1492 to the French Revolution in 1789. This course particularly emphasizes JewishChristian interaction, the Marrano Diaspora, Messianism, and the influence of such larger cultural trends as the Renaissance, Reformation, and absolutism upon the development of Jewish culture. This course is the same as History 3102.

Prerequisite: English 1012 or equivalent.

## JUST 3037 The Hasidic Movement: Its History and <br> Literature

3 hours; 3 credits
Eighteenth-century Jewish pietistic and revivalist movement that became the prevailing mode of life for much of nineteenth-century Eastern European Jewry. Explores the historical development of this movement and focuses on its central mystical doctrines and literature. Considers various historiographical approaches to Hasidism, the vehement opposition to it, and the often controversial role of messianism. This course is the same as History 3104.

Prerequisite: English 1012 or equivalent.

## JUST 3038 Messianic Ideas and Movements in Jewish History

3 hours; 3 credits
Major Jewish messianic trends and movements emerging from Bible up until present. Miracle worker? Apocalyptic warrior? Revealer of secrets? Or savvy politician? Explore the colorful careers of numerous messianic figures and pretenders, such as Jesus, Shabbtai Zevi, Ramhal and the Lubavitcher rebbe; intellectual and historical roots of these movements, ranging from mystical yearnings to Christian and Muslim influences; its popularization among various contemporary hasidic and political groups.

## JUST 3046 The Shtetl in History and Literature

3 hours; 3 credits
Survey of the history and literature of the East European shtetl; its religious, social, educational, economic, and political institutions; its lore and folklore as reflected in historical and literary works. Its impact on America and Israel.

## JUST 3048 Jews of Latin America

3 hours; 3 credits
Explores Latin American Jewish history from colonial rule to the twentieth century. Migration, agricultural colonies, political activism, and literature. Comparison of European, North African, and Middle Eastern Jewish communities. Measures the roles of race, religion, and ethnicity in Latin American societies through Jewish developments. This course is the same as Puerto Rican and Latino Studies 3048 .

Prerequisite: English 1010 or permission of department.

## JUST 3050 History of the Holocaust

3 hours; 3 credits
History and analysis of Nazi Germany's attempt to annihilate European Jewry, 1933-45. Ghettos and killing centers.
Deportations and killings. Jewish physical and spiritual resistance, liberation, and postwar displaced persons camps. This course is the same as History 3243.

Prerequisite: English 1012 or equivalent.

## JUST 3065 Readings in Talmud

1 hour, 1 credit
Readings in selected passages of the Palestinian and Babylonian Talmuds, the foundational texts of Rabbinic Judaism. Texts read
and translated from the original Hebrew and Aramaic. Class discussion in English. Text selections vary from semester to semester. Students may take this course up to six times but may not repeat topics. Grade will be CR/NC.

## JUST 3115 History of Zionism

3 hours; 3 credits
Historical review of the development of Zionism as an idea and as a political movement from its roots in modern Jewish thought to the present.

## JUST 3124 Black-Jewish Activism: Coalitions in America

3 hours; 3 credits
History of American Jewish and African American activism around civil rights and racial justice issues in the twentieth century. This course is the same as AFST 3124 and AMST 3124.

## JUST 3135 Sages and Scholars

## 3 hours; 3 credits

Biographical studies of major Jewish scholars and religious personalities from the late Middle Ages to the twentieth century, their literary activities and their impact on Jewish society and intellectual life. Personalities to be studied include Rabbi Joseph Karo, the Gaon of Vilna, and Rabbi Dr. David Zvi Hoffman.

Prerequisite: English 1012 or equivalent.

## JUST 3205 Business Practices and the Jewish Tradition

3 hours; 3 credits
Using the classical sources of the Jewish tradition, this course will examine subjects dealing with running a business in accordance with Jewish law and values. Topics covered include compassion for the poor, concern for the stranger, racism, employer-employee relations, pricing, honesty in business, water, environmentalism, and moral leadership. (This course is the same as Business 3020)

Prerequisite: English 1012 or equivalent.
JUST 3206 Making a Living: Jews, Business, and Professions from Antiquity up to the Modern World
3 hours; 3 credits
An overview of the Jewish experience in business from the biblical period to contemporary times. Analysis of the historically and culturally varied Jewish communities around the globe and how their surroundings influenced their choices of earning a living. This course is the same as Business 3021

## JUST 3405 Sephardic Heritage

3 hours; 3 credits
The Jewish experience in Muslim countries. Analysis of the Jewish communities in all aspects of life and the upheaval caused by their mass emigration, particularly to Israel and the United States. (This course is the same as History 3552.)

Prerequisite: English 1012 or equivalent.

## JUST 3465 Ashkenazic Heritage: Poland, Russia, and

Beyond
3 hours; 3 credits
Poland and Russia, home to Ashkenazic Jews for 800 years. East

European Jews' religious and cultural traditions. Economic basis of Jewish life. Hasidism and its opponents. Acculturation, modernization, social and religious change. Modern Hebrew and Yiddish literature. New Jewish politics of Assimilationism, Territorialism, Zionism, Bundism, Folkism, Agudas Israel. Mass migration to America, 1880-1924. First World War and revolution. Life and struggle between the World Wars. The Holocaust. Soviet Empire during Cold War. Soviet Jewry Movement, mass migration, collapse of Communism.

Prerequisite: Sophomore status or higher; or permission of Chair.

## JUST 3489 Jews of Brooklyn

3 hours; 3 credits
The heritage and multicultural backgrounds of the Jews of Brooklyn and their contributions to the Brooklyn communities and to American society.

Prerequisite: English 1012 or equivalent.

## JUST 3535 Holocaust Literature

3 hours; 3 credits
Literary responses to the destruction of European Jewry, 19331945. Reading diaries, letters, poetry, fiction, reportages, and other contemporaneous documents. Examination of postwar Holocaust literature, including memoirs, fiction, and testimonies. Contrasting contemporaneous works with postwar literary works. All readings are in English or English translation. This course is the same as Comparative Literature 3625.

Prerequisite: English 1010 [1] or the equivalent.

## JUST 4018 Studies in Jewish Customs

3 hours; 3 credits
Study of the origins and authority of ritual customs ("minhagim") in Jewish tradition, relationship to historic conditions, and place in the Jewish legal system ("halakhah"). Analysis of the typology of customs based on internal religious dynamics as well as external, environmental influences. An analysis of the nature of customs as an expression of communal and cultural diversity within Jewish life.

## JUST 4020 Contemporary Issues in Halakhah

3 hours; 3 credits
Analysis of halakhic problems in the light of advances in science, medicine, and technology.

## JUST 4022 Job and the Problem of Evil

3 hours; 3 credits
Intensive study of the Book of Job as the primary religious work dealing with suffering and evil. Opinions as to "why bad things happen to good people" will be considered in both ancient and modern works. This course is the same as Studies in Religion 3010.

Prerequisite: English 1012 or equivalent.

## JUST 4024 The Dead Sea Scrolls

3 hours; 3 credits
An introduction to the Dead Sea scrolls and their significance for biblical and Talmudic studies, and for the early history of Judaism and Christianity.

## JUST 4034 Kabbalah and Messianism

## 3 hours; 3 credits

Kabbalah (a form of Jewish mysticism) is at the root of various messianic ideologies and movements that became highly influential during the Medieval and early modern eras. Examines the central doctrines of Kabbalah, the geographic and social contexts in which kabbalistic and messianic trends evolved, and the factors that led to their popularization. This course is the same as History 3103.

Prerequisite: English 1012 or equivalent.

## JUST 4054 Religion and the Holocaust: During and After

3 hours; 3 credits
Analysis of rabbinic responsa dealing with legal and religious questions that arose as a result of the Nazi persecution.

Prerequisite: English 1012 or equivalent.

## JUST 4071 Seminar in Special Topics

3 hours; 3 credits
Topics vary from term to term. Course description may be obtained in the department office before registration.

Prerequisite: permission of the chairperson.

## JUST 4195 Anti-Semitism: The Longest Hatred

## 3 hours; 3 credits

Analysis of ideological and historical origins of anti-Semitism in the Greek and Roman periods. Jewish-Christian relations from the New Testament period through modern times. Special emphasis on political and racial anti-Semitism in the nineteenth and twentieth centuries.

Prerequisite: English 1012 or equivalent.

## JUST 4435 Italian Jewry

3 hours; 3 credits
The unique relationship between Italy and its Jewish population. Jewish contributions to Italian culture. Italian Jewry during the Renaissance. New Sephardic communities. Italian Jewry during World War II.

## JUST 4701 Summer Archaeological Field School in Israel (Intensive Program)

3 hours lecture; 6 hours supervised fieldwork; 6 credits Intensive instruction in field methods and techniques of archaeology through participation in every aspect of an excavation; training in archaeological mapping, excavation techniques, and methods of archaeological laboratory analysis. This course is the same as Art 3187. (Not open to students who have previously received credit for archaeological fieldwork.)

Prerequisite: permission of the chairperson and one of the following: Judaic Studies 3012 [12], Anthropology 2400 or 2401 [2.2], Art 2.1, Classics 3210 [26], Core Studies 1, 2.1, 9, a course in archaeological theory and methodology.

## JUST 4751 Special Topics

## 3 hours; 3 credits

Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take Judaic Studies 4751 [75.1] for credit twice or 4752 [75.2] for
credit twice or 4751 [75.1] and 4752 [75.2] for credit once each, but may not repeat topics.

Prerequisite: permission of the chairperson.

## JUST 4752 Special Topics

3 hours; 3 credits
Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take Judaic Studies 4751 [75.1] for credit twice or 4752 [75.2] for credit twice or 4751 [75.1] and 4752 [75.2] for credit once each, but may not repeat topics.

Prerequisite: permission of the chairperson.

## JUST 5531W Independent Researches I

Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Thesis or report. Writing-intensive course.

Prerequisites: Completion of a program, approved by the chairperson, in the Judaic Studies Department or related departments; and permission of the instructor and the chairperson. English *1012 [2].

## JUST 5532W Independent Researches II

Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Thesis or report. Writing-intensive course.

Prerequisites: Completion of a program, approved by the chairperson, in the Judaic Studies Department or related departments; and permission of the instructor and the chairperson. English *1012 [2].

## JUST 5581 Independent Study I

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent study supervised by a faculty member. Approved reading. Periodic conferences. Final examination or term paper.

Prerequisite: completion of a program, approved by the chairperson, in the Judaic Studies Department or related departments; and permission of the instructor and chairperson.

## JUST 5582 Independent Study II

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent study supervised by a faculty member. Approved reading. Periodic conferences. Final examination or term paper.

Prerequisite: completion of a program, approved by the chairperson, in the Judaic Studies Department or related departments; and permission of the instructor and chairperson.

## Hebrew

## HEBR *1001 Elementary Hebrew I

3 hours recitation, 1 hour laboratory; 3 credits
Fundamental course in grammar, speaking, reading, and writing. (Not open to students who have completed Hebrew 0.5 or have completed the Hebrew Regents or the equivalent.) Qualifies as a

LOTE (Language Other Than English) course for Pathways College Option purposes.

## HEBR *1002 Elementary Hebrew II

3 hours recitation, 1 hour laboratory; 3 credits
Continuation of Hebrew *1001 [1]. (Not open to students who have completed Hebrew 0.6 and 0.7 or have completed the Hebrew Regents or the equivalent.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Hebrew *1001 [1] or one year of high school Hebrew.

## HEBR *1003 Intermediate Hebrew I

3 hours recitation, 1 hour laboratory; 3 credits
Oral and aural drill. Grammar review, selected modern readings, and practice in writing and speaking. (Not open to students who have completed the Hebrew Regents or the equivalent.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Hebrew *1002 [2] or two years of high school Hebrew or permission of the chairperson.

## HEBR *1004 Intermediate Hebrew II

3 hours recitation, 1 hour laboratory; 3 credits
Continuation of Hebrew *1003 [3]. Reading and discussion in Hebrew. (Not open to students who have completed Hebrew *2041 [4.1].) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Hebrew *1003 [3] or three years of high school Hebrew or permission of the chairperson.

## HEBR *2041 Literary Masterpieces

3 hours; 3 credits
Readings from significant works and introduction to literary analysis. Conducted in Hebrew. (Not open to students who are enrolled in or have completed Hebrew *1004 [4] or 2045 [4.5].) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: four years of high school Hebrew and ability to converse in Hebrew.

## HEBR 2045 Conversation

3 hours; 3 credits
Oral and aural practice. Reading newspapers and journals.
Discussion and short exposes in Hebrew. Students who are fluent in Hebrew may not take this course for credit except with permission of the chairperson. (Not open to students who have completed Hebrew 4.6.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite or corequisite: Hebrew *1004 [4].

## HEBR 3111 Advanced Grammar and Composition

## 3 hours; 3 credits

Critical and historical review of grammar and style. Writing original narratives and essays. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Hebrew *1004 [4] or 2041 [4.1] or permission of the chairperson.

## HEBR 4021 Poetry of the Hebrew Renaissance

3 hours; 3 credits
Readings from the poetry of Bialik, Tchernichovsky, and some of their contemporaries. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: None, but student should speak with instructor or chairperson to confirm class is appropriate level.

## HEBR 4025 Prose of the Hebrew Renaissance

## 3 hours; 3 credits

Novels and short stories of Mendele Mokher Sefarim, Berditchevsky, Brenner, Frischmann, and Peretz. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: None, but student should speak with instructor or chairperson to confirm class is appropriate level.

## HEBR 4027 Mishnah

## 3 hours; 3 credits

Reading and analysis of select passages from the Mishnah, the first code of Rabbinic Jewish law, dating to the 2nd to 3rd centuries CE, out of which all subsequent Rabbinic law developed. The Mishnah reflects major concerns of Judaism in antiquity including agricultural, marital, and business law, rules regarding the sabbath and holidays, sacrifices, purity, and impurity. Training in Rabbinic dialects of Hebrew. Texts will be read in the original Hebrew. Students may take this class for credit multiple times but may not repeat topics. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes. This course is the same as JUST 4027.

Prerequisite: None, but the student should speak with the instructor or chairperson to assess that the course is at the right level for the student.

## HEBR 4030 Advanced Talmud

3 hours; 3 credits
Reading and analysis of select passages from the Talmud, the major repository of Jewish legal and ethical teaching. Readings reflect major concerns of Judaism in antiquity. Training in Rabbinic dialects of Hebrew and Aramaic. Texts will be read in the original Hebrew and Aramaic. Students may take this class for credit multiple times but may not repeat topics. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: JUST 3014, or 3015, or 3065, or prior study of Talmud at Brooklyn College or elsewhere, or permission of the chairperson.

## HEBR 4041 Bible: The Historical Books

3 hours; 3 credits
The Books of Joshua, Judges, Samuel, Kings, Chronicles, Ezra, and Nehemiah. This course covers a single historical book in a given semester, chosen from the above list. Students may take this class for credit twice but may not repeat topics. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: None, but student should speak with instructor or chairperson to confirm class is appropriate level.

## HEBR 4047 Prose of Modern Israel

## 3 hours; 3 credits

Prose fiction since World War I. Burla, Shenhar, Shamir, Meged, and Yizhar. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: None, but student should speak with instructor or chairperson to confirm class is appropriate level.

## HEBR 4048 Agnon and Hazaz

3 hours; 3 credits
Their novels and short stories. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: None, but student should speak with instructor or chairperson to confirm class is appropriate level.

## HEBR 4049 Poetry of Modern Israel

3 hours; 3 credits
Readings from the poetry of such writers as Shimeoni, Shlonsky, Lamdan, Meltzer, Sh. Shalom, and Leah Goldberg. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: None, but student should speak with instructor or chairperson to confirm class is appropriate level.

## HEBR 4051 Medieval Literature

3 hours; 3 credits
Prose and poetry of the Middle Ages, particularly that of the Golden Age in Spain. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: None, but student should speak with instructor or chairperson to confirm class is appropriate level.

## HEBR 4052 Literature of the Haskalah

3 hours; 3 credits
Growth of modern Hebrew literature in the eighteenth and nineteenth centuries. Representative authors. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: None, but student should speak with instructor or chairperson to confirm class is appropriate level.

## HEBR 4070 Tutorial in Literature and Culture

1 hour conference; minimum 8 hours independent work $\S ; 3$ credits Study of a special topic at an advanced level. Periodic reports and a final paper or examination. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: junior or senior standing and 12 credits in advanced Hebrew courses with an average of 3.0 or higher. Approval of topic by instructor or chairperson.

## HEBR 4451 Bible: The Prophets and the Psalms

3 hours; 3 credits
Prophetic and poetic literature of the Hebrew Bible. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: None, but student should speak with instructor or
chairperson to confirm class is appropriate level.

## Hebrew literature in translation

## HEBR *2091 Hebrew Literature in Translation I

3 hours; 3 credits
Survey of Hebrew literature from the Biblical period through the Middle Ages. Representative works in English translation. (Not open to students who are enrolled in or have completed Comparative Literature 17 or Hebrew 9.)

## HEBR 2092 Hebrew Literature in Translation II

3 hours; 3 credits
Survey of Hebrew literature from the end of the Middle Ages to the present. Representative works in English translation. (Not open to students who are enrolled in or have completed Comparative Literature 17.)

## Honors courses

## HEBR 5041 Seminar

1 hour conference, minimum 8 hours independent work§; 3 credits Study of a literary topic, including but not limited to periods, genres, or major writers. Substantial paper in Hebrew. May not be taken concurrently with Hebrew 5085 [85]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: junior or senior standing and 15 credits in advanced Hebrew courses, approved by the chairperson, with an average of 3.5 or higher. Students may take this course for credit twice, but may not repeat topics.

## HEBR 5085 Seminar and Senior Thesis

1 hour conference, minimum 8 hours independent work; 3 credits Research thesis written in Hebrew on a literary, linguistic, or cultural topic. May not be taken concurrently with Hebrew 5041 [84.1]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: senior standing and 18 credits in advanced Hebrew courses with an average of 3.5 or higher. Approval of the research topic by the instructor and the chairperson.

## Yiddish/Modern

## YIDM 1001 Elementary Yiddish I

## 3 Hours; 3 Credits

Elementary introduction to Yiddish language. Development of skills in idiomatic speaking, reading, and writing Yiddish. (Not open to students who have taken Judaic Studies 4751 [75.1] Special Topics: Yiddish as a Tool for Understanding Jewish Literature and History.) Heritage speakers who know some Yiddish will be examined for placement. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Pathways College Option purposes.
Prerequisite: Yiddish 1001 [1] or the equivalent.

## YIDM 1003 Intermediate Yiddish I

3 Hours; 3 Credits
Further development of skills acquired in Yiddish 1002 [2]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Yiddish 1002 [2] or the equivalent.

## YIDM 1004 Intermediate Yiddish II

3 Hours; 3 Credits
Advanced Yiddish language. Further development of skills in idiomatic speaking, reading, and writing Yiddish. Introduction to classic Yiddish short stories and poetry by Sholem Aleichem, I.L. Peretz, Isaac Bashevis Singer, and others. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Yiddish 1003 [3] or the equivalent.

## YIDM 2041 Yiddish Short Stories and Poetry

3 Hours; 3 Credits
Introduction to East European Jewish culture through Yiddish short stories and poetry. Selected works by a variety of authors, including Shalom Aleichem, Isaac Leib Peretz, Shalom Asch, Isaac Bashevis Singer, Itzik Manger, Kadya Molodowsky, Esther Kreitman, and Miriam Ulinower, among others. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Yiddish 1004 [4] or the equivalent.

## YIDM 1002 Elementary Yiddish II

## 3 Hours; 3 Credits

Further development of skills acquired in Yiddish 1001 [1].
Qualifies as a LOTE (Language Other Than English) course for

The following inactive course(s) will only be offered if there is sufficient demand:

## JUST 3215 Religious Controversy in Israel

## Kinesiology

Department office: 428 West Quad
Phone: 718.951.5514
The Department of Kinesiology has been discontinued and the program hitherto run by the department, the B.S. in exercise science, has been moved to the Department of Health and Nutrition Sciences. The B.S. in physical education teacher was moved from the Department of Kinesiology to the Department of Secondary education starting in fall 2020. Please consult those departments for program details. The courses listed below are also listed under the departments that administer those two programs.

## B.S. degree program in exercise science <br> HEGIS code 1299.30; SED program code 32345

This interdepartmental program is described in the "Health and Nutrition Sciences" section of the Bulletin

## Requirement for readmitted students

Students who are readmitted to Brooklyn College after a term or more of absence must meet the requirements for degrees in effect at the time of readmission.

## Department honors

To qualify for honors in Exercise Science, a major must maintain a scholastic index of at least 3.50 in all advanced work in the major; and satisfactorily complete the following: Kinesiology 4900 Directed Research in Kinesiology plus honors work in an advanced elective in the department (course to be determined in consultation with sponsoring faculty member and approved by Chair). In addition, the student must have the recommendation of at least 2 faculty members of the Department and a recommendation from the Chair of the Department of Kinesiology.

## Courses

*Courses marked with an asterisk (*) are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in this department.
+No more than eight credits in courses in kinesiology courses marked (+) may be counted toward the bachelor of arts degree by students who are not department of kinesiology majors.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## KINS 1003 Fundamental Skills in Movement Activity (Fencing)

2 hours; 1 credit
Fundamental techniques and skills in individual and dual sports, team sports, gymnastics, aquatic sports, and rhythmic movement activities.
Students may be required to provide equipment or supplies for these courses. (Not open to students who have completed an equivalent course.)

## KINS 1004 Fundamental Skills in Movement Activity (Golf)

## 2 hours; 1 credit

Fundamental techniques and skills in individual and dual sports, team sports, gymnastics, aquatic sports, and rhythmic movement activities. Students may be required to provide equipment or supplies for these courses. (Not open to students who have completed an equivalent course.)

## KINS 1009 Fundamental Skills in Movement Activity (Tennis)

2 hours; 1 credit
Fundamental techniques and skills in individual and dual sports,
team sports, gymnastics, aquatic sports, and rhythmic movement activities. Students may be required to provide equipment or supplies for these courses. (Not open to students who have completed an equivalent course.)

## KINS 1012 Fundamental Skills in Movement Activity (Basketball - Men)

2 hours; 1 credit
Fundamental techniques and skills in individual and dual sports, team sports, gymnastics, aquatic sports, and rhythmic movement activities. Students may be required to provide equipment or supplies for these courses. (Not open to students who have completed an equivalent course.)

## KINS 1014 Fundamental Skills in Movement Activity

## (Soccer)

2 hours; 1 credit
Fundamental techniques and skills in individual and dual sports, team sports, gymnastics, aquatic sports, and rhythmic movement activities. Students may be required to provide equipment or supplies for these courses. (Not open to students who have completed an equivalent course.)

## KINS 1015 Fundamental Skills in Movement Activity (Softball)

2 hours; 1 credit
Fundamental techniques and skills in individual and dual sports, team sports, gymnastics, aquatic sports, and rhythmic movement activities. Students may be required to provide equipment or supplies for these courses. (Not open to students who have completed an equivalent course.)

## KINS 1018 Fundamental Skills in Movement Activity (Volleyball)

2 hours; 1 credit
Fundamental techniques and skills in individual and dual sports, team sports, gymnastics, aquatic sports, and rhythmic movement activities. Students may be required to provide equipment or supplies for these courses. (Not open to students who have completed an equivalent course.)

## KINS * +1100 Fitness and Conditioning

2 hours; 2 credits
A beginning experience in general physical fitness and conditioning, including aerobic and resistance training activities.

## KINS * +1101 Aerobic Training

2 hours; 2 credits
A beginning experience in physical fitness and conditioning utilizing a progression of aerobic training techniques including
walking/jogging/running and machine based activities.

## KINS*+1102 Weight/Resistance Training

2 hours; 2 credits
A beginning experience in physical fitness and conditioning utilizing weights and other forms of resistance training activities.

## KINS *+1105 Self-Defense

2 hours; 2 credits
A beginning experience in basic self-defense activities.

## KINS * +1110 Tennis

2 hours; 2 credits
This course is designed to provide students a beginning experience in tennis (singles and doubles).

## KINS *+1111 Racquetball

2 hours; 2 credits
This course is designed to provide students a beginning experience
in racquetball (singles and doubles).

## KINS *+1115 Basketball

2 hours; 2 credits
A beginning experience in basketball.

## KINS * +1116 Soccer

2 hours; 2 credits
A beginning experience in soccer.

## KINS*+1117 Volleyball

2 hours; 2 credits
A beginning experience in volleyball.

## KINS *+1120 Swimming

2 hours; 2 credits
A beginning experience in swimming.

## KINS*+1125 Ballroom Dance

2 hours; 2 credits
A beginning experience in ballroom dance.

## KINS * +1130 Pilates

2 hours; 2 credits
A beginning experience in pilates and how to train for it.

## KINS *+1131 Yoga

2 hours; 2 credits
A beginning experience in yoga and its history.

## KINS * +2002 Introduction to Modern Dance I

4 hours; 3 credits
Introduction to the basic elements of modern dance technique and how to teach them.

## KINS * +2003 Modern Dance II

4 hours; 3 credits
Intermediate elements of modern dance technique. Continuation of Kinesiology 2002.

## KINS *+2004 Independent Study in Dance

1 hour; 1 credit
Research, observation and critique of dance performance(s) associated with historically significant dance choreographers and/or performers from recorded media archives.

## KINS *+2011 Lifeguarding

1 hour recitation, 2 hours activity; 2 credits
Skills and knowledge necessary to provide a safe aquatic environment at a lakefront or pool; entry-level requirement for beach lifeguarding. Organizational and administrative practices.

Students successfully completing this course may be eligible to apply for American Red Cross Lifeguard certification.

Prerequisite: permission of the department chairperson and the ability to swim continuously 300 yards.

## KINS * +2500 Personal Fitness

3 hours; 3 credits
Contemporary health topics and issues. Students examine health risk and protective factors that influence the individual's achievement of optimal health across the life span. This course is designed to help students understand their responsibility for their health. The themes of the course include personal decision-making and physical activity. Self-assessment inventories are used to involve students in any health issues and provide a means for applying health information in personal decision-making. The goal of this course is to explore major personal health topics and to apply them in order to achieve, maintain, and promote high-level health. A minimum grade of " C " in this course is required of Physical Education and Exercise Science majors for the degree.

## KINS 3000 Introduction to Kinesiology

## 3 hours; 3 credits

A professional orientation and introduction to the breadth of the field of physical education, disability sport and physical activity, and exercise science in schools, industry, and community agencies for majors in physical education, disability sport and physical activity, and exercise science. Contemporary, cutting-edge issues related to health and fitness. In-depth consideration of emerging issues such as childhood obesity, physical and cognitive disabilities, built environment, nutrition/diet, drugs/alcohol/tobacco and other such topics that are in health/fitness news and research. A minimum grade of "C" in this course is required of Physical Education and Exercise Science majors for the degree.

## KINS 3001 Anatomy and Physiology for Physical Education

3 hours lecture, 2 hours lab; 4 credits
This course provides an examination of the structure and function of the major body systems, with emphasis on the muscular, skeletal, cardiovascular and respiratory systems. It introduces basic concepts in understanding of the chemical, cellular and tissue levels of structural organization, and explores the nervous, endocrine, digestive, urinary and reproductive systems. The course must be taken by majors in Physical Education Teacher Education but is open to other students. It does not serve as a substitute for those needing Anatomy \& Physiology as a pre-requisite for Exercise Science, Physical Therapy, etc. Students should consult with their advisors for clarification.

## KINS *+3004 Fundamentals of Physical Conditioning

1 hour lecture, 2 hours activity; 2 credits
Principles of physical conditioning of athletes and nonathletes. Practical experience in the development of fitness, including strength, flexibility, and endurance. Investigation of rationale underlying sound conditioning programs.

Prerequisite: Physical Education/KINS 3275 [22.75], candidacy for the B.S. degree with a major in physical education, or permission of the instructor.

KINS 3005 First Aid and Safety

2 hours; 2 credits
Students develop a working knowledge of first aid methods and techniques and accident prevention. A minimum grade of " C " is required of Physical Education and Exercise Science majors for this course. Certification may be earned.

## KINS * 3008 Theory of Exercise and Fitness

3 hours; 3 credits
Application of principles of fitness and diet to the development of exercise programs with emphasis upon the particular needs of the individual student.

Prerequisite: two semesters of science (biology, chemistry, or physics) at high school or college.

## KINS 3041 Emergency Care

4 hours; 4 credits
Techniques of emergency medical care considered to be within the responsibility of the emergency medical technician. Prerequisite: certification in cardiopulmonary resuscitation and first aid by one of the following: American Red Cross, American Heart Association, National Safety Council, New York City Regional Emergency Medical Service Council; and department permission.

Corequisite: KINS 3042 Emergency Care Practicum.

## KINS 3042 Emergency Care Practicum

4 hours laboratory including supervised practice, 1 hour fieldwork; 21/2 credits
Development of emergency care skills. Supervised fieldwork in a hospital emergency room.
Prerequisite: certification in cardiopulmonary resuscitation and first aid by one of the following: American Red Cross, American Heart Association, National Safety Council, New York City Regional Emergency Medical Service Council; and department permission.

Corequisite: KINS 3041 Emergency Care.

## KINS 3045 Leadership in Emergency Care

2 hours lecture, 2 hours laboratory; 3 credits Organization and administration of cardiopulmonary resuscitation, automatic external defibrillation (AED), and first aid programs. Analysis and testing of emergency care skills. Fulfills the minimum requirements for American Red Cross instructor certification in cardiopulmonary resuscitation, first aid, and AED courses.

Prerequisite: American Red Cross Certification in CPR, first aid, and AED or Emergency Medical Technician (EMT) certification or the equivalent.

## KINS 3150 Digital Technology in Kinesiology

2 hours lecture and lab; 1 credit
Detailed examination and practical experience utilizing various digital technologies including Dartfish Connect Motion Analysis Software (www.Dartfish.com, Dartfish USA, Inc). Experience in desktop publishing, data entry and analysis, producing slides, digital photography and video capture/editing. Students registered for this course must also be registered for Physical Education and Exercise Science/Kinesiology 4250. Skills acquired in this class are important for success in Physical Education and Exercise Science/Kinesiology 4250, 4260, 4750, 4760, 4406 or Secondary Education 4406, and Physical Education and Exercise

Science/Kinesiology 4412 or Secondary Education 4412.

## KINS 3211 Movement Perspectives

3 hours; 3 credits
Consideration of various theoretical aspects of physical education, sports, and dance. Theory and practice through movement.

## KINS 3213 Motor Learning and Human Performance

3 hours; 3 credits
Factors that affect the learning and performance of motor skills. Motor-learning principles, motor ability traits, transfer of motor skills, proactive and retroactive inhibition, and motivation.

## KINS 3271 Human Physiology

## 3 hours; 3 credits

Application of physiological concepts to health and life. The mechanisms and control systems that allow for functional harmony. Systemic approach to the physiology of bone, muscle, nerve, special senses, circulation, respiration, digestion, metabolism, the endocrine glands, and reproduction. This course is the same as Health and Nutrition Sciences 2300. (Not open to students who are enrolled in or have completed Biology 6.1 or 6.2.) STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: one of the following: Biology 1, 3, Chemistry 0.4, 1100 [1], 1.5, 1040 [5], Core Studies 7.1, 8.1.

## KINS 3275 Human Anatomy

3 hours lecture, 2 hours laboratory; 4 credits
Structure of systems in the human body. Macroscopic dissection of a mammalian specimen. (Not open to students who are enrolled in or have completed Biology 6.1 or 6.2 or 24.2 or Health and Physical Education 22.7 or Health Science 22.75.) STEM variant course Satisfies Pathways Required Core Life and Physical Sciences.

## KINS 3281 Human Anatomy and Physiology 1

3 hours lecture; 3 hours laboratory; 4.5 credits
A foundation in the form and function of the human body. Exploration and development of an understanding of anatomical terminology, chemical, cellular and tissue levels of structural organization and body systems include integumentary, skeletal, muscular, nervous and endocrine systems. Students are required to dissect mammalian specimens. This course is the same as Anthropology 3265, Biology 1501, and Health and Nutrition Sciences 2302. STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: 1) high school chemistry or the equivalent taken within the past five years or satisfactory performance on a chemistry competency test, and 2) high school biology or the equivalent taken within the past five years or satisfactory performance on a biology competency test.
Recommended: College chemistry (introductory/general) and college biology (introductory/general) are recommended before taking this course

## KINS 3285 Human Anatomy and Physiology 2

3 hours lecture; 3 hours laboratory; 4.5 credits Introduction to the form and function of the human body.

Exploration and development of an understanding of cardiovascular, immune, respiratory, digestive, urinary and reproductive systems as well as metabolism and fluid and electrolyte balance. Students are required to dissect mammalian specimens. This course is the same as Anthropology 3266, Biology 1502, and Health and Nutrition Sciences 2303. STEM variant course - Satisfies Pathways Required Core Life and Physical Sciences.

Prerequisite: One of the following: Anthropology 3265, Biology 1501, Health and Nutrition Sciences 2302 or Physical Education and Exercise Science/Kinesiology 3281.

## KINS 3290 Applied Musculoskeletal Anatomy

## 3 hours; 3 credits

Detailed examination of the musculoskeletal system of the human body with a focus on understanding its structure and function in applied settings such as activities of daily living, work, sport and exercise, and rehabilitation. Bone structure, bony landmarks, muscle attachments, muscle actions and resulting motions, and body planes and axes. A minimum grade of C is required of Department of Kinesiology majors for this course. Lab fee applies.

Prerequisite for Exercise Science students: Kinesiology 3281 and 3285, each with a minimum grade of C.

Prerequisite for Physical Education students: Kinesiology 3001
Anatomy and Physiology for Physical Education, with a minimum grade of C .

## KINS 3295 Motor Development and Learning

3 hours; 3 credits
Students gain knowledge of motor development and learning and principles. Topics include the processes of skilled motor performance and motor skill acquisition, human motor development from childhood through older adulthood, the influence of perceptual, cognitive, physiological, and social development on motor development. Emphasis is on the practical application of concepts to the teaching of motor skills. A minimum grade of $C$ is required of Department of Kinesiology majors for this course.

Prerequisite for Exercise Science students: Kinesiology 3281 and 3285, each with a minimum grade of C.

Prerequisite for Physical Education students: Kinesiology 3001 Anatomy and Physiology for Physical Education, with a minimum grade of C .

## KINS 3320 Introduction to Therapeutic Recreation

## 3 hours; 3 credits

Introduction to and overview of the continuum of therapeutic recreation programs and services for persons with disabilities through the lifespan. Recreation therapy, leisure education, leisure counseling, and recreation programming will be addressed. Students will be exposed to the differences and similarities in treatment methods in clinical, community and school settings. Overview of TR programs and planning that address physical medicine and rehabilitation techniques for community reintegration, impact of chronic illness and adjustment disorders frequently affecting vulnerable children, and juvenile offender risk factors will be provided.

Prerequisite: candidacy for a B.S. degree with a major in physical education and a minor in adapted physical education and
therapeutic recreation; sophomore/junior standing.
Co-requisite: Physical Education and Exercise Science/Kinesiology 3000.

## KINS 3321 Physical Education for the Emotionally Disturbed and Physically Disabled

3 hours; 3 credits
Physically disabling emotional and physical disorders. Special services and programs to aid disabled people in developing their full potential; role of physical education in this development. Principles and methods of adapted physical education.

Prerequisite: one of the following: Physical Education *1507 [1], Education 48.1, 58.1, 60.1, permission of the chairperson.

## KINS 3324 Field Experience for Therapeutic Recreation and Adapted Physical Activity

3 hours seminar, 6 hours fieldwork; 2 credits
Applied supervised experience in teaching youth with disabilities in an inclusive setting and in more restrictive settings when the needs of the student require additional support. The student's expressed professional preference/objective will be considered in placement as applicable. Seminar-based class meetings with the College instructor and active participation and observation of the implementation of APA and or TR in a setting outside the college community for a total of no less than 80 hours. It is recommended that this course be taken late in the sophomore year or early in the junior year.

Prerequisite: candidacy for a B.S. degree with a major in physical education and a minor in adapted physical education and therapeutic recreation; sophomore/junior standing; Physical Education/Kinesiology 3000.
Co-requisite: KINS 3325 (absolute requirement).

## KINS 3326 Therapeutic Recreation and Physical Disability

3 hours; 3 Credits
Etiology, characteristics, and medical implications of various physical impairments, both congenital and traumatic. Common assessment tools and theoretical approaches to treatment and the role of the recreational therapist within the physical medicine and rehabilitation context and health promotion processes. Risk management and program evaluation. Americans with Disability Act and its implications on students with disability. Multi-, inter-, and trans-disciplinary approaches to rehabilitation. Review of the primary roles of members of the rehabilitation team. Due to necessity for applied training and education, attending class and full participation is a fundamental requirement for a student to earn a passing grade in this course.

Prerequisite: candidacy for a B.S. degree with a major in physical education or disability sport and physical activity and junior/senior standing; Physical Education/Kinesiology 3325.

## KINS 3328 Therapeutic Recreation and Mental Health

3 Hours; 3 Credits
The role of recreation therapy in mental health, psychiatric environments, and behavioral healthcare particularly as it relates to the educational environment. Causes, treatment strategies, terminology, etiology, and care of individuals with acute and chronic mental illnesses and the importance of recreation therapy as both an integral component of the educational and treatment team and as a coping mechanism and component of life quality. Leisure assessments and leisure counseling. Use of an eclectic approach to working with children and youth who have been
abused/neglected and/or have mental health problems and/or substance abuse Issues. Sport, psychodrama, group therapy, play therapy, music and horticulture modalities, and animal facilitated therapy training, reflecting the applied nature of this course. Due to necessity for applied training and education, attending class and full participation is a fundamental requirement for a student to earn a passing grade in this course.

Prerequisite: candidacy for a B.S. degree with a major in physical education and junior/senior standing; Physical
Education/Kinesiology 3320.

## KINS 3330 Practicum for Therapeutic Recreation and Adapted Physical Activity

3 seminar hours, 10 field hours; 3 credits
Experience in an area of the student's expressed professional objective in which the student participates in a practical setting outside the college community for a total of no less than 150 hours during the semester. Students will meet with supervising faculty member in a class-oriented seminar to discuss their experiences. This course should be taken late in the senior year.

Prerequisite: minor in adapted physical activity and therapeutic recreation and completion of all other required courses in the minor; senior standing.

## KINS 3401 Diversity and Inclusion in Physical Education

3 hours recitation, 25 hours field experience; 3 credits Current theory and methods of teaching inclusive physical education to students from diverse backgrounds including but not limited to culture, race, religion, gender and disability. Includes issues of language development and diversity, differences between written and spoken language, teaching students of diverse linguistic and cultural backgrounds and those with special needs, A minimum grade of " B " in this course is required of Physical Education and Exercise Science majors for the degree.

Prerequisite: Secondary Education/Childhood and Special Education 2001 and 2002.

## KINS 3402 Integrative and Multidisciplinary Teaching and Learning in Physical Education

## 3 hours; 3 credits

Theories and practices supporting curriculum design in the content area of physical education. Study, analysis, and development of content-specific standards-based curriculum units that include diagnostic, formative, and summative assessments. Research-based models and instructional practices for inclusive settings, including students with special needs, gifted and talented students, English Language Learners, and heterogeneous ability groupings. Special emphasis on literacy across all content areas and alignment of planning and instruction with State and National standards. Overview, preparation and planning for New York State teacher certification; support development of portfolio for licensure assessment.

Prerequisites: Secondary Education 2001, 2002, Kinesiology 3000.

## KINS 4200W Physiology of Exercise

2 hours lecture; 2 hours laboratory; 3 credits
Study of body systems and organs during physical activity with emphasis on metabolic, cardio respiratory, and body composition parameters. Laboratory experiences employing physiological principles during active participation in exercise are also included. This is a writing intensive course. A minimum grade of $C$ is required
of Physical Education and Exercise Science majors for this course. Lab fee applies.

Prerequisite for Exercise Science students: Kinesiology 3281 and 3285, each with a minimum grade of C; English *1012.

Pre-requisite for Physical Education students: Kinesiology 3001 Anatomy and Physiology for Physical Education, with a minimum grade of C; English *1012.

## KINS 4229 Physiology of Exercise

2 hours lecture, 2 hours laboratory; 3 credits Physiological factors involved in bodily movement and performance of work. Such phenomena as responsive changes in circulation and respiration coincident with exercise, and adaptation to environmental conditions. Efficiency, physical fitness, coordination, and fatigue.

Prerequisite: Physical Education/Kinesiolgy 3271 [22.71] and 3275 [22.75] or the equivalent.

## KINS 4231 Exercise Testing and Prescription

2 hours lecture, 2 hours laboratory; 3 credits
Maximal and sub-maximal tests for the evaluation of cardiovascular fitness. Laboratory and field procedures for the measurement of body composition, muscular strength, endurance, and power. Risk assessment and stratification. Interpreting test results and developing exercise prescriptions for healthy adults. Assessing progress.

Prerequisite: Kinesiology 4200W

## KINS 4250 Biomechanics

3 hours; 3 credits
The principles that influence human motion. Statics, dynamics, kinematics and kinetics applied to the musculoskeletal system of the human body. Emphasis is placed on developing the ability to analyze human motion with the goal of optimizing human movement performance and identifying mechanical factors associated with musculoskeletal injury. A minimum grade of C is required of Department of Kinesiology majors for this course. Lab fee applies.

Prerequisite for Exercise Science students: Kinesiology 3281 and 3285, each with a minimum grade of C; Kinesiology 3290 (with a grade of $C$ or better).

Pre-requisite for Physical Education students: Kinesiology 3001 Anatomy and Physiology for Physical Education, with a minimum grade of C; Kinesiology 3290 (with a grade of C or better).

## KINS 4260 Advanced Biomechanics for Exercise Science

## 3 hours; 3 credits

Integration of advanced concepts and relevant scientific information to provide for understanding of biomechanics as it relates to exercise, physical training, and rehabilitation. Within the framework of exercise science, this course provides the student with knowledge that will allow for the assessment of human motion for the purposes of identifying critical factors of performance and injury including persons with a disability. A minimum grade of "C" in this course is required of Department of Kinesiology majors for the degree.

Prerequisite: cumulative GPA of 2.5 or higher and Physical

Education and Exercise Science/Kinesiology 4250 (with a grade of C or better) and Physics 1100.

## KINS 4400 Fitness Program Management

3 hours; 3 credits
Principles of fitness and health promotion program operation including cost/ benefit and cost/effectiveness, program objectives, content, promotion and implementation, financial and personnel management, and facility planning and design. A minimum grade of " C " is required of Department of Kinesiology majors for this course.

Prerequisite: cumulative GPA of 2.5 or higher and Physical Education and Exercise Science/Kinesiology 4200W (with a grade of C or better).

## KINS 4402 Fitness Assessment and Exercise Prescription

4 hours; 3 credits
Students study the process and procedures of physical fitness evaluation and prescription. Emphasis is placed on the design of individual and group exercise programs. A minimum grade of " C " is required of Department of Kinesiology majors for this course. Lab fee applies.

Prerequisite: cumulative GPA of 2.5 or higher and Physical Education and Exercise Science/Kinesiology 4200W (with a grade of C or better).

## KINS 4500 Sport and Exercise Psychology

3 hours; 3 credits
Analysis of psychological principles underlying the teaching and performance of physical activity including sport and exercise. A minimum grade of "C" in this course is required of Physical Education and Exercise Science majors for the degree.

Prerequisite: cumulative GPA of 2.5 or higher.

## KINS 4510 Advanced Principles of Physical Activity:

 Cardiovascular/Pulmonary Training2 hours lecture, 2 hours laboratory; 3 credits
Lecture and practical lab activities focused on advanced principles of physiology as it relates to physical activity and related improvements on the cardiovascular and cardiopulmonary systems. Theoretical and practical exploration of physical activities such as running, swimming, cycling, cross-country skiing and dance on the body's aerobic system are covered. A minimum grade of " C " in this course is required of Department of Kinesiology majors for the degree.

Prerequisite: cumulative GPA of 2.5 or higher and Physical Education and Exercise Science/Kinesiology 4200W and 4250 (with a grade of C or better in each).

## KINS 4520 Advanced Principles of Physical Activity: Strength/ Resistance Training

2 hours lecture, 2 hours laboratory; 3 credits Lecture and practical lab activities focused on advanced principles of physiology as it relates to physical activity and related improvements on the musculoskeletal system. Theoretical and practical exploration of physical activities such as weight training, free weights vs. machine-based resistance, plyometric training, body resistance, aerobic training (running, swimming, cycling, cross-country skiing and dance) on the body's musculoskeletal system. A minimum grade of " C " in this course is required of Department of Kinesiology majors for the degree.

Prerequisite: cumulative GPA of 2.5 or higher and Physical Education and Exercise Science/Kinesiology 4200W and 4250
(with a grade of C or better in each).

## KINS 4750 Internship in Disability Sport and Physical

 Activity9 hours; 3 credits
Practical experiences in planning, organizing, assessing, and implementing disability sport/physical activity programs in various settings. Internship may extend beyond one term. This would require that students complete 30 hours of internship activities.

Prerequisites: completion of all required course work and/or permission of the undergraduate deputy or chair.

## KINS 4760 Internship in Exercise Science

9 hours; 3 credits
Practical experiences in planning, organizing, assessing, and implementing exercise science programs in various settings. Internship may extend beyond one term. This would require that students complete 300 hours of internship activities

Prerequisites: completion of all required course work and/or permission of undergraduate deputy or chair.

## KINS 4900 Directed Research in Kinesiology

6 hours; 3 credits
Individual reading on special topics in health, physical education, recreation, or exercise science. Research may go beyond one term. A passing grade is required of Department of Kinesiology majors for this course. (Repeatable)

Prerequisites: completion of all required course work, GPA of 3.0 or better and/or permission of undergraduate deputy or chair.

## KINS 5082 Independent Study

6 hours conference and independent work§; 2 credits Independent study and readings in an area of specialization in the profession of physical education/kinesiology. Conferences. Report or term paper.

Prerequisite: senior standing and GPA of 3.00 or higher in kinesiology courses and a GPA of 2.50 or higher and permission of the chairperson.

## KINS 5083 Directed Research

6 hours conference and independent work§; 2 credits The structuring and completion of a research topic in any area in the field of physical education/kinesiology. Design, test, and evaluation of research data. Report or term paper.

Prerequisite: all of the following: Physical Education
3072/Kinesiology [72], senior standing, an index of 3.00 or higher in physical education/kinesiology courses, a scholastic index of 2.70 or higher, permission of the chairperson.

## Linguistics Program

## Department office: 1209 Ingersoll Hall

Phone: 718.951.5000 x6631
The Brooklyn College Linguistics Program, which draws its faculty from several language related departments, offers students training in understanding and analyzing language and covers the full scope of the field of linguistics through an interdisciplinary approach. We offer students a bachelor of arts degree or a minor in linguistics as well as a special double-major option.

Our students learn the phonetic and phonological sound systems of language and gain an understanding of morphology--how sounds are combined into meaningful words and inflections. They learn to appreciate syntax--how words are put together in utterances--and semantics--the meanings and nuances of language. They survey the variation in language use across individuals, regions, and societies by studying sociolinguistics and ethnolinguistics. Students appreciate the development of language over time through historical linguistics. Our students learn about the complex interaction between the brain and language through psycholinguistics. Linguistics majors and minors also have the opportunity to apply linguistics to modern world problems, computer processing programs for language, and, in a senior seminar, their own interests.

Our graduates choose careers in law, education, speech pathology and audiology, computer science, publishing, English, English as a second language, linguistics, anthropology, psychology, philosophy, or classical languages.

## B.A. degree program in linguistics <br> HEGIS code 1505; SED program code 02051

Department requirements for major (32-36 credits)
Students must complete parts 1 through 5.

1. Linguistics 2001.
2. Three of the following: Linguistics 3019, 3020, 3021, 3022, 3024, 4000. At least two of the three must be from 3019-3022.
3. Two of the following: Anthropology 1300, 3301, English 3520, Linguistics 3023, 3026, 3028, 3029, 3030, Philosophy 3203 or 3204, 3530, Psychology 3540, 3541, Communication Arts, Sciences, and Disorders 1113, 2231; Spanish 3390; any unused courses from part 2 above plus any prerequisites of the courses.
4. Two of the following: Anthropology 2320, 3310, 3360; Computer Science 2210, 3110, 3130, 3410; English 3196, 3522, 3523; Philosophy 3123, 3220, 3420, 3422; Puerto Rican and Latino Studies 4410, 4420; Psychology 2600, 3400, 3530, 3580; Communication Arts, Sciences, and Disorders 1178, 1179; Spanish 3320, 3360; one course in the Department of Modern Languages and Literatures numbered 2021 or above, or Greek 4031 or above, or Latin 4131 or above, or Hebrew 3111or above, or the equivalent; any unused courses from parts 2 and 3 above; plus any prerequisites of the courses.
Appropriate courses may be substituted for a total of not more than two courses in areas 3 and/or 4 with permission of the Linguistics Program director.
5. Linguistics 4001 W , a capstone seminar to be taken in the senior year.

Note: When a student chooses to double major in linguistics and another major, up to three courses in parts 3 and 4 which are applicable towards the requirements of the student's other major may also be applied toward the requirements of the major in linguistics.

## Interdepartmental Minor(s)

## Minor in Linguistics

A program of 13-16 credits as follows:
Linguistics 2001
Two courses from area 2 of the major.
At least one other course chosen from area 2 and/or area 3 of the major.

Each course must be completed with a grade of C or higher. Courses presented for this minor may not be counted towards the major in any of the departments listed under area 3 of the linguistics major. Students should meet with the program director to plan a program suited to their interests and career plans.

## Courses

## LING 2001 Introduction to Linguistics

4 hours; 4 credits
Nature and structure of human language in relation to other communication systems. Evolution and acquisition of language; dialects and styles; language and culture; speech and writing. Comparison of traditional and recent theories of language. (Not open to students who are enrolled in or have completed Anthropology 2300). STEM variant course - Satisfies Pathways Flexible Core Scientific World requirement.

## LING 3019 Morphology

4 hours; 4 credits
Analysis of the internal structure of words in natural languages. Examination of the nature of the morpheme and of word-formation processes including inflection, derivation, and compounding. Interface between morphology and other levels of linguistic analysis.
This course is the same as Communication Arts, Sciences, and Disorders 2720.

Prerequisite: Linguistics 2001 [1] or Anthropology 2301 [2.3].

## LING 3020 Phonology

4 hours; 4 credits
Analysis of the sound systems of natural languages. Phonetics and phonology. Relation of phonology to vocabulary and syntax.

Prerequisite: Linguistics 2001 [1] or Anthropology 2301 [2.3]

## LING 3021 Syntax

4 hours; 4 credits
Analysis of the sentence structure of natural languages. Sentence and discourse. Relation of syntax to semantics and phonology. Traditional and recent theories of syntactic analysis.

Prerequisite: Linguistics 2001 [1] or Anthropology 2301 [2.3].

## LING 3022 Semantics

4 hours; 4 credits
Analysis of the meaning of words and sentences. Relation of semantics to vocabulary, syntax, and discourse. Traditional and recent theories of meaning.

Prerequisite: Linguistics 2001 [1] or Anthropology 2301 [2.3].

## LING 3023 Introduction to Natural Language Processing

4 hours; 4 credits
Introduction to the principles, history, and accomplishments of natural language processing from the perspective of the structure of human language. Overview of the techniques used by natural language processing to deal with the phonetics, phonology, morphology, syntax, and semantics of natural languages. Interaction between ideas in the philosophy of language and developments growing out of natural language processing. Applications of natural language processing to a wide range of real-
world contexts.
This course is the same as Computer and Information Science 2830 and English 3525.

Prerequisite: Computer and Information Science *1110 [1.5] Prerequisites or co-requisites): Computer and Information Science 2210 [11] and Linguistics 2001 [1].

## LING 3024 African American English

4 hours, 4 credits
Introduction to the historical development and linguistic structure of African American English presented through the analysis of its underlying linguistic structure; social, cultural and educational considerations of its use; comparison of the major theories of African American English development, including its relationship to other dialects of American English and Caribbean creole languages. This course is the same as AFST 3232.

Prerequisites: English 1010 [1].

## LING 3026 Historical Linguistics

4 hours; 4 credits
Origin and evolution of language. Dialects, languages, language families. Relationships between languages and language families. Processes involved in language classification. Linguistic change. The comparative method and its use in historical reconstruction. This course is the same as Anthropology 3392.

Prerequisite: Anthropology 2300 [2.3] or Linguistics 2001 [1] or permission of the chairperson.

## LING 3027 History of the English Language

4 hours; 4 credits
Origins of the English language and its development to the present. This course is the same as English 3520.

Prerequisite: English 1010 [1].

## LING 3028 Applied Linguistics

4 hours; 4 credits
Introduction to key issues in the field of applied linguistics, including theories and concepts related to language learning, language analysis, and language assessment presented through the examination of the teaching of English language learners and language minority students. The linguistic, psychological, sociolinguistic, and pedagogical parameters of human language learning; source materials and approaches for investigating language learning processes; bidialectalism, intercultural communication, forensic linguistics, language policy, and discourse analysis. This course is the same as English 3521.

Prerequisite: English 1010 [1].

## LING 3029 Sociolinguistics

4 hours; 4 credits
The study of language as it is used by various social groups. Language and gender, language and culture, Creole languages,
black English, linguistic change.
This course is the same as Anthropology 3390 and English 3524.
Starting Fall 2019 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

Prerequisite: English 1010 [1] or permission of the chairperson.

## LING 3030 Language and Community: Linguistic Fieldwork

 in New York City4 hours, 4 credits
Introduction to qualitative and quantitative methodologies involved in conducting linguistic fieldwork and the examination of social, cultural, and individual dynamics of field work situations. Project design, time management, ethical considerations, entering the community, sampling techniques, data elicitation, recording, coding, and interpreting data, substantiating research results.

Prerequisites: English 1010 [1].

## LING 4000 Seminar in Linguistic Analysis

4 hours; 4 credits
Advanced study in formal linguistics. Topics vary from term to term. Course description may be obtained from the program before registration.
Students may take this course for credit twice, but may not repeat topics.

Prerequisite: permission of the Linguistics Program director.

## LING 4001W Senior Seminar in Linguistics

3 hours and independent work and conference; 4 credits Capstone seminar for seniors on a problem or topic in linguistic analysis. Course description may be obtained from the Linguistics Program prior to registration. Final research paper incorporates materials drawn from the research literature and original field data sources, and is written in the style of an academic journal article. Writing-intensive course.

Prerequisite: senior standing, twelve or more credits in linguistics courses, or permission of the Linguistics Program director; English *1012 [2].

## Mathematics

Department office: 1156 Ingersoll Hall
Phone: 718.951.5246

## Full-time Faculty

Professors: Halpern, Hu, Mate, Preston, Sibner, Velling
Associate Professors: Aulicino, Benes, Chamanara, Clement, Cooley, Hochberg, Kingan, Pinheiro, Suzuki
Assistant Professors: Goodson, Hubbard
The Mathematics Department offers distinctive undergraduate educational programs in pure and applied mathematics as well as in mathematics education. Our faculty develops and conducts high quality research and its members participate in the mathematics and urban education doctoral programs of The Graduate Center of The City University of New York.

The department offers a bachelor of arts, a bachelor of science, and minor in mathematics, bachelors of science in actuarial mathematics and in financial mathematics, jointly with the CIS department a bachelor of science in computational mathematics, as well as a bachelor of arts degree in adolescence education for mathematics teachers and a concentration for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades 1-6).

We are dedicated to providing our students with the best possible understanding of mathematics as a deductive science. We also promote mathematical knowledge applied to such other fields as the natural sciences, actuarial science, computer science, preengineering, economics, finance, primary and secondary education, and the quantitative social sciences.

Students who major, minor, or take a course in mathematics increase their computational facility, develop their appreciation for the abstract structures and reasoning at the heart of mathematics, and enhance their ability to apply mathematics to real-world problems. Mathematics students gain experience with current mathematical software and technology, and may study computational mathematics in conjunction with the Computer and Information Science Department. Mathematics students may elect to develop expertise in financial mathematics to obtain the marketable credentials for work in the financial industry.

Students who wish to pursue graduate studies in theoretical or applied mathematics may apply to the master's and doctoral degree programs offered by or in conjunction with this department.

## B.A. degree program in mathematics HEGIS code 1701; SED program code 02064

## Department requirements (45-50 credits)

To enroll in any advanced course in mathematics, students must maintain an average grade of $C$ or higher in all courses previously taken in the department, unless this requirement is waived by the chairperson. A student exempt, without credit, from a course may not take the course later for credit except with permission of the chairperson. Mathematics B.A. majors must complete a minimum of 18 credits in advanced courses for the degree. All mathematics courses offered to satisfy the requirements for a major in mathematics must be completed with a grade of C- or higher. Unless otherwise specified in this bulletin, any mathematics courses used to satisfy a prerequisite for an advanced elective must be completed with a grade of C - or higher.

The department chair, with the approval of the chair of the department's undergraduate curriculum committee, may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

Mathematics 1006 and one of Mathematics 1011 or Mathematics 1012. Completion of some or all of these courses may be waived conditional on the outcome of appropriate placement exams.

Mathematics 1201, 1206, and 2201. Transfer students may also need to take Mathematics 1211 - see the Mathematics department chair.
Mathematics 2001, 2101, 3101 and 4201.
Two of the following: Mathematics 4101, 4106, 4206, 2206 and 4211, 4216, 4302, 4306, 3501 and 4501, 4506, 3501 and 4511, 2206 and 4701, 5001, 5002, 5003, 5004.

Computer and Information Science 1115 or 1215
Additional courses in the Mathematics department to bring the total number of credits in advanced courses to 18.

Department recommendation

Majors should consult with a Mathematics department counselor concerning substitutions for core science courses.
Prospective doctoral students should develop reading competence in at least one of the following languages: French, German, Russian.

## B.S. degree program in actuarial mathematics <br> HEGIS code 1701; SED program code 34143

## Department requirements (73 credits)

A student exempt, without credit, from a course may not take the course later for credit except with permission of the chairperson.
The department chair, with the approval of the chair of the department's undergraduate curriculum committee, may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

Mathematics 1006 and one of Mathematics 1011 or Mathematics 1012. Completion of some or all of these courses may be waived conditional on the outcome of appropriate placement exams.
Mathematics 1201, 1206, and 2201. Transfer students may also need to take Mathematics 1211 - see Mathematics department chair. Mathematics 2001, 2101 and 4201.
Computer and Information Science 1115 or 1215.
Accounting 2001.
All of the following: Mathematics 2206, 2601, 3501, 4501 and 4601.
Two of the following: Mathematics 3801, 3802 or 4506.
All of the following: Business 2100 or Economics 2100; Business 2200 or Economics 2200; and Finance 3310.

Additional requirements for a B.S. degree
Candidates for a B.S. degree with a major in actuarial mathematics must complete at least 60 credits in science and mathematics; 24 of these 60 credits must be completed in advanced courses in the Mathematics Department. These 24 credits must be completed at Brooklyn College with a grade of C- or higher in each course. Specific course requirements for a B.S. degree are described above.

The following courses may be applied toward the 60 credits in science and mathematics:
All courses in the departments of Biology, Chemistry, Computer and Information Science, Geology, Mathematics, Physics, and Psychology. Courses marked with a "\#" in the Department of Health and Nutrition Sciences.
---Anthropology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470, 4665.
-- [Core Studies 5, 5.1, 5.2, 7.1, 7.2, 8.1, 8.2.]
-- [Core Curriculum 1300 through 1399.]
-- Earth and Environmental Sciences 1010.
-- [Core Curriculum 3301 through 3399.]
---Economics 3400, 4410, 3410, 4422.
---Philosophy 3203, 3204, 3231, 3232, 3422, 3423, 3601, 3605, 3610.
---Kinesiology 3271, 3275, 3281, 3285, 4229, 4251.
---Sociology 2701.

## B.S. degree program in financial mathematics HEGIS code 1701; SED program code 34144

## Department requirements (69-72 credits)

A student exempt, without credit, from a course may not take the course later for credit except with permission of the chairperson.
The department chair, with the approval of the chair of the department's undergraduate curriculum committee, may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

Mathematics 1006 and one of Mathematics 1011 or Mathematics 1012. Completion of some or all of these courses may be waived conditional
on the outcome of appropriate placement exams.
Mathematics 1201, 1206 and 2201. Transfer students may also need to take Mathematics 1211 - see Mathematics department chair.
Mathematics 2001, 2101 and 4201.
Computer and Information Science 1115 or 1215.
Computer and Information Science 3110 and 3820; or Mathematics 3202.
All of the following: Mathematics 2206, 2601, 3501, 4501, 4506 and 4601.
All of the following: Business 2100 or Economics 2100; Business 2200 or Economics 2200; Business 4400 W or Economics 4400 W .

Additional requirements for a B.S. degree
Candidates for a B.S. degree with a major in financial mathematics must complete at least 60 credits in science and mathematics; 24 of these 60 credits must be completed in advanced courses in the Mathematics Department. These 24 credits must be completed at Brooklyn College with a grade of C- or higher in each course. Specific course requirements for a B.S. degree are described above.

The following courses may be applied toward the 60 credits in science and mathematics:
All courses in the departments of Biology, Chemistry, Computer and Information Science, Geology, Mathematics, Physics, and Psychology. Courses marked with a "\#" in the Department of Health and Nutrition Sciences.
----Anthropology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470, 4665.
-- [Core Studies 5, 5.1, 5.2, 7.1, 7.2, 8.1, 8.2.]
-- [Core Curriculum 1300 through 1399.]
-- Earth and Environmental Sciences 1010.
-- [Core Curriculum 3301 through 3399.]
---Economics 3400, 4410, 3410, 4422.
---Philosophy 3203, 3204, 3231, 3232, 3422, 3423, 3601, 3605, 3610.
----Kinesiology 3271, 3275, 3281, 3285, 4229, 4251.
---Sociology 2701.

## B.S. degree program in mathematics HEGIS code 1701; SED program code 02065

Department requirements (52-55 credits)
To enroll in any advanced course in mathematics, students must maintain an average grade of $C$ or higher in all courses previously taken in the department, unless this requirement is waived by the chairperson. A student exempt, without credit, from a course may not take the course later for credit except with permission of the chairperson. Mathematics majors must offer a minimum of 24 credits in advanced courses for the degree. All mathematics courses offered to satisfy the requirements for a major in mathematics must be completed with a grade of C- or higher. Unless otherwise specified in this bulletin, any mathematics courses used to satisfy a prerequisite for an advanced elective must be completed with a grade of C - or higher.

The department chair, with the approval of the chair of the department's undergraduate curriculum committee, may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

Mathematics 1006 and one of Mathematics 1011 or Mathematics 1012. Completion of some or all of these courses may be waived conditional on the outcome of appropriate placement exams.

Mathematics 1201, 1206 and 2201. Transfer students may also need to take Mathematics 1211 - see Mathematics department chair.
Mathematics 2001, 2101 and 4201.
Computer and Information Science 1115 or 1215.

Candidates for a B.S. degree in mathematics must choose one of the following concentrations, a) to c), plus additional courses in the Mathematics Department to bring the total number of credits in advanced courses to 24:
a) Concentration in general mathematics (52 credits)

Mathematics 3101
Two of the following: Mathematics 4101, 4106, 4206, 2206 and 4211, 4216, 4302, 4306, 3501 and 4501, 4506, 3501 and 4511, 2206 and 4701, 5001, 5002, 5003, 5004.
b) Concentration in theoretical mathematics (52 credits)

Mathematics 2206 and 3101
Three of the following: Mathematics 3106, 4101, 4106, 4206, 4216, 4302, 4306, 500x (the 500x must be in theoretical mathematics)
c) Concentration in applied mathematics (53-55 credits)

All of the following: Mathematics 2206, 3202, 3501, 4701.
Two of the following: Mathematics 2706, 3107, 4211, 4216, 4501, 500x (the 500x must be in applied mathematics)

## Department recommendation

Majors should consult with a Mathematics Department counselor concerning substitutions for core science courses.
Prospective doctoral students should develop reading competence in at least one of the following languages: French, German, Russian.

Additional requirements for a B.S. degree
Candidates for a B.S. degree with a major in mathematics must complete at least 60 credits in science and mathematics; 24 of these 60 credits must be completed in advanced courses in the Mathematics Department. These 24 credits must be completed at Brooklyn College with a grade of C - or higher in each course. Specific course requirements for a B.S. degree are described above.

The following courses may be applied toward the 60 credits in science and mathematics:
All courses in the departments of Biology, Chemistry, Computer and Information Science, Geology, Mathematics, Physics, and Psychology. Courses marked with a "\#" in the Department of Health and Nutrition Sciences.
---Anthropology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470, 4665.
-- [Core Studies 5, 5.1, 5.2, 7.1, 7.2, 8.1, 8.2.]
-- [Core Curriculum 1300 through 1399.]
-- Earth and Environmental Sciences 1010.
-- [Core Curriculum 3301 through 3399.]
---Economics 3400, 4410, 3410, 4422.
---Philosophy 3203, 3204, 3231, 3232, 3422, 3423, 3601, 3605, 3610.
---Kinesiology 3271, 3275, 3281, 3285, 4229, 4251.
---Sociology 2701.

## B.S. degree program in computational mathematics HEGIS code 1701; SED program code 02067

This interdepartmental program is described in the "Computer and Information Science" section of the Bulletin

## B.A. degree program in adolescence education: mathematics teacher HEGIS code 1701.01; SED program code 26735

The Department of Secondary Education and the Department of Mathematics jointly offer a program for students who plan to teach mathematics in grades 7 through 12. Additional information may be obtained from the Department of Secondary Education or the Department of Mathematics. Adolescence education (grades 7-12) and special subject programs are writing-intensive. Students should consult a counselor as early as possible to plan their program.

All mathematics courses offered to satisfy the requirements for a major in mathematics teacher must be completed with a grade of C-, or higher. Unless otherwise specified in this Bulletin, any mathematics course used to satisfy the prerequisite for an advanced elective must be completed with a grade of C- or higher.

## Program requirements (73-74 credits)

Mathematics 1011 or the combination of Mathematics 1021 and 1026. Completion of some or all of these courses may be waived conditional on the outcome of appropriate placement exams.

Mathematics 1201, 1206 and 2201. Transfer students may also need to take Mathematics 1211 - see mathematics department chair.
All of the following: Mathematics 2001, 2011W, 2101, 3101, 3501, 4201, 4302, 4401, 4406.
Computer and Information Science 1115.
The following pedagogical courses in the Department of Secondary Education (total of 26 credits):
Secondary Education 2001, 2002, 3401, 3402. This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.

Secondary Education 3456 (3 credits) may be started after completing Secondary Education 2001 and 2002.
Secondary Education 4403: Seminar on Methods of Teaching Mathematics, Student Teaching I
Secondary Education 4409: Advanced Seminar on Methods of Teaching Mathematics, Student Teaching II
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department. Degree programs in Secondary Education include a major in an appropriate department of the college. Completion of an adolescence education program as part of a major in English, one of the appropriate social sciences, mathematics, or one of the sciences qualifies students for New York State initial certification in Secondary Education for grades 7 through 12.

Students qualifying for the initial certification in adolescence education may obtain an extension to teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

Students must complete 26 credits in the Department of Secondary Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

Students must have a B- in both Secondary Education 2001 and 2002 and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

To take Secondary Education 4413 students must have a GPA of 2.75 or higher and permission of the head of the program.
To take Secondary Education 4401-4406, students must have a GPA of 2.75 or higher, a B- or better in both Secondary Education 3401 and 3402, and/or permission of the head of the program.

To take Secondary Education 4407-4412, students must earn a B- or higher in Secondary Education 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of the program.

## Departmental Minor(s)

## Minor in Actuarial and Financial Mathematics

## Department Requirements (12 credits)

At least 12 credits from the following list of advanced electives in Mathematics: Mathematics 2601, 3202, 3801, 3802, 4601.
All courses offered to satisfy the requirements for a minor in actuarial and financial mathematics must be completed at Brooklyn College with a grade of C-or higher.

## Department recommendation

Actuarial and financial mathematics minors should check the bulletin to see which of these courses are sequenced together, and consult with department counselors for recommendations.

## Minor in Mathematics

At least 12 credits in advanced electives in mathematics with a grade of C- or higher. With the permission of the chairperson, at most 6 credits of advanced courses from another institution may be accepted toward this requirement. Mathematics minors should consult with the department counselor for recommendations.

## Minor in Statistics

Department Requirements (12 credits)

At least three courses (12 credits) from the following list of advanced electives in Mathematics: Mathematics 3202, 4501, 4506, 4511, 4701.
Prerequisite for entry to the minor: Mathematics 2101 and 2201 with a grade of C- or higher.
All courses offered to satisfy the requirements for a minor in statistics must be completed at Brooklyn College with a grade of C-or higher.

Department recommendation

Statistics minors should check the bulletin to see which of these courses are sequenced together, and consult with department counselors for recommendations.

## Interdepartmental Minor(s)

## Minor in Data Science

Program Requirements: 18-19 credits
Computer and Information science 3225, 3440.
Mathematics 4531.
Either Mathematics 2001 and Mathematics 3501, or Computer and Information Science 2210 and Mathematics 2501.
One additional course, chosen from among the following:
Business Management 2200 or 4400 W or
Computer and Information science 1410 or 3130 or
Finance 3377 or
Economics 2200 or 3370 or 4422 or 4400 W or
Mathematics 3601 or 4101 or 4501 or
Philosophy 3203 or 3204 or 3423 or
Political Science 3014 W or 3421 or 3423 or
Psychology 3510 or 3520 or 3530 or 3580 or 4400 or
Sociology 3506 or 3604.
Prerequisite requirements for the minor:
Math 1201, 1206, 2101;
Computer and Information science 1215.
Courses presented for the major in Computer and Information Science may also be used to satisfy the minor in Data Science. A minor in CIS requires completing 12 credits from among courses numbered between 2000 and 4899 with a grade $C$ or better.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Mathematics

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in mathematics must complete all concentration requirements with a grade of C - or higher in each course and an overall average of C or higher in all mathematics courses taken for the concentration.

Concentration requirements:
The Department of Mathematics chair, with the approval of the chair of the department's undergraduate curriculum committee, may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

Computer and Information Science 1001. Students exempted from Computer and Information Science 1001 must take a computer and information science course numbered 1110 or higher other than the course used to satisfy the computer and information science requirement below.

Mathematics 1406.
Mathematics 1006 and one of Mathematics 1011 or Mathematics 1012. Completion of some or all of these courses may be waived conditional on the outcome of appropriate placement exams.

Students permitted to enroll in Mathematics 1011 or Mathematics 1012 without taking college algebra must take an additional 3 credits of mathematics besides the courses listed below. Students permitted to enroll in Mathematics 1201 without taking either college algebra or precalculus must take an additional 36 credits of mathematics besides the courses listed below.

All of the following courses: Mathematics 1201, 1206, 2011W, 2101, and 2501. Computer and Information Science 1035 or 1600.

## Courses

Courses with asterisks are not counted as advanced mathematics courses

## MATH *1006 College Algebra for Precalculus

## 4 hours, 3 credits

Real Numbers, Sets and Intervals, Absolute Value, Exponents and Radicals, Algebraic Expressions, Polynomials, Rational Expressions, Factoring, Solving Basic Equations, Solving Equations Involving Radicals, Solving Quadratic Equations, The Coordinate Plane, Lines, Introduction to Functions and Relations, Linear Functions in Two Variables, Systems of Linear Equations, Graphs of linear and quadratic functions. Starting Fall 2019 qualifies as STEM variant course - Satisfies Pathways Required Core Math and Quantitative Reasoning requirement.

Prerequisite: Placement by the Department of Mathematics.

## MATH *1010 Problem Solving for College Mathematics

## 1 hour; 1 credit

An enhancement on the skill of problem-solving in Math 1021, with use of manipulatives and technology.

Corequisite: Mathematics 1021 or equivalent.

## MATH * 1011 Precalculus Mathematics

4 hours; 3 credits
Preparation for calculus. Trigonometry. The concept of function, including, linear and quadratic functions, composition of functions, polynomials and rational functions, exponential, logarithmic, trigonometric, and inverse trigonometric functions. Conic sections.

Binomial theorem. Introduction to limit ideas. (Not open to students who are enrolled in or have completed Mathematics 1021, 1026, 1201, 1206, or any Mathematics course numbered over 2000.) STEM variant course - Satisfies Pathways Required Core Math and Quantitative Reasoning requirement.

Prerequisite: All students entering into Mathematics 1011 must have met one of the following conditions: Received a B- or higher in Mathematics 1006, achieved minimum scores on the COMPASS test of $s 1=70, s 2=70$, and $s 3=45$; achieved a minimum score of 70 on the ACCUPLACER College-Level Math test; placement by departmental examination; or permission of the deputy chair.

## MATH *1012 Precalculus with Recitation

5 hours, 3 credits
Preparation for calculus. Trigonometry. The concept of function, including, linear and quadratic functions, composition of functions, polynomials and rational functions, exponential, logarithmic, trigonometric, and inverse trigonometric functions. Conic sections. Binomial theorem. Introduction to limit ideas. (Not open to students who are enrolled in or have completed Mathematics 1021, 1026, 1201, 1206, or any Mathematics course numbered over 2000.) Starting Fall 2019 qualifies as STEM variant course Satisfies Pathways Required Core Math and Quantitative Reasoning requirement.

Prerequisite: All students entering into Math 1012 must have met one of the following conditions: Received a C- or higher in Math

1006, achieved minimum scores on the COMPASS test of s1 = 70, $s 2=70$, and $s 3=45$; achieved a minimum score of 60 on the ACCUPLACER College-Level Math test; placement by departmental examination; or permission of the deputy chair.

## MATH *1021 Precalculus Mathematics A

3 hours lecture, 1 hour recitation; 2 credits
Preparation for calculus with more introductory material than Mathematics 1011. Mathematics 1021 and 1026 constitute a twoterm sequence for students who are not prepared for Mathematics 1011 or who wish a review. Real numbers. Complex numbers. Graphs. Functions, especially linear and quadratic functions. Polynomials and rational functions. Introduction to logarithmic and exponential functions. (Not open to students who are enrolled in or have completed Mathematics 1011, 1201, 1206, or any Mathematics course numbered over 2000.) STEM variant course: The combination of Mathematics 1021 and Mathematics 1026 satisfies the Pathways Required Core Math and Quantitative Reasoning requirement.

Prerequisite: To meet CUNY's college readiness requirements in mathematics.

## MATH *1026 Precalculus Mathematics B

3 hours lecture, 1 hour recitation; 2 credits
Continuation of Mathematics 1021. More extensive study of functions; composition of functions. General inverse functions. Trigonometric and inverse trigonometric functions. Conic sections. Binomial theorem. (Not open to students who are enrolled in or have completed Mathematics 1011, 1201, 1206, or any Mathematics course numbered over 2000.) STEM variant course: The combination of Mathematics 1021 and Mathematics 1026 satisfies Pathways Required Core Math and Quantitative Reasoning requirement.

Prerequisite: All students entering into Math 1026 must have met one of the following conditions: earned a grade of C- or higher in Math 1021; achieved minimum scores on the COMPASS test of s1 $=70, s 2=70$, and $s 3=70$; achieved a minimum score of 90 on the ACCUPLACER College-Level Math test; or obtained departmental permission.

## MATH *1031 Introduction to Mathematics for the Social Sciences and Business

## 3 hours; 2 credits

Graphs; functions; polynomial and rational functions; exponential and logarithmic functions; the parabola; systems of linear equations and inequalities; geometric series; the binomial theorem. (Not open to students who are enrolled in or have completed any mathematics course numbered 1011 [2.9] or higher. Not open to entering freshmen.)

Prerequisite: two years of sequential mathematics or mathematics A in high school.

## MATH *1101 Introduction to Mathematical Thinking

## 3 hours; 3 credits

Analysis, on an elementary level, of the nature of mathematical reasoning; elements of set theory; some simple postulational systems. (A student who is enrolled in or has completed MATH 1011 or any mathematics course numbered 1201 or higher or Computer and Information Science 2210 [11] may not take Mathematics 1101 [1.3] for credit except with permission of the chairperson.)

Prerequisite: course 2 of the New York State Sequential Mathematics Curriculum, or two-and-one-half years of high school mathematics including one year of geometry and a course in intermediate algebra, or Mathematics 0.04 , or a grade of C - or higher in Mathematics 0.35 or 0.36 or 0.44 , or the equivalent.

## MATH *1102 Elementary Number Theory

## 3 hours; 3 credits

Fundamental properties of integers and related systems, in particular of primes, factorization, and divisibility. (Not open to students who have completed Mathematics 1.1 for credit. A student who is enrolled in or has completed any mathematics course numbered 2001 or higher may not take Mathematics *1102 [1.4] for credit except with permission of the chairperson.)

Prerequisite: course 2 of the New York State Sequential Mathematics Curriculum, or two-and-one-half years of high school mathematics including one year of geometry and a course in intermediate algebra, or Mathematics 0.04 , or a grade of C - or higher in Mathematics 0.35 or 0.36 or 0.44 , or the equivalent.

## MATH * 1201 Calculus I

4 hours; 4 credits
Mathematics 1201, 1206 and 2201 constitute a three-term sequence. Mathematics 1201 is an introduction to calculus: limits and continuity; derivatives and integrals of algebraic, exponential, logarithmic, and trigonometric functions of one variable; methods of numerical approximation, and applications of the derivative to mathematics, physics, engineering, biology, chemistry, and other fields. STEM variant course - Satisfies Pathways Required Core Math and Quantitative Reasoning requirement.

Prerequisite: All students entering into Mathematics 1201 must have met one of the following conditions: earned a grade of C - or higher in Mathematics 1011, 1012 or 1026; achieved minimum scores on the COMPASS test of $s 1=70, s 2=70, s 3=70$, and $s 5=$ 70; achieved a minimum score of 105 on the ACCUPLACER College-Level Math test; or obtained departmental permission.

## MATH * 1206 Calculus II

4 hours; 4 credits
Continuation of Mathematics *1201 [3.3]. Trigonometric and inverse trigonometric functions, techniques (closed form and numerical) and applications of integration for functions of one variable, improper integrals, l'Hopital's rule, sequences, series, and polar coordinates. (Not open to students who have completed Mathematics 4.20 or 5.10.)

Prerequisite: a grade of C- or higher in Mathematics 3.20 or 1201 [3.3].

## MATH *1211 Infinite Series

## 1 hour; 1 credit

Intended for students who completed Calculus II, without infinite series. Taylor series; tests for convergence. (Not open to students who are enrolled in or have completed Mathematics *1206 [4.3] or 5.10 or 5.20).

Prerequisite: Mathematics 4.20 with a grade of C- or higher; or permission of the chairperson.

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MATH *1231 Applied Calculus for Economics, Business and Finance
4 hours, 4 credits
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An applied calculus course aimed primarily at economics, business and finance students. Detailed study of functions and their properties (linear, polynomial, exponential, and logarithmic), with applications to economics, business and finance. Basic regression. An intuitive introduction to limits, the tangent line, and differentiation of algebraic and exponential functions. Strong emphasis on applications to business, economics, and finance. (Not open to students who have completed Mathematics 1201.).

Prerequisite: A grade of C- or higher in Mathematics 1006 or placement by the Department of Mathematics.

## MATH *1301 Basic Concepts of Geometry

## 3 hours; 3 credits

Analysis, on an elementary level, of the nature of mathematics. Geometries of various types. (Not open to students who have completed Mathematics 1.7 for credit. A student who is enrolled in or has completed any mathematics course numbered 1711 or higher may not take Mathematics 1301 [1.2] for credit except with permission of the chairperson.)

Prerequisite: course 2 of the New York State Sequential Mathematics Curriculum, or two-and-one-half years of high school mathematics including one year of geometry and a course in intermediate algebra, or Mathematics 0.04, or a grade of C- or higher in Mathematics 0.35 or 0.36 or 0.44 , or the equivalent.

## MATH * 1311 Thinking Mathematically

3 hours, 3 credits
Problem solving and applications of mathematical thinking in the real world and in the ideal world of mathematics. Elementary number theory, probability, geometry, and their applications. Number systems and the sizes of various infinite sets. Additional topics chosen from: elementary topology, discrete mathematics, chaos and fractals, probability. Satisfies Pathways Required Core Math and Quantitative Reasoning requirement. (Not open to students who have completed Mathematics 1006, 1011, 1012, 1026, 1201, 1206, 1501, or any other Mathematics course numbered 2001 or higher.)

## MATH *1401 Elementary Mathematics from an Advanced

 Standpoint4 hours; 4 credits
Mathematics content needed for teaching major strands in the early childhood and elementary school mathematics curriculum: Problem Solving; Sets; Number Systems; Geometry; Probability and Statistics. (A student who is enrolled in or has completed any Mathematics Department course numbered 1206 or higher or who has completed Calculus 1 with a grade of B or higher may not take Mathematics 1401 for credit except with permission of the chairperson. Mathematics 1401 may be credited toward a baccalaureate degree only by students who have completed at least five credits in Education.) STEM variant course - Satisfies Pathways Required Core Math and Quantitative Reasoning requirement.

Prerequisite: Math 1006, or Math 1311, or Math 1021 and Math 1010, or a course which is acceptable for at least three credits in mathematics at Brooklyn College.

## MATH *1406 Mathematics in Education

2 hours; 2 credits
Concepts and principles of mathematics underlying the elementary school curriculum. Taught in coordination with Education 3206
[44]. a. Early childhood education section: emphasis on topics relevant to teaching children from prekindergarten to grade 3. b. Elementary, bilingual, and special education section: emphasis on topics relevant to teaching children from kindergarten to grade 6.

Prerequisite: Mathematics *1401 [1.95]; or a higher level mathematics course and a passing score on a placement test. Corequisite: Education 3206 [44].

## MATH *1501 Elements of Statistics with Applications

3 hours; 3 credits
Analysis and presentation of data. Abuses of statistics. Measures of central tendency; measures of variability. Hypothesis testing. Estimation. Tests of independence. Applications to various fields. Use of simple calculator required. (Not open to students who are enrolled in or have completed any of the following: any mathematics course numbered 2501 or higher, Business 3400 [30.2], Economics 3400 [30.2], 3422 [57], Psychology 3400 [40.1], 2600 [50].) Starting Fall 2018 Satisfies Pathways Required Core Mathematics and Quantitative Reasoning requirement.

## MATH *1601 Modern Mathematics for the Social Sciences

3 hours; 3 credits
Mathematics 1601 [1.8] covers recent developments in mathematics of significance to the social scientist. Linear programming including necessary introductory topics and study of a computer language. (Not open to students who are enrolled in or have completed any mathematics course numbered 2101 or higher except with permission of the chairperson.)

Prerequisite: course 2 of the New York State Sequential Mathematics Curriculum, or two-and-one-half years of high school mathematics including one year of geometry and a course in intermediate algebra, or Mathematics 0.04 , or a grade of C - or higher in Mathematics 0.35 or 0.36 or 0.44 , or the equivalent.

## MATH *1701 Symbolic Manipulation in Calculus II

1 hour; 1 credit
Use of symbolic manipulation computer software to present in greater depth certain topics in second semester calculus. Topics include applications of integration, numerical integration, Taylor series, graphing in polar coordinates.

Prerequisite or corequisite: Mathematics *1206 [4.3] or 1211 [4.31].

## MATH *1711 Mathematical Fundamentals of Computer Graphics I

4 hours; 4 credits
Mathematical principles of computer graphics. Euclidean and affine geometry. Coordinate systems and transformations. Matrix representations of transformations. Rotations, translations, and projections in 2 dimensions. Representations of 2 dimensional objects using polygons, quadratic curves and splines.
Determination of distances between, or intersections of objects in 2 dimensions. (Students who have completed both Mathematics 1711 [8.5] and Mathematics 2101 [10.1] will receive only 3 credits for Mathematics 1711 [8.5] and only 2 credits for Mathematics 2101 [10.1].)

Prerequisites: Computer and Information Science 3110 [15] and Mathematics*1201 [3.3].

## MATH *1716 Mathematical Fundamentals of Computer

## Graphics II

4 hours; 4 credits
Orthogonal transformations, translations, and projections in 3 dimensions. Representations of 3 dimensional objects using polygons, quadratic surfaces and splines. Determination of distances between, or intersections of objects in 3 dimensions.

Prerequisite: Mathematics 1711 [8.5].

## MATH *1801 Mathematics of Non-Western Civilizations

3 hours; 3 credits
A study of the mathematics of non-Western civilizations through the use of translated primary sources. Numeration, computation, problem solving techniques in cultures of Asia, Africa, and the Middle East. Influences on Western mathematics. (Not open to students who have completed Core Curriculum 3212 or 3312. ) 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement.

Prerequisite: Junior standing.

## MATH * 2001 Transition to Advanced Mathematics

3 hours; 3 credits
An introduction to mathematical proofs and a transition to advanced mathematics. Elements of mathematical language: basic set theory and logic. Direct proof, proof by contrapositive and proof by contradiction. Counterexample and disproof. Relations. Functions. Mathematical induction. Countable and uncountable sets. Proofs in elementary number theory. Development of the real numbers. Properties of the real number system: order, uncountability, completeness, least upper bound property, and the existence of the limits of Cauchy sequences.

Corequisite: Mathematics *1206

## MATH 2006 Special Topics in Mathematics

3 hours; 3 credits
A topic in mathematics not covered in the regular curriculum. The topics will, in general, vary from one offering to another. Course descriptions will be available in the department office before registration in semesters in which the course is to be offered. Students may take this course for credit three times, but may not repeat topics.

Prerequisite: Mathematics *1206 [4.3] or higher; permission of the chairperson.

## MATH 2011W History of Mathematics

3 hours; 3 credits.
Development of mathematics from antiquity to recent times. Interrelationship of subject matter and the rise of modern concepts. Term paper required. Writing-intensive course.

Prerequisite: Mathematics *1206 [4.3] or 1211 [4.31]; and English *1012 [2].

## MATH *2101 Linear Algebra I

3 hours lecture, 1 hour recitation; 3 credits
Matrix algebra. Systems of linear equations. Determinants. Vector spaces. Linear independence. Linear transformations. Inner product spaces. (Not open to students who are enrolled in or have completed Mathematics 4101.) Students who have completed both Mathematics 1711 and Mathematics 2101 will receive only 3
credits for Mathematics 1711 and only 2 credits for Mathematics 2101.

Prerequisite: Math 1201.

## MATH * 2201 Multivariable Calculus

4 hours; 4 credits
Continuation of Mathematics *1206 [4.3]. Vectors and parametric equations, partial differentiation, multiple integration, line integrals, and Green's theorem. (Not open to students who have completed Mathematics 5.10 or 5.20 .)

Prerequisite: a grade of C- or higher in Mathematics *1206 [4.3]; or prerequisite or corequisite: Mathematics *1211 [4.31].

## MATH 2206 Introduction to Differential Equations

4 hours; 4 credits
Standard methods of solving ordinary differential equations; geometric interpretations; problems in physics leading to ordinary and partial differential equations; elementary techniques for partial differential equations and separation of variables; Fourier series.

Prerequisite or corequisite: Mathematics 2101 and Mathematics 2201.

## MATH *2208 Actuarial Mathematics I

70 minutes a week for 11 weeks; 1 credit Calculus and linear algebra. Emphasis on those aspects not covered in previous courses and on problem types similar to those appearing on Examination 100 of the Society of Actuaries. Spring term.

Prerequisite: Mathematics 5.10 or 5.20 or 2201 [5.3]; and 2101 [10.1].

## MATH *2501 Elementary Probability and Statistics

3 hours; 3 credits
Sample spaces; combinatorial theory; elementary probability; random variables; discrete and continuous probability distributions; confidence intervals; hypothesis testing. (Not open to students who are enrolled in or have completed Mathematics 3501 [51.1].)

Prerequisite: Mathematics *1206 [4.3] or 1211 [4.31] or 5.10 or 5.20.

## MATH 2601 Introduction to Financial Mathematics

4 hours; 4 credits
Time value of money and measurement of interest; annuities/cash flows with non-contingent payments; loans, amortization schedules and sinking funds; bonds and related securities; general cash flows and portfolios; immunization.

Prerequisite: Mathematics 1206; or Mathematics 1211.

## MATH *2701 Symbolic Manipulation in Multivariate Calculus

1 hour; 1 credit
Use of symbolic manipulation computer software to present in greater depth certain topics in multivariable calculus. Topics include functions of two and three variables, vectors, partial derivatives, and multiple integrals.

Prerequisite or corequisite: Mathematics *2201 [5.3].

## MATH 2706 Chaos and Structural Stability in One-

## Dimensional Dynamics

3 hours lecture, 2 hours laboratory; 4 credits
Computer and thought experiments will be used to illustrate concepts from one-dimensional dynamical systems. Lectures will focus on theoretical concepts explaining the phenomena illustrated in the laboratory assignments. Topics include structural stability, chaos, symbolic dynamics, kneading sequences for folding maps, bifurcation in parameter spaces, periodic points and the Sarkovskii ordering. Cantor sets, and fractional dimension. (Not open to students who completed Mathematics 2006 [30] in fall, 1990.)

Prerequisite: Mathematics *1206 [4.3].

## MATH 3101 Abstract Algebra I

3 hours; 3 credits
Elementary theory of groups, rings, and fields; integers, rationals, real and complex numbers; elements of number theory, polynomials.

Prerequisite: Mathematics 5.10 or 5.20 or 2201 [5.3];
Mathematics *2001[9.5] and 2101 [10.1].

## MATH 3106 Theory of Numbers

3 hours; 3 credits
Congruences; quadratic residues; diophantine equations; factorization.

Prerequisite: Mathematics 3101 [14.1].

## MATH 3107 Cryptography and Cryptanalysis

4 hours; 4 credits
An introduction to mathematical cryptography. Various cryptographic systems. Basic cryptanalytic attacks. Modern cryptographic systems; authentication; factorization attacks. This course is the same as Computer and Information Science 3240.

Prerequisite: Mathematics 2101 [10.1].

## MATH 3111 Graph Theory and Applications

4 hours, 4 credits
A rigorous study of graph theory and algorithms. Topics include trees, connectivity, Eulerian and Hamiltonian graphs, planar graphs, graph colorings, network flows, matching theory, graph minors, and applications to large graphs.

Prerequisite: Mathematics 2101

## MATH 3202 Mathematical Modeling and Simulation

4 hours; 4 credits
An introduction to constructing, solving, and testing mathematical models of real-life problems. Case-study approach. Deterministic discrete-time models and difference equations. Probabilistic modeling, random numbers generation and Monte Carlo simulation. Inventory and queuing models. Deterministic continuous-time models and differential equations; Stochastic differential equations.

Prerequisite: Mathematics 2101; and Mathematics 2206; and Mathematics 2501 or 3501; Computer and Information Science 1110 or 1115 or 1180

3 hours lecture, 1 hour recitation; 3 credits
Descriptive Statistics: graphical representations; measures of central tendency; measures of spread; sample correlation. Probability Theory: Sample spaces; combinatorial theory; elementary probability; random variables; discrete and continuous probability distributions; moments and moment-generating functions; bivariate random variables; change of variables; limit theorems. (Not open to students who are enrolled in or have completed Mathematics 2501.)

Prerequisite: Math 2201.

## MATH 3601 Investment Science

4 hours; 4 credits
Net present value, internal rate of return; yield, duration, immunization, and convexity of fixed-income securities; meanvariance portfolio theory, Markowitz model, CAPM, factor models, arbitrage pricing theory; models of asset dynamics, Ito's lemma, options theory, Black-Scholes equation; interest-rate derivatives. (This course is the same as Finance 3370 and [Business 3370] and Economics 3370.)

Prerequisite: Economics 3400 [30.2] or Business 3400 [30.2] or
Mathematics *2501 [8.1] or Mathematics 3501 [51.1];
Mathematics *2201[5.3].
Prerequisite or corequisite: Economics 2100 [10.1] or 2200 [20.1]
or Business 2100 [10.1] or 2200 [20.1].

## MATH 3606 Mathematics of Operations Research

3 hours; 3 credits
Linear programming; network analysis; queueing theory; simulation; decision analysis.

Prerequisite: Mathematics 3501 [51.1].

## MATH 3801 Introduction to Life Contingencies

4 hours, 4 credits
Survival function, life tables, analytical laws of mortality, continuous and discrete life insurance and life annuities, recursive equations, present value random variables, benefit premiums, premium principles, and basic policy value calculations.

Prerequisite: Mathematics 3501.

## MATH 3802 Introduction to Risk Theory

4 hours, 4 credits
Utility theory in insurance; Individual risk model; Collective risk model; Distributions for the number of claims and Loss distributions; Ruin theory; Ruin probability and Capital at ruin; Lundberg's inequality; Premium principles; Risk measures; Reinsurance.

Prerequisite: Mathematics 3501

## MATH 4101 Linear Algebra II

4 hours; 4 credits
Determinants, matrices, and systems of linear equations; linear dependence; vector spaces; eigenvalues, and eigenvectors; matrix equations; linear transformations; convex sets.

Prerequisite: Mathematics 2101 [10.1] and 3101 [14.1].

Groups, rings, integral domains, fields; homomorphisms and isomorphisms; polynomials over a field; factorization; vector spaces over a field; field extensions and applications; introduction to Galois theory.

Prerequisite: Mathematics 3101 [14.1].

## MATH 4201 Advanced Calculus I

4 hours; 4 credits
Advanced calculus of functions of one variable. The real number system. Completeness, compactness, connectedness. Continuous functions, uniform continuity. Differentiation, the mean-value theorem, Taylor's theorem. Riemann integration, the fundamental theorem of calculus. Interchange of limit operations, numerical series, power series.

Prerequisite: Mathematics 2001, 2101 and 2201, and at least 3 credits in advanced Mathematics Department courses or permission of the Chairperson.

## MATH 4206 Advanced Calculus II

4 hours; 4 credits
Advanced calculus of functions of several variables. Elementary topology of Rn. Partial derivatives and differentials. Chain rule. Implicit function theorem and Jacobians. Rigorous development of the Riemann integral. Line and surface integrals. GreenÕs theorem, StokesÕs theorem, the divergence theorem.

Prerequisite: Mathematics 2101 [10.1] and 4201 [11.1] and one other advanced Mathematics Department course.

## MATH 4211 Partial Differential Equations

## 4 hours; 4 credits

Solution of partial differential equations; theory of Fourier series and their applications to boundary value problems; applications to mathematical physics; transform methods; numerical methods; systems of orthogonal functions.

Prerequisite: Mathematics 2206 [13].

## MATH 4216 Introduction to Functions of a Complex

## Variable

4 hours; 4 credits
Calculus of complex functions; Cauchy-s integral theorem; Laurent series, singularities; residues; properties of analytic functions; conformal mapping; analytic continuation.

Prerequisite: Mathematics 4201 [11.1] and permission of the chairperson.

## MATH 4302 Foundations of Geometry

4 hours; 4 credits
Critical analysis of foundations of geometry; postulational development of Euclidean and hyperbolic geometries; theories of incidence, order, congruence, parallelism, and measure; ordered linear geometries of arbitrary dimension as join systems (multigroups).

Prerequisite: Mathematics *2001 [9.5] and a minimum of six credits in advanced Mathematics Department courses.

## MATH 4306 Introduction to Topology

## 4 hours; 4 credits

Intuitive concepts of topology: topology as a geometry of
continuity, topological equivalence; one- and two-dimensional manifolds, Jordan curve theorem. Introduction to general topology; topology of Euclidean, metric, and abstract spaces with emphasis on continuous mappings, compactness, connectedness, completeness, separation axioms. Applications to analysis and geometry.

Prerequisite or corequisite: Mathematics 4201 [11.1] and permission of the chairperson.

## MATH 4401 Secondary School Mathematics from an Advanced Viewpoint

4 hours; 4 credits
An advanced overview of mathematical topics in the secondary school curriculum: logic, space geometry, transformation geometry, coordinate geometries, polynomials, and computer applications.

Prerequisites: Mathematics 3101; Computer and Information Science 1110 or 1115

## MATH 4406 Seminar in Problem Solving and Selected Topics

1 hour; 1 credit
Reading, discussions, problem-solving sessions on selected topics in graph theory, topology, game theory, number theory, and recreational mathematics. Fall term.

Prerequisite: at least eight credits in advanced Mathematics Department courses; and senior standing or permission of the chairperson.

## MATH 4501 Probability and Statistics II

4 hours; 4 credits
Order statistics; Point estimators, their measures of quality and their properties; confidence intervals; theory of statistical tests; multinomial distribution; chi-square tests; bivariate normal distribution; regression.

Prerequisite: Math 3501.

## MATH 4506 Time Series

4 hours; 4 credits
The basics of time series analysis. Graphical displays, autocorrelation and cross-correlation functions, correlograms. Auto-regressive models, moving average models, integrated models, ARIMA models. Exponential smoothing, Box-Jenkins method. Fourier analysis, periodogram analysis.

Prerequisite: Mathematics 4501 [52].

## MATH 4511 Probability

## 4 hours; 4 credits

Combinatorial analysis; random walks; conditional probability; central limit theorem; random variables; law of large numbers; Markov chains; finite difference methods.

Prerequisite: Mathematics 3501 [51.1].

## MATH 4531 Applied Intermediate Statistics

3 hours; 3 credits
A second course in Statistics with emphasis on applications in Data Science. Introduction to the use of R software; analysis of variance; multiple comparisons; the Kruskal-Wallis test; linear least squares regression and statistical properties; multivariate normal
distribution; Bayesian statistics and basics of decision theory; sampling and experimental design. Optional: non-parametric statistics.

Prerequisite: Mathematics 2501 or Mathematics 3501, and Mathematics 2101.

## MATH 4601 Financial Instruments and Their Pricing

4 hours; 4 credits
Definitions of some of the most important derivative securities traded in the financial markets: forward and futures contracts, caplets, caps, swaps, and options (Call, Put, Barrier, Bermudan, Asian, Digital, Exotic). The principles of arbitrage pricing and riskneutral pricing, discrete-time binomial trees. The continuous time Black Scholes model and the Capital Asset Pricing model. The pricing of interest rates in an arbitrage-free framework and important interest rate models. Concentration on stochastic modeling and applications. (This course is the same as Finance 3375 [Business 3375] and Economics 3375.)

Prerequisite: Mathematics 2601 and Mathematics 3501; or Mathematics 3601; or Finance 3370; or Economics 3370.

## MATH 4701 Numerical Analysis

4 hours; 4 credits
Introduction to numerical analysis using high-speed computers. Fixed-point and floating-point arithmetic; analysis of errors; numerical solution of algebraic and transcendental equations and systems of linear equations. Interpolation and approximation. Numerical differentiation and integration. Solution of ordinary differential equations.

Prerequisite: Mathematics 2101; and Mathematics 2201; and Computer and Information Science 1110 or 1115
Co-requisite: Mathematics 2206

## MATH 5001 Independent Study I

Minimum of 9 hours independent work and conference; 3 credits Independent study of a selected list of readings approved by a faculty adviser. Thesis or final examination.

Prerequisite: a minimum of 12 credits in advanced Mathematics
Department courses and permission of the chairperson.

## MATH 5002 Independent Study II

Minimum of 9 hours independent work and conference; 3 credits Independent study of a selected list of readings approved by a faculty adviser. Thesis or final examination.

Prerequisite: a minimum of 12 credits in advanced Mathematics Department courses and permission of the chairperson.

## MATH 5003 Independent Study III

Minimum of 9 hours independent work and conference; 3 credits Independent study of a selected list of readings approved by a faculty adviser. Thesis or final examination.

Prerequisite: a minimum of 12 credits in advanced Mathematics Department courses and permission of the chairperson.

## MATH 5004 Independent Study IV

Minimum of 9 hours independent work and conference; 3 credits Independent study of a selected list of readings approved by a faculty adviser. Thesis or final examination.

Prerequisite: a minimum of 12 credits in advanced Mathematics Department courses and permission of the chairperson.

The following inactive course(s) will only be offered if there is sufficient demand:
MATH 4521 Actuarial Mathematics II

## Modern Languages and Literatures

Department office: 4239 Boylan Hall
Phone: 718.951.5451

## Full-time Faculty

Professors: Chang, Girelli-Carasi, Huffman, Llanos Mardones, Mbom, Renner
Associate Professors: Alonso, Childers
Assistant Professor: Huang
The Brooklyn College Department of Modern Languages and Literatures is dedicated to educating students with respect to language, literature, culture, and cross-cultural diversity. The department presents students with options for satisfactorily fulfilling the College language requirement to preparing for entry in a doctoral program. We offer bachelor of arts degrees in French, Italian, Russian, or Spanish as well as minors in Italian American studies, Italian international studies, Chinese, French, German, Italian, Russian, or Spanish. In addition, we offer a bachelor of arts degree in adolescence education for French, Spanish, or Italian teachers, as well as a concentration in Chinese, French, Italian, Russian, or Spanish for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades 1-6).

We provide expert instruction at all levels to impart language proficiency. Students in basic courses are equipped with linguistic and cultural competency as well as adequate preparation for pursuit of an advanced degree in foreign language, literature, and culture. The department also places a great deal of emphasis on transitional courses that allow students to take higher level courses, whether their goal be to major, minor, or simply heighten their expertise in language, literature, and culture. Students, at whatever level, receive the amount of instruction in language, literature, and culture to continue on to the next step if they so wish.

Linguistic and cultural competence is essential for students preparing to be high school foreign language teachers. The department ensures that these students also have a command of the methodology of teaching language. Neither does it ignore the importance of literature, because these students will teach it at the high school level, and also because students frequently change their career goals and enroll in a doctoral program in literature.

Our graduates frequently apply their language and literature skills, not only in secondary education, but in careers in the nonprofit, business, and governmental worlds.
Students who wish to pursue graduate studies may apply to the master's and doctoral degree programs offered by or in conjunction with this department.

## Placement in foreign language courses

Students may begin study of a language at Brooklyn College or may continue foreign language study begun in high school. Students who are fluent in a given language usually register for advanced courses in that language. These students may register for courses beginning with 101, 102, 103 only with permission of a department counselor.
Students who want to begin study of a foreign language at Brooklyn College should follow these guidelines for registration.
(a) Basic courses in all languages are listed with numbers beginning with 101,102,103,104. Each course is the prerequisite of the next. Courses numbered 1030 are the prerequisite of all courses numbered 2020 and higher. Some advanced courses have additional prerequisites.
(b) For specific information on course content and prerequisites, students should consult individual course listings on the following pages.

Students who want to continue foreign language study begun in high school should follow these guidelines for registration.
(a) Students who have completed four years or more of foreign language study and have passed the Regents level 3 examination in the language should consult a department counselor to determine proper placement.
(b) Students who have completed fewer than four years of foreign language study but have passed the Regents level 3 examination in the language should register for course 2021. If there has been a lapse of time since completing high school work, the student should consult a department counselor.
(c) Students who have completed three years or less of foreign language study but have not passed the Regents level 3 examination in the language are advised to consult a department counselor about placement before registration. Students who have completed one year of language study or less in high school normally enroll in course beginning with 101 at Brooklyn College. Students with two years of high school language experience usually enroll in course beginning with 102, and students with three years of high school language experience usually enroll in course beginning with 103. Any questions regarding placement should be directed to the department office.

## B.A. degree program in French <br> HEGIS code 1102; SED program code 02025

Department requirements for majors in French (36-38 credits)

There are two options for the major:

Option I: French and Francophone Language, Literature, and Culture (36-38 credits)

For all concentrations:
The following are required (36-38 credits in advanced courses): French 2030W and 3610.
At least one of the following culture courses: French 3510, 3515, 3520, or 3525.
The remaining courses are to be selected from French 1030 and above.
Students may concentrate in (a) Literature and Culture or (b) Translation
(a) Literature and Culture concentration

Students should complete the requirements above.
(b) Translation

Students should complete three of the following as part of the requirements listed above: French 3240, or 3260, or 3290, or Modern Languages and Literatures (MLAN) 4500.
For all concentrations, two courses in Modern Languages and Literatures (MLAN) can be applied to the major.
With permission of the chairperson, one course may be in an allied discipline (Africana Studies, American Studies, Anthropology, Art, Classics, English, History, Linguistics, Music, Philosophy, Psychology, Puerto Rican and Latino Studies, Communication Arts, Sciences and Disorders, Computer Information Science).

Knowledge of Latin and/or another Language Other Than English is also helpful.
Option II: Language and Business (36 credits)
All of the following: French 2030W; 2432; 3610; 3515 or 3525.
Four additional courses to be selected from French 1030 and above.
Both of the following: Business 3100, 3170.
Two of the following: Business 3240, 3200, 3210, 3230, 3130, 3140.
The "W" designates a writing intensive course.

The department chairperson, with the approval of the department's curriculum committee, may allow substitutions for one or more of the requirements consistent with the educational goals of the program.

## B.A. degree program in Italian HEGIS code 1104; SED program code 02033

This program is not accepting majors as of Spring 2020.
Department requirements for majors in Italian (24-36 credits)
There are two options for the major:
Option I: Italian (24 credits)
The following are required (24 credits in advanced courses):
All of the following: Italian 2030W and 3610.
At least one of the following culture courses: Italian 3515, 3510, or 3518.
The remaining courses are to be selected from Italian 2024, 2021, 2432, 2120, 3515, 3525, 3510, or 3518. Tier II, Tier III, and/or Tier IV.

6 credits may be taken in courses outside the department related in content and purpose, which may be any of the following:
Interdisciplinary Studies 2025 - Italian-American Relations
English 3192 - Special Topics (Departmental approval required)
English 3164 - Introduction to Italian American Literature
History 3261 - Modern Italy
Interdisciplinary Studies 70-Seminar (Departmental approval required)
Art 3030* - Early Renaissance Art in Italy
Art 3038* - Sixteenth-Century Renaissance Art in Italy
Judaic Studies 4435 - Italian Jewry
Interdisciplinary Studies 2012 - Italians in America

* only one art course can be taken.

Any other course requires departmental permission.
While courses taken toward completion of the major may be taught in English or Italian, majors in Italian Language and Literature are required, ir the event of the former, to do the work in Italian.

A knowledge of Latin and/or another Language Other Than English is also helpful.
Option II: Language and Business (36 credits)
All of the following: Italian 2024 or 2030W; 2432; 3610; 3515 or 3525.
Four additional courses to be selected from Italian 2021, 2030 or 2030W, 2120 or $2120 \mathrm{~W}, 3515,3525,3510$, or 3518 , Tier II, Tier III, and/or Tier IV.

Both of the following: Business 3100, 3170.
Two of the following: Business 3240, 3200, 3210, 3230, 3130, 3140.
The "W" designates a writing intensive course.

## B.A. degree program in Russian HEGIS code 1106; SED program code 02039

Department requirements for majors in Russian (24-36 credits)
There are two options for the major:

Option I: Russian (24 credits)

The following are required ( 24 credits in advanced courses):
Russian 2030 and 3610.
Russian 2120W.
At least one of the following culture courses: Russian 3515 or 3510.
The remaining courses are to be selected from Russian 2021, 2024, 2120, 2432, 3515, 3525, 3510 or 3518. Tier II, Tier III, and/or Tier IV.
A knowledge of Latin and/or another Language Other Than English is also helpful.

Option II: Language and Business (36 credits)
All of the following: Russian 2024 or 2030, 2432, 3610, 3515 or 3525.
Four additional courses to be selected from Russian 2021, 2030 or 2030W, 2120 or $2120 \mathrm{~W}, 3515,3525,3510$, or 3520 , Tier II, Tier III, and/or Tier IV.
Both of the following: Business 3100, 3170.
Two of the following: Business 3240, 3200, 3210, 3230, 3130, 3140.
The "W" designates a writing intensive course.

## B.A. degree program in Spanish <br> HEGIS code 1105; SED program code 02034

Department requirements for majors in Spanish (36-38 credits)

There are two options for the major:

Option I: Spanish and Latin American Language, Literature, and Culture (36-38
credits)
The following are required (36-38 credits in advanced courses): Spanish 2030W and 3610.
At least one of the following culture courses: Spanish 3510, 3515, 3520, or 3525.
The remaining courses are to be selected from Spanish 1030 and above.
Students may concentrate in (a) Literature and Culture or (b) Translation or (c) Hispanic Linguistics as follows:
(a) Literature and Culture concentration

Students should complete the requirements listed above.
(b) Translation

Students should complete three of the following as part of the requirements listed above: Spanish 3240, or 3260, or 3290, or Modern Languages and Literatures 4500
(c) Hispanic Linguistics

Students should complete three of the following as part of the requirements listed above: Spanish 3320, or 3390, or Modern Languages and Literatures 3360, or LING 2001.

For all concentrations, two courses in Modern Languages and Literatures (MLAN) may be applied to the major.
With permission of the chairperson, one course may be in an allied discipline (Africana Studies, American Studies, Anthropology, Art, Classics, English, History, Linguistics, Music, Philosophy, Psychology, Puerto Rican and Latino Studies, Communication Arts, Sciences, and Disorders, Computer Information Science).

Knowledge of Latin and/or another Language Other Than English is also helpful.
Option II: Language and Business (36 credits)
All of the following: Spanish 2024 or 2030W; 2432; 3610; 3515 or 3525.
Four additional courses to be selected from Spanish 1030 and above.
Both of the following: Business 3100, 3170.
Two of the following: Business 3240, 3200, 3210, 3230, 3130, 3140.
The "W" designates a writing intensive course.
The department chairperson, with the approval of the department's curriculum committee, may allow substitutions for one or more of the requirements consistent with the educational goals of the program.

## B.A. degree program in adolescence education: French teacher HEGIS code 1102.01; SED program code 26796

The Department of Secondary Education and the Department of Modern Languages and Literatures jointly offer a program for students who plan to teach French in grades 7 through 12. Adolescent education (grades 7-12) programs are writing intensive. Additional information may be obtained from the Department of Secondary Education or the Department of Modern Languages and Literatures. Students should consult a counselor as early as possible to plan their program.

Program requirements (58 credits)
Thirty credits in the content area are required for New York state certification to teach a Language Other Than English at the secondary level.
Twenty-four of those credits must be taken in the Department of Modern Languages and Literatures as follows:
All of the following: French 2030W and 3610.

Two of the following culture courses: French $3515,3525,3510$, or 3520.
Twelve credits to be selected from French 2024, 2021, 2432, 2120, 3515, 3525, 3510, 3520. Tier II, Tier III, and/or Tier IV.
The remaining six credits may be selected from the following options:

1) Up to two courses in the major language and/or from Modern Languages 2310 or higher.
2) Two courses in a second language, Language 2021 or above.
3) Up to two courses in related areas, subject to department approval.

An average of B or higher in the major is required for student teaching.
In addition, students must complete the following pedagogical courses in the Department of Secondary Education: Secondary Education 2001, $2002,3401,3402,3456,4401,4411$, and 4482 (total of 28 credits).

This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.
Secondary Education 2001, 2002, 3401, 3402
Secondary Education 3456 may be started after completing Secondary Education 2001 and 2002.
Student teaching: Secondary Education 4401, 4411, and 4482.
Students qualifying for the initial certification in adolescence education may obtain an extension to teach English, social studies, mathematics, a modern language, or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department.
Admission requirements and academic standing

Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

Students must have a B- in both Secondary Education 2001 and 2002, New York City Department of Education Fingerprint clearance, and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

To take Secondary Education 4401, 4411 and 4482 , students must have a GPA of 2.75 or higher, a B- or better in both Secondary Education 3401 and 3402, and/or permission of the head of the program.

To take Secondary Education 4407-4412, students must earn a B- or higher in Secondary Education 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of the program.

## B.A. degree program in adolescence education: Italian teacher HEGIS code 1104.01; SED program code 26804

The Department of Secondary Education and the Department of Modern Languages and Literatures jointly offer a program for students who plan to teach Italian in grades 7 through 12. Adolescent education (grades 7-12) programs are writing intensive. Additional information may be obtained from the Department of Secondary Education or the Department of Modern Languages and Literatures. Students should consult a counselor as early as possible to plan their program.

This program is not accepting majors as of Spring 2020.
Program requirements (56 credits)
Thirty credits in the content area are required for New York state certification to teach a Language Other Than English at the secondary level. Twenty-four of those credits must be taken in the Department of Modern Languages and Literatures as follows:

All of the following: Italian 2030W and 3610.
Two of the following culture courses: Italian 3515, 3525, 3510, or 3518.
Twelve credits to be selected from Italian 2021, 2024, 2432, 2120, 3515, 3525, 3510, 3518. Tier II, Tier III, and/or Tier IV.
The remaining six credits may be selected from the following options:

1) Up to two additional courses in the major language and/or from Modern Languages 2310 or higher.
2) Two courses in a second language, Language 2021 or above.
3) Up to two courses in related areas, subject to department approval.

An average of B or higher in the major is required for student teaching.
In addition, students must complete the following pedagogical courses in the Department of Secondary Education: Secondary Education 2001, 2002, 3401, 3402, 4405, 4411, 3456 (total of 26 credits).

This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.
Secondary Education 2001, 2002, 3401, 3402
Secondary Education 3456 may be started after completing Secondary Education 2001 and 2002.
Secondary Education 4405 Seminar on Methods of Teaching Modern Languages, Student Teaching I
Secondary Education 4411 Advanced Seminar on Methods of Teaching Modern Languages, Student Teaching II.
Students qualifying for the initial certification in adolescence education may obtain an extension to teach English, social studies, mathematics, a modern language, or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department. Students completing majors in secondary education or in special subjects under the former requirements should refer to the 2000-2003 Undergraduate Bulletin.

Admission requirements and academic standing
Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

Students must have a B- in both Secondary Education 2001 and 2002 and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

To take Secondary Education 4413 students must have a GPA of 2.75 or higher and permission of the head of the program.
To take Secondary Education 4401-4406, students must have a GPA of 2.75 or higher, a B- or better in both Secondary Education 3401 and 3402, and/or permission of the head of the program.

To take Secondary Education 4407-4412, students must earn a B- or higher in Secondary Education 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of the program.

## B.A. degree program in adolescence education: Spanish teacher HEGIS code 1105.01; SED program code 26801

The Department of Secondary Education and the Department of Modern Languages and Literatures jointly offer a program for students who plan to teach Spanish in grades 7 through 12. Adolescent education (grades 7-12) programs are writing intensive. Additional information may be obtained from the Department of Secondary Education or the Department of Modern Languages and Literatures. Students should consult a counselor as early as possible to plan their program.

## Program requirements (58 credits)

Thirty credits in the content area are required for New York state certification to teach a Language Other Than English at the secondary level. Twenty-four of those credits must be taken in the Department of Modern Languages and Literatures as follows:

All of the following: Spanish 2030W and 3610.
Two of the following culture courses: Spanish 3515, 3525, 3510, or 3520.
Twelve credits to be selected from Spanish 2021, 2024, 2432, 2120, 3515, 3525, 3510, 3520. Tier II, Tier III, and/or Tier IV.
The remaining six credits may be selected from the following options:

1) Up to two additional courses in the major language and/or from Modern Languages 2310 or higher.
2) Two courses in a second language, Language 2021 or above.
3) Up to two courses in related areas, subject to department approval.

An average of B or higher in the major is required for student teaching.
In addition, students must complete the following pedagogical courses in the Department of Secondary Education (28 credits): Secondary Education 2001, 2002, 3401, 3402, 4401, 4411, 3456, 4482.

This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.

Secondary Education 2001, 2002, 3401, 3402,
Secondary Education 3456 may be started after completing Secondary Education 2001 and 2002.
Student teaching: Secondary Education 4401, 4411, and 4482.
Students qualifying for the initial certification in adolescence education may obtain an extension to teach English, social studies, mathematics, a modern language, or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department. Students completing majors in secondary education or in special subjects under the former requirements should refer to the 2000-2003 Undergraduate Bulletin.

## Admission requirements and academic standing

Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

Students must have a B- in both Secondary Education 2001 and 2002, New York City Department of Education Fingerprint clearance and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

To take Secondary Education 4401, students must have a GPA of 2.75 or higher, a B- or better in both Secondary Education 3401 and 3402 , and/or permission of the head of the program.

Students must earn a B- or higher in Secondary Education 4401, and a GPA of 2.75 or higher in their major.

## Departmental Minor(s)

## Minor in Chinese

Department Requirements
Department Requirements
A minimum of 15 credits in advanced courses selected from Chinese 1030 and above.
It is recommended that the students meet with a department advisor to plan a coherent program of study.
Students might choose a sequence of courses constituting a general survey of
(a) Chinese literature; (b) translation studies; or (c) Chinese for business

All courses must be completed with a grade of $C$ or higher.
A minimum of nine credits must be completed at Brooklyn College.
The department chairperson, with the approval of the department's curriculum committee, may allow substitutions for one or more of the requirements consistent with the educational goals of the program.

## Minor in Chinese Translation

Department Requirements (15 credits)

CHIN 2030W Advanced Language Skills 2
CHIN 3260 Literary Translation
CHIN 3240 Translation for the Professions
Two other Chinese courses numbered above 2021.
All the courses used to meet these degree requirements must be completed with a grade of C or higher.

## Minor in French

Department Requirements
A minimum of 15 credits in advanced courses selected from French 1030 and above.
It is recommended that the students meet with a department advisor to plan a coherent program of study.
Students might choose a sequence of courses constituting a general survey of
(a) French and/or Francophone literature; (b) translation studies; or (c) French for business

All courses must be completed with a grade of C or higher.
A minimum of nine credits must be completed at Brooklyn College.

The department chairperson, with the approval of the department's curriculum committee, may allow substitutions for one or more of the requirements consistent with the educational goals of the program.

## Minor in French Translation

## Department Requirements (15 credits)

FREN 2030W Advanced Language Skills II
FREN 3260 Literary Translation
FREN 3290 Translation Practicum
FREN 3240 Translation for the Professions
One other French course numbered above 2021.
All the courses used to meet these degree requirements must be completed with a grade of C or higher.

## Minor in German

Department Requirements
A minimum of 12 credits in advanced courses in German 2021 and above.

## Minor in Italian and Italian American Studies

Department Requirements
A program of 15 credits as follows:

1. A minimum of 9 credits in advanced courses in Italian 1030 and above
2. With permission of the chairperson, two of the following courses may be applied towards the minor: ENGL 2003, ENGL 3164, HIST 3024, HIST 3025, ARTD 3030, ARTD 3038, ARTD 3046 MLAN 1310, MLAN 2012, MLAN 2015, MLAN 2150, MLAN 2610, MLAN 3210, MLAN 3360 or MLAN 4500.

It is recommended that the students meet with a department advisor to plan a coherent program of study.
Students might choose a sequence of courses constituting a general survey of
(a) Italian and/or Italian American literature; (b) translation studies; or (c) Italian for business

All courses must be completed with a grade of $C$ or higher.
A minimum of nine credits must be completed at Brooklyn College.
The department chairperson, with the approval of the department's curriculum committee, may allow substitutions for one or more of the requirements consistent with the educational goals of the program.

## Minor in Italian Translation

Department Requirements ( 15 credits)

ITAL 2030W Advanced Languages Skills II
ITAL 3260 Literary Translation
ITAL 3290 Translation Practicum
ITAL 3240 Translation for the Professions
One other Italian course numbered above 2021.
All the courses used to meet these degree requirements must be completed with a grade of $C$ or higher.

## Minor in Russian Studies

Department Requirements
A program of 15 credits as follows:

1. A minimum of 9 credits in advanced courses in Russian 1030 and above
2. With permission of the chairperson, two of the following courses may be applied towards the minor: HIST 3070, HIST 3252, HIST 3254, POLS 3303, POLS 3309, MLAN 1310, MLAN 2012, MLAN 2015, MLAN 2150, MLAN 2610, MLAN 3210, MLAN 3360 or MLAN 4500.

It is recommended that the students meet with a department advisor to plan a coherent program of study.
Students might choose a sequence of courses constituting a general survey of
(a) Russian literature; (b) translation studies; or (c) Russian for business

All courses must be completed with a grade of C or higher.
A minimum of nine credits must be completed at Brooklyn College.
The department chairperson, with the approval of the department's curriculum committee, may allow substitutions for one or more of the requirements consistent with the educational goals of the program.

## Minor in Russian Translation

Department Requirements (15 credits)

RUSS 2030W Advanced Language Skills II
RUSS 3260 Literary Translation
RUSS 3290 Translation Practicum
RUSS 3240 Translation for the Professions
One other Russian course numbered above 2021.
All the courses used to meet these degree requirements must be completed with a grade of C or higher.

## Minor in Spanish

Department Requirements
A minimum of 15 credits in advanced courses selected from Spanish 1030 and above.
It is recommended that the students meet with a department advisor to plan a coherent program of study.
Students might choose a sequence of courses constituting a general survey of
(a) Peninsular and/or Latin American literature; (b) translation studies; (c) Hispanic linguistics; or (d) Spanish for business

All courses must be completed with a grade of $C$ or higher.

A minimum of nine credits must be completed at Brooklyn College.
The department chairperson, with the approval of the department's curriculum committee, may allow substitutions for one or more of the requirements consistent with the educational goals of the program.

## Minor in Spanish Translation

## Department Requirements ( 15 credits)

SPAN 2030W Advanced Language Skills II
SPAN 3260 Literary Translation
SPAN 3290 Translation Practicum
SPAN 3240 Translation for the Professions
One other Spanish course numbered above 2021.
All the courses used to meet these degree requirements must be completed with a grade of C or higher.

## Interdepartmental Minor(s)

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C - or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Chinese

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs may elect one of the following concentrations in modern languages and literatures.

## Concentration requirements:

A minimum of 30 credits is required for a concentration in Chinese, French, Italian, Russian, or Spanish. All courses offered by the department apply towards the concentration. Students may take all 30 credits in one language or create a combined concentration by taking courses in a maximum of two other languages.

Up to two courses in related topics from other departments (such as Art, History, Puerto Rican and Latino Studies, or Africana Studies) may be applied to the concentration. A list of pre-approved courses is available in the Department office. Other courses require Department approval.

A minimum of 18 credits must be taken in the primary language.

## French

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs may elect one of the following concentrations in modern languages and literatures.

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Concentration requirements:
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A minimum of 30 credits is required for a concentration in Chinese, French, Italian, Russian, or Spanish. All courses offered by the department apply towards the concentration. Students may take all 30 credits in one language or create a combined concentration by taking courses in a maximum of two other languages.

Up to two courses in related topics from other departments (such as Art, History, Puerto Rican and Latino Studies, or Africana Studies) may be applied to the concentration. A list of pre-approved courses is available in the Department office. Other courses require Department approval.

A minimum of 18 credits must be taken in the primary language.

## Italian

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs may elect one of the concentrations below in modern languages and literatures.

Please note that this concentration is not accepting students for the 2020-2021 academic year.

## Concentration requirements:

A minimum of 30 credits is required for a concentration in Chinese, French, Italian, Russian, or Spanish. All courses offered by the department apply towards the concentration. Students may take all 30 credits in one language or create a combined concentration by taking courses in a maximum of two other languages.

Up to two courses in related topics from other departments (such as Art, History, Puerto Rican and Latino Studies, or Africana Studies) may be applied to the concentration. A list of pre-approved courses is available in the Department office. Other courses require Department approval.

A minimum of 18 credits must be taken in the primary language.

## Russian

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the

Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs may elect one of the following concentrations in modern languages and literatures.

## Concentration requirements:

A minimum of 30 credits is required for a concentration in Chinese, French, Italian, Russian, or Spanish. All courses offered by the department apply towards the concentration. Students may take all 30 credits in one language or create a combined concentration by taking courses in a maximum of two other languages.

Up to two courses in related topics from other departments (such as Art, History, Puerto Rican and Latino Studies, or Africana Studies) may be applied to the concentration. A list of pre-approved courses is available in the Department office. Other courses require Department approval.

A minimum of 18 credits must be taken in the primary language.

## Spanish

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs may elect one of the following concentrations in modern languages and literatures.

Concentration requirements:
A minimum of 30 credits is required for a concentration in Chinese, French, Italian, Russian, or Spanish. All courses offered by the department apply towards the concentration. Students may take all 30 credits in one language or create a combined concentration by taking courses in a maximum of two other languages.

Up to two courses in related topics from other departments (such as Art, History, Puerto Rican and Latino Studies, or Africana Studies) may be applied to the concentration. A list of pre-approved courses is available in the Department office. Other courses require Department approval.

A minimum of 18 credits must be taken in the primary language.

## Department recommendations

Modern languages and literatures majors are advised to take one or more courses in literatures other than the major. Appropriate courses in anthropology, art history, classics, comparative literature, English, history, Judaic studies, philosophy, and theater are recommended.

## Courses

All courses, unless otherwise indicated, are taught in the target language.
*Courses marked with an asterisk ( ${ }^{*}$ ) are not counted toward the requirement of no fewer than 24-27 credits in advanced courses in the major language.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## Modern languages

## MLAN 1310 Approaches to Learning a Modern Language

## 3 hours; 3 credits

Analysis of the process of second-language acquisition for the adult language learner and of the relationship between language learning and cultural awareness. Development of practical self-monitoring and self-evaluating strategies to promote successful language acquisition and cultural competence. For students studying or planning to study a modern language, including English at the college level.This course is the same as English *1003.

Prerequisite: permission of the chairperson of the Departmentof Modern Languages and Literatures

## MLAN 2012 The Animal Self

3 hours; 3 credits
The relationship between animals and humans explored in a range of literary texts with animal narrators and protagonists. Texts from a variety of genres and cultures, such as ancient Greece and Rome, modern Europe and North America, Meiji Japan, and Native America. Themes include: identity; communication and language; love and sexuality; human exceptionalism. (Not open to students who have completed Core Curriculum 3112.) 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement.

Prerequisite: English 1010 or permission of the department and junior standing.

## MLAN 2015 Con, Cop and Mark: Representations of Criminality and Authority

3 hours; 3 credits
Investigation of the oft-blurred boundaries between the criminal, the authority, and the victim in literature and other forms of artistic representation. Exploration of how the interdependency of these roles is portrayed in authors such as Aeschylus, Euripides, Marlowe, DeQuincey, Kafka, Artaud and Burroughs, as well as in film noir and other cinematic genres. (Not open to students who have completed Core Curriculum 3115.) 2017-2018: Satisfies Pathways College Option requirement. Starting Fall 2018 Satisfies Pathways Flexible Core Individual and Society requirement.

Prerequisite: English 1010 or permission of the department.

## MLAN 2150 Intercultural Literacy and Competence

## 3 hours; 3 credits

Focusing on one of the linguistic-cultural regions corresponding to a language taught by the Department of Modern Languages and Literatures, this course combines analytical and experiential approaches to lead students to a greater appreciation for, and understanding of, linguistic and cultural differences. Students acquire tools for analyzing and navigating language differences, behavioral norms, and social values within and across the borders between countries or language communities. They cultivate awareness of regional differences, the role of media and other institutions in reifying national traits, and the challenges to existing identities. This course fosters proficiency in interaction with individuals from other cultures, with the goal of helping students prepare for study or work abroad, and/or internships, professional activity, or community service involving the corresponding immigrant community in NYC. Starting Fall 2019 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

Prerequisite: English 1010 or permission of the chairperson.

## MLAN 2510 Cultural Traditions of Modernity

3 hours; 3 credits
This course deals with culture, ethnicity, religion, and global perspectives as they pertain to cultural areas associated with a modern language, e.g. the Arab-speaking world, China, France and the Francophone world, Italy, Japan, Latin America, Russia, or Spain. It traces the historical and cultural forces influencing the social, religious, culinary, ethnic, artistic, and political development of one of these countries or regions in their formation. It then goes on to explore the influence the country in question has had on the world community with its contributions in various areas of human endeavor. Consideration will be given to representative literary figures as well as visual art, film, and other forms of cultural production

Prerequisite: English 1010 or permission of the chairperson.

## MLAN 2520 Italy and the world

3 hours; 3 credits
A study of Italy's influence on the world through its multi-layered traditions such as pre-Roman Italic cultures, Greek and Roman influences, Arab and Byzantine legacies, the Renaissance, past and present artistic, literary and scientific achievements.

## MLAN 2610 Literature in Translation

3 hours; 3 credits

Reading and discussion of representative authors from the literary tradition of a non-English-speaking country or region, such as the Arabic-speaking Middle East and North Africa, China, France, Francophone Africa and the Caribbean, German-speaking Europe, Italy, Japan, Latin America, Russia, or Spain. Literary works will be contextualized in relation to the historical circumstances in which their authors lived, and viewed through the lens of the culture that produced them. (Not open to students who have completed GERM 1610, ITAL 1610, RUSS 1610, or SPAN 1610.) Starting Spring 2018 Satisfies Pathways Flexible Core Individual and Society requirement.

Prerequisite: English 1010 or permission of the chairperson.

## MLAN 3210 Environmental World Literature

4 hours; 4 credits
Environmental world literature; examining representations of environmental themes in literary texts in different cultures and countries; exploring different environmental literary genres, themes, and critical concepts. Reading knowledge of English required.

## MLAN 3360 Language and Technology

3 hours, 2 hours multimedia laboratory; 3 credits
Foundations of Computer-Assisted Language Learning (CALL). CALL theory and research. A systematic approach to multimedia resources for students and teachers of Languages Other Than English. Audiovisual materials and resources (audio documents, films, and videos), CALL software programs, electronic hypertext dictionaries and glossaries, translation systems, and voiced enhanced texts. Audio, video, language learning apps, and speech recognition interfaces. Finding and evaluating CALL resources. Critical multimedia and technology literacy. Use of social media and other group sharing, cloud-and Web-based resources as an environment for learning and teaching new languages.
Development of bilingual classroom activities using multimedia technologies. To be taught in English.

Prerequisite: Spanish 1030 or Italian 1030 or French 1030 or Chinese 1030 or permission of the chairperson.

## MLAN 4500 Critical Theories in Translation Studies

3 hours; 3 credits
A historical overview of the field of translation studies; translation theory; an examination of intersecting theories of
"transculturation" and "translation" and "contact zones"; the role of linguistic difference in mediating relations of power; translation and its relation to border and migration studies and postcolonial theory; the uses of translation and transcultural studies for theorizing culture in contexts of sexual, racial, class difference; translation and the legacies of diaspora, coloniality, and empire. Starting Fall 2020 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

Prerequisites: Students should have completed the Brooklyn College language requirement before taking this class.

## Arabic

## ARAB 1010 Elementary Arabic I

3 hours, 1 hour multimedia laboratory; 3 credits
First in a two-semester intensive sequence for beginners and those who have had one year or less of high school study. Introduction to
phonetics and writing systems. Development of communicative skills and cultural awareness through extensive classroom interaction and a variety of multimedia materials. (Not open to heritage speakers or to students who have completed Arabic 1 or more than one year of high school Arabic.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: none.

## ARAB 1020 Elementary Arabic II

3 hours, 1 hour multimedia laboratory; 3 credits Second in a two-semester sequence. Expanded acquisition of phonetics and writing systems. Development of communicative skills and cultural awareness through extensive classroom interaction and a variety of multimedia materials. Designed to prepare students for Arabic 1030. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Arabic 1010 or permission of the chairperson

## ARAB 1030 Intermediate Arabic I

3 hours, 1 hour multimedia laboratory; 3 credits
First in a two-semester sequence for students who have completed Arabic 1010 and 1020, or have had four years of high-school study. Continued development of oral fluency and writing in social interaction and in systematic vocabulary building. Increased awareness of cultural diversity in areas where language is spoken. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Arabic 1020 or permission of the chairperson.

## ARAB 1038 Basic Writing and Reading Skills for Heritage Speakers

3 hours, 1 hour multimedia laboratory; 3 credits
Fundamentals of writing and reading for students whose knowledge of Arabic is limited to spoken communication. Emphasis on spelling, word order, and verb tenses, based on authentic literary and nonliterary texts. Practice in written self-expression. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: permission of the chairperson.

## ARAB 2010 Intermediate Arabic II

3 hours, 1 hour multimedia laboratory; 3 credits
Second in a two-semester sequence for students who have completed Arabic 1030. Further refinement of oral fluency and writing in social interaction and in systematic vocabulary building. Expanded awareness of cultural diversity through study of literary and nonliterary texts and other media of communication. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Arabic 1030 or permission of the chairperson.

## ARAB 2018 Intermediate Writing and Reading Skills for Heritage Speakers

3 hours, 1 hour multimedia laboratory; 3 credits
Further development of writing and reading skills for students with basic knowledge of the structure of Arabic. Continued practice in reading and understanding authentic literary and nonliterary texts on a variety of levels. Qualifies as a LOTE (Language Other Than

English) course for Pathways College Option purposes.
Prerequisite: Arabic 1038 [3.8] or permission of the chairperson.

## ARAB 2310 Peer Tutoring I

2 hours tutoring, 1 hour conference; 1 credit
Two hours of peer tutoring in the Learning Center and one conference hour per week with a faculty supervisor. Final report in journal form. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: permission of the chairperson.

## ARAB 2320 Peer Tutoring II Arabic

2 hours tutoring, 1 hour conference; 1 credit
Two hours of peer tutoring in the Learning Center and one conference hour per week with a faculty supervisor. Final report in journal form. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Arabic 2310 and permission of the chairperson.

## Chinese

## CHIN 1010 Elementary Chinese I

3 hours, 1 hour multimedia laboratory; 3 credits
First in a two-semester sequence for beginners. Development of communicative skills and cultural awareness through extensive classroom interaction and a variety of multimedia materials. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Open only to students with no prior experience with the language.
All other students must take the Brooklyn College language placement test.

## CHIN 1020 Elementary Chinese II

3 hours, 1 hour multimedia laboratory; 3 credits Second in a two-semester sequence. Expanded acquisition of phonetics and writing systems. Development of communicative skills and cultural awareness through extensive classroom interaction and a variety of multimedia materials. Designed to prepare students for Chinese 1030.
Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 1010 or the appropriate score in the Brooklyn College online placement test.

## CHIN 1030 Intermediate Chinese I

3 hours, 1 hour multimedia laboratory; 3 credits
First in a two-semester sequence for students who have completed Chinese 1010 and 1020 or the equivalent. Continued development of oral fluency and writing skills. Increased awareness of cultural diversity in areas where language is spoken. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 1020 [2.1], or the appropriate score on the Brooklyn College online placement test, or permission of the chairperson.

## CHIN *1038 Basic Writing and Reading Skills for Heritage Speakers

4 hours, 1 hour multimedia laboratory; 4 credits
Fundamentals of writing and reading for students whose knowledge of Chinese is limited to spoken communication. Emphasis on writing and the distinctions among various levels of dialect and language. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: permission of the chairperson.

## CHIN *1111 Calligraphy

2 hours; 1 credit
Esthetics and practice of Chinese calligraphy for students with or without Chinese language background.

## CHIN 1150 Chinese Calligraphy: History, Theory and Praxis

## 3 hours; 3 credits

Hands-on writing, Chinese characters/ideograms, formation and composition of Chinese characters, history of Chinese calligraphy, and evolution of styles and characters, classical literati culture and aesthetic tradition, metaphysics of qi, mindfulness practice, and importance of Chinese calligraphy in Chinese culture, and relevance to contemporary daily life. Reading materials will be English. The course will be taught in English

## CHIN *1910 T'ai-chi Ch'Yan: Theory and Practice

2 hours laboratory; 1 credit
The short Yang form for health, meditation, and self-defense with push-hands practice and readings from the T'ai-chi classics, the Lao tzu, Chuang tzu, Confucian Analects, and I Ching. (Not open to students who have taken or are enrolled in Physical Education *+1007 [17.20].) To be taught in English.

Prerequisite: none.

## CHIN 2018 Intermediate Writing and Reading Skills for Heritage Speakers

3 hours, 1 hour multimedia laboratory; 3 credits
Further development of writing and reading skills for students with basic knowledge of the structure of Chinese. Continued practice in reading and understanding authentic literary and nonliterary texts on a variety of levels. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 1038 or the appropriate score in the Brooklyn College online placement test.

## CHIN 2021 Intermediate Chinese II

3 hours, 1 hour multimedia laboratory; 3 credits Development of advanced language skills for non-heritage speakers; analytical practice and self-expression in the written and spoken language; use of authentic literary and nonliterary texts. (Not open to students who have completed a course in Chinese numbered 2024 or above. The Department therefore recommends that 2021 be taken before any courses with a higher number.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 1030 or the appropriate score in the Brooklyn College online placement test.

## CHIN 2024 Advanced Language Skills I

3 hours; 3 credits
Development of advanced language skills; analytical practice and self-expression in the written and spoken language; use of authentic literary and nonliterary texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 1030 or 2018 or 2021, or the appropriate score on the Brooklyn College online placement test, or permission of the chairperson.

## CHIN 2030W Advanced Language Skills II

4 hours; 4 credits
Continued practice in advanced written expression and in textual analysis; composition modeled on selected literary texts. Writingintensive course. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 1030 or 2018 or permission of the chairperson

## CHIN 2110 Classical Culture of China

3 hours; 3 credits
Introductory study of ancient Chinese culture through close reading of a variety of texts. Attention to such questions as literary genre, material and performance contexts, gender, political institutions, religion, philosophy, models of culture, and the creation of a classical tradition. Practice in close reading and communication by means of critical writing, class discussion, and such other methods, such as collaborative group work. Conducted in English. (Not open to students who are enrolled in or have completed CORC 1110).

Prerequisite: English 1010 or permission of the chairperson.

## CHIN 2410 Fieldwork in Communities and Professional Environments I

9 hours fieldwork, 1 hour conference; 3 credits
A minimum of nine hours per week of supervised fieldwork in an approved place of employment, professional environment, or community program, where students will use Chinese. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: 15 credits of advanced courses in the target language and permission of the chairperson

## CHIN 2431 Chinese for the Arts

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Chinese is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. May be taken before or concurrently with Chinese 2410 [60.02]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 2030 [11.12] or permission of the chairperson.

## CHIN 2432 Chinese for Business

## 3 hours; 3 credits

Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Chinese is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. May be taken before or concurrently with Chinese 2410 [60.02]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 2030 [11.12] or permission of the chairperson.

## CHIN 2433 Chinese for Criminal Justice

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Chinese is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. May be taken before or concurrently with Chinese 2410 [60.02]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 2030 [11.12] or permission of the chairperson.

## CHIN 2435 Chinese for the Media

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Chinese is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. May be taken before or concurrently with Chinese 2410 [60.02]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 2030 [11.12] or permission of the chairperson.

## CHIN 2436 Chinese for Social Sciences

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Chinese is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. May be taken before or concurrently with Chinese 2410 [60.02]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 2030 [11.12] or permission of the chairperson.

## CHIN 2437 Chinese for Social Work

## 3 hours; 3 credits

Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Chinese is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. May be taken before or concurrently with Chinese 2410 [60.02]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 2030 [11.12] or permission of the chairperson.

## CHIN 2810 Studies in Chinese Media

3 hours; 3 credits
Introduction to Chinese media, including newspapers, journals, speeches, essays, radio and television broadcasts, video documentaries, the Internet, and pop music lyrics. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 1030 or 2018 or permission of the chairperson.

## CHIN 3010 Chinese Language Arts for the Bilingual English Learner

3 hours; 3 credits
Advances future teachers' understanding of methodology and practice in teaching Chinese within bilingual programs. Familiarizes students with the special challenges bilingual programs pose for curriculum development and lesson planning, instruction and assessment. (3 credits, taught in both Chinese and English) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 1030, 1038, 2018, or 2030; or permission of the chairperson.

## CHIN 3210 Contrastive Chinese and English Linguistics

## 3 hours; 3 credits

Intended to heighten students' awareness of the differences between English and Chinese through a contrastive methodology. For example, the English phonological system as compared with the Chinese tonal system. Presupposes familiarity with both languages. Students must be able to read, write, and speak in both English and Chinese. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 1030, 1038, 2018, or 2030; or permission of the chairperson.

## CHIN 3240 Translation for the Professions

## 3 hours; 3 credits

Practical and theoretical approaches to translating materials drawn from a variety of texts and to integrating translation resources available in the multimedia laboratory. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

3 hours; 3 credits
Practical and theoretical approaches to translating literary texts including poetry, plays, and narrative fiction. Analysis of selected published translations and of the cultural factors bearing upon the process of translation. Integration of resources available in the multimedia laboratory. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: CHIN 2030 [ 11.12] or permission of the chairperson.

## CHIN 3290 Translation Practicum

One hour conference, minimum 9 hours independent work; 3 credits
Individual translation project designed in consultation with a faculty supervisor and leading to a portfolio containing successive and final drafts. May be taken twice provided the project is different.
Bilingual (Chinese and English) ability required; practicum location and topics vary from term to term; projects can include either written or oral translation. No special fees. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 3240 or 3260 or permission of the chairperson.

## CHIN 3610 Landmarks of Chinese Literature

3 hours; 3 credits
An introductory course designed to familiarize students with major literary works in Chinese within a chronological and cultural framework. Representative texts from the Chinesespeaking world, providing an overview of writings that have shaped the lives of generations of readers. Frequent writing assignments in Chinese to strengthen students' individual competencies. This core of texts, reviewed periodically by the department, serves as a foundation for advanced literature courses. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 1030 or 2018 or permission of the chairperson.

## CHIN 3615 Modern Chinese Literature from 1919 to 1949

3 hours; 3 credits
Readings from vernacular literature from the May 4th Movement to the founding of the People's Republic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 2010 [10] or permission of the chairperson.

## CHIN 3616 Modern Chinese Literature from 1949 to the

## Present

3 hours; 3 credits
Readings from postwar literature of the People's Republic, Taiwan, and overseas Chinese communities. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 2010 [10] or permission of the chairperson.

## CHIN 3640 Survey of Classical Chinese Poetry

3 hours; 3 credits
Introduction to the development of various poetic forms in the classical style. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 1030 or permission of the chairperson.

## CHIN 3645 T'ang Poetry

3 hours; 3 credits
Reading of the works of well-known T'ang dynasty poets. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 1030 or 2018 or permission of the chairperson.

## CHIN 3662 Classical Novel

3 hours; 3 credits
Readings from five major Chinese novels from the fourteenth to the eighteenth centuries: San-kuo yen-i, Shui-hu-chuan, Hsi-yu chi, Ju-lin wai-shih, Hung-lou Meng. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 2010 [10] or permission of the chairperson.

## CHIN 3710 Philosophical Texts from the I Ching to Mao Tse-tung

3 hours; 3 credits
Intellectual history of China. Documents in the original language and translation. Emphasis on contrasts and continuity. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 1030 or 2018 or permission of the chairperson.

## CHIN 3810 Chinese Literature and Film

3 hours; 3 credits
The relationship between Chinese literary works and the films they inspired. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Chinese 1030 or 2018 or permission of the chairperson.

## CHIN 3910 Special Topics

3 hours; 3 credits
Special topic or theme not otherwise covered in the regular curriculum. Topics vary and reflect special interests of students and faculty. Course description available in department office prior to registration. Students may take the course more than one time, but may not repeat the topic or theme. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: CHIN 2020 [11.1] or 2030 [11.12] or 3610 [17.50] or permission of the chairperson.

## CHIN 3930 Chinese Multispecies Stories

4 hours; 4 credits
Chinese literature and culture; Multispecies Studies; examining representation of multispecies relations texts in contemporary China and beyond in both local and transnational contexts; exploring different genres, themes, and critical concepts. Bilingual knowledge in Chinese and English required.

Prerequisites: CHIN 2021 or 2030 W or 3610 or permission of the chairperson.

## CHIN 5070 Tutorial in Literature and Culture

1 hour conference, minimum 8 hours independent work§; 3 credits Study of a special topic at an advanced level. Periodic reports and a final paper or examination. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: junior or senior standing and 12 credits in advanced Chinese courses with an average of 3.0 or higher. Approval of topic by instructor or chairperson.

## Honors Courses

## CHIN 5084 Seminar

1 hour conference, minimum 8 hours independent work§; 3 credits Study of a literary topic, including but not limited to periods, genres, or major writers. Substantial paper in Chinese. May not be taken concurrently with Chinese 5085 [85]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: junior or senior standing and 15 credits in advanced Chinese courses approved by the chairperson with an average of 3.5 or higher. Students may take this course for credit twice, but may not repeat topics.

## CHIN 5085 Seminar and Senior Thesis

1 hour conference, minimum 8 hours independent work $\S ; 3$ credits Research thesis, written in Chinese, on a literary, linguistic, or cultural topic. May not be taken concurrently with Chinese 5084 [84.1]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: senior standing and 18 credits in advanced Chinese courses with an average of 3.5 or higher. Approval of the research topic by the instructor and the chairperson.

## French

## FREN *1010 Basic Language Skills I

3 hours, 1 hour multimedia laboratory; 3 credits
The first in a three-semester introductory sequence for beginners. Emphasis on basic social functions, simple conversation, readings, and writing. Introduction to the cultures where French is spoken. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisites: Only open to students with no prior experience with the language.
All other students must take the Brooklyn College language placement test.

## FREN 1015 Intensive Elementary French I

5 hours, 1 hour multimedia laboratory; 4 credits
The first course in an intensive two-semester sequence for beginners and those who have one year or less of high school study. Development of reading, writing, speaking, listening, and cultural awareness through classroom interaction and practice, utilizing a variety of multimedia materials. Designed for students wishing to proceed at an accelerated pace. Credit given only upon completion of French 1035 [3.2]. (Not open to heritage speakers or to students who are enrolled in or have completed French *1010 [1], French 1.5 , or more than one year of high school French.) Qualifies as a LOTE (Language Other Than English) course for Pathways College

Option purposes.
Prerequisite: None.

## FREN *1020 Basic Language Skills II

3 hours, 1 hour multimedia laboratory; 3 credits Second in a three-semester introductory sequence. Continued emphasis on basic social functions, simple conversations, readings, and writing. Narration and description of past and future events. Increased understanding of the cultures where French is spoken. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French *1010 [1], or the appropriate score on the Brooklyn College online placement test, or permission of the chairperson.

## FREN *1030 Basic Language Skills III

3 hours, 1 hour multimedia laboratory; 3 credits
Third in a three-semester introductory sequence. Further emphasis on basic social functions and practice in longer, more complex conversations, readings, and writing on a broader range of familiar topics. Communication of needs, ideas, and emotions. Continued study of cultures where French is spoken. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French *1020 [2], or the appropriate score on the Brooklyn College online placement test, or permission of the chairperson.

## FREN 1034 Fundamentals of Reading and Writing for Nonheritage Speakers

2 hours, 1 hour multimedia laboratory; 2 credits
Review and further development of intermediate-level reading and writing skills with special attention to grammar and style. An optional transitional course designed to prepare students for French *2010 [4]. May be taken concurrently with French 2011 [3.6]. (Not open to heritage speakers or to students who have recently completed four years of high school French or are enrolled in or have completed French *1035 [3.2].) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French *1030 [3], or a passing grade on the level 3 Regents examination, or a significant time lag in language study at this level, or permission of the chairperson.

## FREN 1035 Intensive Elementary French II

5 hours, 1 hour multimedia laboratory; 4 credits
Second in the two-semester intensive sequence. Continued development of reading, writing, speaking, listening, and cultural awareness through extensive classroom interaction, practice, and a variety of multimedia materials. Designed to prepare students for French *2010 [4]. (Not open to heritage speakers or to students who are enrolled in or have completed French *1010 [1], 1020 [2], or 1030 [3].) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 1015 [1.2] or permission of the chairperson.

## FREN 1038 Basic Writing and Reading Skills for Heritage Speakers

3 hours, 1 hour multimedia laboratory; 3 credits
Fundamentals of writing and reading for students whose
knowledge of French is limited to spoken communication. Emphasis on writing and the distinctions among various levels of dialect and language. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: permission of the chairperson.

## FREN 2011 Basic Conversation Workshop

1 hour, 2 hours multimedia laboratory; 1 credit
A supplementary course providing additional practice speaking French on everyday topics using authentic materials from a variety of contemporary media such as newspapers, magazines, radio, television, and film. For nonheritage speakers who have completed French *1030 [3], 1035 [3.2], or their equivalent. May be taken concurrently with or independently of French 1034 [3.4]. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French *1030 [3] or 1035 [3.2], or a passing grade on the level 3 Regents examination, or four years of high school study, or permission of the chairperson.

## FREN 2012 Conversation

3 hours; 3 credits
Oral and aural practice. Reading newspapers and journals. Discussion and short expos in French. Students who are fluent in French may not take this course for credit. (Not open to students who have completed French 2915 [4.6].) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French *1030 [3].

## FREN 2018 Intermediate Writing and Reading Skills for Heritage Speakers

3 hours, 1 hour multimedia laboratory; 3 credits
Further development of writing and reading skills for students with basic knowledge of the structure of French. Continued practice in reading and understanding authentic literary and nonliterary texts on a variety of levels. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 1038 [3.8] or permission of the chairperson

## FREN 2021 Integrated Language Skills

3 hours, 1 multimedia laboratory hour; 3 credits Continued development of language skills and cultural understanding using a variety of authentic materials including film, video, and short literary texts. Class discussions, group activities, and team projects. Individual writing assignments with emphasis on accuracy and style. (Not open to students who have completed a course in French numbered 2024 or higher. The Department therefore recommends that 2021 be taken before any courses having a higher number.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French *1030 or the appropriate score on the Brooklyn College online placement test.

## FREN 2024 Advanced Language Skills I

## 3 hours; 3 credits

Development of advanced language skills; analytical practice and self-expression in the written and spoken language; use of authentic literary and nonliterary texts. Qualifies as a LOTE
(Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 1030 or 2018 or 2021, or the appropriate score on the Brooklyn College online placement test, or permission of the chairperson.

## FREN 2030W Advanced Language Skills II

4 hours; 4 credits
Continued practice in advanced written expression and in textual analysis; composition modeled on selected literary texts. Writingintensive course. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: English 1012, French 1030 or 2018 or permission of the chairperson.

## FREN 2120 Understanding Texts in French

3 hours; 3 credits
Development of reading and analytical skills in French. Short, authentic texts, both literary and nonliterary, representing diverse contemporary styles and genres. Discussions and frequent writing assignments using a variety of approaches and supplementary materials available in the multimedia laboratory. May be taken concurrently with or after French 2018 or 2024. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 1030 or permission of the chairperson.

## FREN 2431 French for the Arts

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where French is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2030W or permission of the chairperson.

## FREN 2432 French for Business

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where French is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2030W or permission of the chairperson.

## FREN 2433 French for Criminal Justice

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where French is routinely used. Designed to familiarize students with common interactions within the professional environment and with
problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2030W or permission of the chairperson.

## FREN 2435 French for the Media

## 3 hours; 3 credits

Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where French is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2030W or permission of the chairperson.

## FREN 2436 French for Social Sciences

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where French is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2030W or permission of the chairperson.

## FREN 2437 French for Social Work

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where French is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2030W or permission of the chairperson.

## FREN 2910 Exploring French Cultures Through Film

3 hours lecture, 1 hour multimedia laboratory; 3 credits The development of written and conversational skills using recent French and Francophone films that offer the student a broad introduction to contemporary French and Francophone cultures. Designed for initial and intermediate students who want to achieve fluency in listening, speaking, and writing. Also open to other students who are willing to deepen their knowledge of Francophone World and France and of their current social contradictions and political debates. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 1030 or permission of the chairperson

## FREN 2915 Exploring French and Francophone Cultures Through the Press

2 hours lecture, 1 hour language laboratory; 2 credits Improvement of oral skills while learning about current issues in France and Francophone World. Readings of current news articles dealing with political issues, using Blackboard, oral presentations, and a weekly group discussion. Assignments match student's specialization or interests, in order to provide a vocabulary and the oral and writing skills that will be useful for professional careers. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 1030 [3]

## FREN 3240 Translation for the Professions

3 hours; 3 credits
Practical and theoretical approaches to translating materials drawn from a variety of texts and to integrating translation resources available in the multimedia laboratory. (French 3240 [20.03] not open to students who have completed French 54.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: FREN 2030 or permission of the chairperson.

## FREN 3260 Literary Translation

3 hours; 3 credits
Practical and theoretical approaches to translating literary texts including poetry, plays, and narrative fiction. Analysis of selected published translations and of the cultural factors bearing upon the process of translation. Integration of resources available in the multimedia laboratory. (French 3260 [21.03] not open to students who have completed French 54.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: FREN 2030 [ 11.12] or permission of the chairperson.

## FREN 3290 Translation Practicum

One hour conference, minimum 9 hours independent work§; 3 credits
Individual translation project designed in consultation with a faculty supervisor and leading to a portfolio containing successive and final drafts. May be taken twice provided the project is different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 3240 or 3260 or permission of the chairperson.

## FREN 3510 History of French Civilization

3 hours; 3 credits
A historical overview of the values, institutions, and cultural heritage of France and other French-speaking European cultures from their origins to the mid-twentieth century. Discussions and frequent writing assignments using a variety of approaches and supplementary materials from the French print, broadcast, and electronic media. Field trips to museums and cultural events. May be taken concurrently with or after French 2018 or 2024. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 1030 or permission of the chairperson.

3 hours; 3 credits
An exploration of the major features of contemporary French society and other French-speaking European cultures from 1945 to the present with particular attention to developing an understanding of the concepts of cultural identity and difference within the changing European context. Discussions and frequent writing assignments using a variety of approaches and supplementary materials from the French print, broadcast, and electronic media. Field trips to museums and cultural events. May be taken concurrently with or after French 2018 or 2024. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 1030 or permission of the chairperson.

## FREN 3520 History of Francophone Cultures

## 3 hours; 3 credits

A historical overview of the cultural heritage of the major Frenchspeaking cultures of the world outside of Europe from the foundations of French colonialism to 1945. Particular attention to developing an understanding of the concepts of colonialism; nationalism; and racial, regional, and national identities. Discussions and frequent writing assignments using a variety of approaches and supplementary materials from the print, broadcast, and electronic media. Field trips to museums and cultural events. May be taken concurrently with or after French 2018 or 2024. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 1030 or permission of the chairperson.

## FREN 3525 The Contemporary Francophone World

## 3 hours; 3 credits

An exploration of the contemporary French-speaking world outside of Europe from 1945 to the present with particular attention to developing an understanding of the concepts of cultural identity and difference, nationalism, and la francophonie. Discussions and frequent writing assignments using a variety of approaches and supplementary materials from the print, broadcast, and electronic media. Field trips to museums and cultural events. May be taken concurrently with or after French 2018 or 2024. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 1030 or permission of the chairperson.

## FREN 3610 Landmarks of French and Francophone Literatures

## 3 hours; 3 credits

An introductory course designed to familiarize students with major literary works in French within a chronological and cultural framework. Representative texts from the French-speaking world, providing an overview of French and Francophone writings that have shaped the lives of generations of readers. Frequent writing assignments in French to strengthen students' individual competencies. This core of texts, reviewed periodically by the department, serves as a foundation for advanced literature courses. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 1030 or 2018 or permission of the chairperson.

FREN 3620 Thematic Readings in French Poetry
3 hours; 3 credits

Representative selections from medieval times to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## FREN 3621 Thematic Readings in the French Novel

3 hours; 3 credits
Representative works from the origins to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## FREN 3622 Thematic Readings in French Short Fiction

3 hours; 3 credits
Representative stories and short novels from medieval times to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson

## FREN 3623 Thematic Readings in French Theater

3 hours; 3 credits
Representative works from the origins to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students make take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## FREN 3624 Thematic Readings in the French Essay

3 hours; 3 credits
Representative works of French expository prose from the Middle Ages to the present within a specific thematic and cultural context. Course description available in department prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030 W or 3610 [17.50] or permission ofthe chairperson

## FREN 3630 Thematic Readings in Francophone Poetry

3 hours; 3 credits
Representative selections from medieval times to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are
different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## FREN 3631 Thematic Readings in the Francophone Novel

3 hours; 3 credits
Representative works from the origins to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## FREN 3632 Thematic Readings in Francophone Short Fiction

3 hours; 3 credits
Representative stories and short novels from the origins to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030W or 3610 [17.50] ]or permission of the chairperson.

## FREN 3633 Thematic Readings in Francophone Theater

3 hours; 3 credits
Representative works from the Francophone theater within a specific thematic and cultural context. This course will study the tensions of an age torn between traditions and modernity in this important period of the Francophone world. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## FREN 3634 Thematic Readings in the Francophone Essay

3 hours; 3 credits
Representative works from Francophone thought. Political, social, and cultural milieu of the twentieth-century Francophone world within a specific thematic and cultural context. Emphasis on the historical, ideological, and cultural forces that have transformed the Francophone world from a dominated space into a free one. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## FREN 3710 Women in French Literature

3 hours; 3 credits
The image of women as expressed in selected French literary works. Course description available in department office prior to
registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## FREN 3720 Autobiographical Literature in French

3 hours; 3 credits
Autobiographical fiction and nonfiction in French literature. Memoirs, letters, diaries, journals, confessions. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## FREN 3730 Moral and Religious Themes in French and Francophone Literatures

3 hours; 3 credits
Religious beliefs and practices as expressed in selected literary works in French. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## FREN 3740 Historical and Social Visions in French and Francophone Literatures

3 hours; 3 credits
French and Francophone history and/or society, past and present, as reflected in selected literary works. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## FREN 3810 French Literature and Film

3 hours; 3 credits
The relationship between French literary works and the films they inspired. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## FREN 3910 Special Topics

3 hours; 3 credits
Special topic or theme not otherwise covered in the regular curriculum. Topics vary and reflect special interests of students and faculty. Course description available in department office prior to registration. Students may take the course more than one time, but may not repeat the topic or theme. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: FREN 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## FREN 3915 French and Francophone Literatures and the

 Arts3 hours; 3 credits

The relationship between French and Francophone literary works and the visual and/or performing arts. Outside lectures, visits to exhibitions and/or museums, attendance at musical and/or theatrical performances. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## FREN 4710 Writings of a Major French Author

3 hours; 3 credits
An in-depth, monographic study concentrating either on the opus of a major French writer or on one of the masterpieces of French literature. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030W or 3610 [17.50] and two courses from Tiers II and/or III, or permission of the chairperson

## FREN 4720 Writings of a Major Francophone Author

3 hours; 3 credits
An in-depth, monographic study concentrating either on the opus of a major Francophone writer or on one of the masterpieces of Francophone literature. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: French 2020 [11.1] or 2030W or 3610 [17.50] and two courses from Tiers II and/or III, or permission of the chairperson.

## FREN 5070 Tutorial in Literature and Culture

1 hour conference, minimum 8 hours independent work§; 3 credits Study of a special topic at an advanced level. Periodic reports and a final paper or examination. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: junior or senior standing and 12 credits in advanced French courses with an average of 3.0 or higher. Approval of topic by the chairperson.

## Honors courses

## FREN 5084 Seminar

1 hour conference, minimum 8 hours independent work§; 3 credits Study of a literary topic, including but not limited to periods, genres, or major writers. Substantial paper in French. May not be taken concurrently with French 5085 [85]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: junior or senior standing and 15 credits in advanced French courses approved by the chairperson with an average of 3.5 or higher. Students may take this course for credit twice, but may not repeat topics.

## FREN 5085 Seminar and Senior Thesis

1 hour conference, minimum 8 hours independent work§; 3 credits Research thesis, written in French, on a literary, linguistic, or cultural topic. May not be taken concurrently with French 5084 [84.1]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: senior standing and 18 credits in advanced French courses with an average of 3.5 or higher. Approval of the research topic by the instructor and the chairperson.

## German

## GERM 1010 Elementary German I

3 hours, 1 hour multimedia laboratory; 3 credits
First in a three-semester sequence for beginners and those who have had one year or less of high school study. Introduction to phonetics and writing systems. Development of communicative skills and cultural awareness through extensive classroom interaction and a variety of multimedia materials. (Not open to heritage speakers or to students who have completed more than one year of high school German.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

## GERM 1020 Elementary German II

3 hours, 1 hour multimedia laboratory; 3 credits
Second in the three-semester sequence. Continued development of reading, writing, speaking, listening, and cultural awareness through extensive classroom interaction, practice, and a variety of multimedia materials. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: German 1010 or permission of the chairperson.

## GERM 1610 German Literature in Translation

3 hours; 3 credits
Development of German literature from the eighteenth through the twentieth century. Lectures, readings, and discussions in English.

Prerequisite: English 1012 [2] or permission of the chairperson.

## GERM 2012 Intermediate Conversation for the Professions for Nonheritage Speakers

2 hours, 2 hours multimedia laboratory; 2 credits
A supplementary course providing conversational practice in career-oriented situations such as interviews, telephone conversations, taking and leaving messages, providing and obtaining information. May be taken concurrently with or independently of German *2010 [4]. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: German 1035 [3.2] or permission of the chairperson.

## GERM 2021 Integrated Language Skills

3 hours, 1 multimedia laboratory; 3 credits
Continued development of language skills and cultural understanding using a variety of authentic materials including film, video, and short literary texts. Class discussions, group activities, and team projects. Individual writing assignments with emphasis on accuracy and style. (Not open to students who have completed a course in German numbered 2024 or higher. The Department therefore recommends that 2021 be taken before any courses having a higher number.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: German 1030 or 1035 or the level 3 Regents
examination with a passing grade, or four years of high school German, or permission of the chairperson

## GERM 2024 Advanced Language Skills I

3 hours; 3 credits
Development of advanced language skills for nonheritage speakers; analytical practice and self-expression in the written and spoken language; use of authentic literary and nonliterary texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: German 1035 or permission of the chairperson.

## GERM 2030 Advanced Language Skills II

3 hours; 3 credits
Continued practice in advanced written expression and in textual analysis for heritage and nonheritage speakers; composition modeled on selected literary texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: German 2020 [11.1] or permission of the chairperson.

## GERM 2431 German for the Arts

## 3 hours; 3 credits

Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where German is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: German 2030 [11.12] or permission of the chairperson.

## GERM 2432 German for Business

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where German is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: German 2030 [11.12] or permission of the chairperson.

## GERM 2433 German for Criminal Justice

## 3 hours; 3 credits

Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where German is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: German 2030 [11.12] or permission of the chairperson.

## GERM 2435 German for the Media

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where German is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: German 2030 [11.12] or permission of the chairperson.

## GERM 2436 German for Social Sciences

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where German is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: German 2030 [11.12] or permission of the chairperson.

## GERM 2437 German for Social Work

## 3 hours; 3 credits

Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where German is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: German 2030 [11.12] or permission of the chairperson.

## GERM 3260 Literary Translation

3 hours; 3 credits
Practical and theoretical approaches to translating literary texts including poetry, plays, and narrative fiction. Analysis of selected published translations and of the cultural factors bearing upon the process of translation. Integration of resources available in the multimedia laboratory. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: GERM 2030 or permission of the chairperson.

## GERM 5070 Tutorial in Literature and Culture

1 hour conference, minimum 8 hours independent work§; 3 credits Study of a special topic at an advanced level. Periodic reports and a final paper or examination. Qualifies as a LOTE (Language Other

Than English) course for Pathways College Option purposes.
Prerequisite: junior or senior standing and 12 credits in advanced German courses with an average of 3.0 or higher. Approval of topic by instructor or chairperson.

## GERM 5084 Seminar

1 hour conference, minimum 8 hours independent work§; 3 credits Study of a literary topic, including but not limited to periods, genres, or major writers. Substantial paper in German. May not be taken concurrently with German 5085 [85]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: junior or senior standing and 15 credits in advanced German courses approved by the chairperson with an average of 3.5 or higher. Students may take this course for credit twice, but may not repeat topics.

## GERM 5085 Seminar and Senior Thesis

1 hour conference, minimum 8 hours independent work§; 3 credits Research thesis, written in German, on a literary, linguistic, or cultural topic. May not be taken concurrently with German 5084 [84.1]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: senior standing and 18 credits in advanced German courses with an average of 3.5 or higher. Approval of the research topic by the instructor and the chairperson.

## Haitian Creole

## CREO 1038 Basic Writing and Reading Skills for Heritage

## Speakers

3 hours, 1 hour multimedia laboratory; 3 credits
Fundamentals of writing and reading for students whose knowledge of Haitian Creole is limited to spoken communication. Emphasis on writing and the distinctions among various levels of dialect and language. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: permission of the chairperson.

## CREO *2048 Intermediate Writing and Reading Skills for Heritage Speakers

3 hours, 1 hour multimedia laboratory; 3 credits
Further development of writing and reading skills for students with basic knowledge of the structure of Haitian Creole. Continued practice in reading and understanding authentic literary and nonliterary texts on a variety of levels. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Haitian Creole 1038 [3.8] or permission of the chairperson.

## Italian

## ITAL *1010 Basic Language Skills I

3 hours, 1 hour multimedia laboratory; 3 credits
The first in a three-semester introductory sequence for beginners. Emphasis on basic social functions, simple conversation, readings, and writing. Introduction to the cultures where Italian is spoken. Qualifies as a LOTE (Language Other Than English) course for

Pathways College Option purposes.
Prerequisites: Open only to students with no prior experience with the language.
All other students must take the Brooklyn College language placement test.

## ITAL *1011 Italian Diction for Singers

3 hours; 3 credits
Fundamental course in Italian diction as sung in Italian musical repertoire. Reading comprehension, vocabulary, and grammar. (Not open to students who have completed Italian *1010 [1], 1.5, 1020 [2], or 1030 [3] at Brooklyn College.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: permission of the director of the Conservatory of Music.

## ITAL 1015 Intensive Elementary Italian I

5 hours, 1 hour multimedia laboratory; 4 credits The first course in an intensive two-semester sequence for beginners and those who have one year or less of high school study. Development of reading, writing, speaking, listening, and cultural awareness through classroom interaction and practice, utilizing a variety of multimedia materials. Designed for students wishing to proceed at an accelerated pace. Credit given only upon completion of Italian 1035 [3.2]. (Not open to heritage speakers or to students who are enrolled in or have completed Italian *1010 [1], Italian 1.5, or more than one year of high school Italian.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: none.

## ITAL *1020 Basic Language Skills II

3 hours, 1 hour multimedia laboratory; 3 credits Second in a three-semester introductory sequence. Continued emphasis on basic social functions, simple conversations, readings, and writing. Narration and description of past and future events. Increased understanding of the cultures where Italian is spoken. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian *1010 [1], or the appropriate score on the Brooklyn College online placement test, or permission of the chairperson

## ITAL *1030 Basic Language Skills III

3 hours, 1 hour multimedia laboratory; 3 credits
Third in a three-semester introductory sequence. Further emphasis on basic social functions and practice in longer, more complex conversations, readings, and writing on a broader range of familiar topics. Communication of needs, ideas, and emotions. Continued study of cultures where Italian is spoken. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian *1020 [2], or the appropriate score on the Brooklyn College online language placement test, or permission of the chairperson.

## ITAL 1031 Basic Conversation Workshop

1 hour, 2 hours multimedia laboratory; 1 credit

A supplementary course providing additional practice speaking Italian on everyday topics using authentic materials from a variety of contemporary media such as newspapers, magazines, radio, television, and film. For nonheritage speakers who have completed Italian *1030 [3], 1035 [3.2], or their equivalent. May be taken concurrently with or independently of Italian 1034 [3.4]. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian *1030 [3] or 1035 [3.2], or a passing grade on the level 3 Regents examination, or four years of high school study, or permission of the chairperson.

## ITAL 1034 Fundamentals of Reading and Writing for Nonheritage Speakers

2 hours, 1 hour multimedia laboratory; 2 credits
Review and further development of intermediate-level reading and writing skills with special attention to grammar and style. An optional transitional course designed to prepare students for Italian *2010 [4]. May be taken concurrently with Italian 1031 [3.6]. (Not open to heritage speakers or to students who have recently completed four years of high school Italian or are enrolled in or have completed Italian 1035 [3.2].) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian *1030 [3], or a passing grade on the level 3 Regents examination, or a significant time lag in language study at this level, or permission of the chairperson.

## ITAL 1035 Intensive Elementary Italian II

5 hours, 1 hour multimedia laboratory; 4 credits
Second in the two-semester intensive sequence. Continued development of reading, writing, speaking, listening, and cultural awareness through extensive classroom interaction, practice, and a variety of multimedia materials. Designed to prepare students for Italian *2010 [4]. (Not open to heritage speakers or to students who are enrolled in or have completed Italian *1010 [1], 1020 [2], or 1030 [3].) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 1015 [1.2] or permission of the chairperson.

## ITAL 1038 Basic Writing and Reading Skills for Heritage Speakers

3 hours, 1 hour multimedia laboratory; 3 credits
Fundamentals of writing and reading for students whose knowledge of Italian is limited to spoken communication. Emphasis on writing and the distinctions among various levels of dialect and language. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Permission of the chairperson.

## ITAL 1610 Italian Literature in Translation

3 hours; 3 credits
Survey of Italian literature from its origins to the present. Background lectures. Reading and discussion in English of representative masterpieces.

## ITAL 2012 Intermediate Conversation for the Professions for Nonheritage Speakers

2 hours, 2 hours multimedia laboratory; 2 credits
A supplementary course providing conversational practice in
career-oriented situations such as interviews, telephone conversations, taking and leaving messages, providing and obtaining information. May be taken concurrently with or independently of Italian *2010 [4]. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 1035 [3.2], 1034 [3.4], or 1031 [3.6], or permission of the chairperson

## ITAL 2015 Advanced Conversation

3 hours; 3 credits
This is an intensive course intended for students wishing to achieve fluency in conversational Italian. The course includes active use of the language, class discussions, oral reports on selected cultural topics, oral summaries of short stories and other Italian texts, as well as viewing of videos on contemporary Italy. Course conducted in Italian. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 1030 or department permission.

## ITAL *2018 Intermediate Writing and Reading Skills for Heritage Speakers

3 hours, 1 hour multimedia laboratory; 3 credits
Further development of writing and reading skills for students with basic knowledge of the structure of Italian. Continued practice in reading and understanding authentic literary and nonliterary texts on a variety of levels. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 1038 [3.8] or permission of the chairperson.

## ITAL 2021 Integrated Language Skills

3 hours, 1 multimedia laboratory hour; 3 credits Continued development of language skills and cultural understanding using a variety of authentic materials including film, video, and short literary texts. Class discussions, group activities, and team projects. Individual writing assignments with emphasis on accuracy and style. (Not open to students who have completed a course in Italian numbered 2024 or higher. The Department therefore recommends that 2021 be taken before any courses having a higher number.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 1030 or the appropriate score on the Brooklyn College online language placement test.

## ITAL 2024 Advanced Language Skills I

3 hours; 3 credits
Development of advanced language skills; analytical practice and self-expression in the written and spoken language; use of authentic literary and nonliterary texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 1030 or 2021, or the appropriate score on the Brooklyn College online language placement test, or permission of the chairperson

## ITAL 2030W Advanced Language Skills II

4 hours; 4 credits
Continued practice in advanced written expression and in textual analysis; composition modeled on selected literary texts. Writing-
intensive course. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: English 1012, Italian 1030 or 2018 or permission of the chairperson.

## ITAL 2120 Understanding Texts in Italian

## 3 hours; 3 credits

Development of reading and analytical skills in Italian. Short, authentic texts, both literary and nonliterary, representing diverse contemporary styles and genres. Discussions and frequent writing assignments using a variety of approaches and supplementary materials available in the multimedia laboratory. (Students who have completed Italian 3610 [17.50] or more advanced literature courses may take Italian 2120 [15.50] with the permission of the chairperson.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 1030 or permission of the chairperson. Corequisite: Italian *2018 [4.8], 2024, 2030W or permission of the chairperson.

## ITAL 2431 Italian for the Arts

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Italian is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2030W or permission of the chairperson.

## ITAL 2432 Italian for Business

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Italian is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2030W or permission of the chairperson.

## ITAL 2433 Italian for Criminal Justice

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Italian is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2030W or permission of the chairperson.

## ITAL 2435 Italian for the Media

## 3 hours; 3 credits

Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Italian is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2030W or permission of the chairperson.

## ITAL 2436 Italian for Social Sciences

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Italian is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2030W or permission of the chairperson.

## ITAL 2437 Italian for Social Work

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Italian is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2030W or permission of the chairperson.

## ITAL 2444 Internship in Italian International Studies

9 hours field work; 3 credits
A minimum of nine hours per week of supervised fieldwork in an approved professional international institution that is concerned with Italian cultural activities, diplomacy, trade, or banking. Scheduled conferences. Critical report written in Italian on the semester's experience. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 1030 or permission of the chairperson.

## ITAL 2510 The Italian Cultural Heritage

3 hours; 3 credits
The cultural experience of Italy and the Italian people. Literary texts from, and films about, major intellectual figures and culturalhistorical periods: Ancient Rome; Dante and the Middle Ages; Leonardo, Michelangelo and the Renaissance; the Risorgimento; the 20th century. Conducted in English. Readings and multimedia materials in English. Starting Fall 2019 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

## ITAL 3240 Translation for the Professions

## 3 hours; 3 credits

Practical and theoretical approaches to translating materials drawn from a variety of texts and to integrating translation resources available in the multimedia laboratory. (French 3240 [20.03] not open to students who have completed French 54.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2030W or permission of the chairperson.

## ITAL 3260 Literary Translation

3 hours; 3 credits
Practical and theoretical approaches to translating literary texts including poetry, plays, and narrative fiction. Analysis of selected published translations and of the cultural factors bearing upon the process of translation. Integration of resources available in the multimedia laboratory. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2030W or permission of the chairperson.

## ITAL 3290 Translation Practicum

One hour conference, minimum 9 hours independent work§; 3 credits
Individual translation project designed in consultation with a faculty supervisor and leading to a portfolio containing successive and final drafts. May be taken twice provided the project is different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 3240 or 3260 or permission of the chairperson.

## ITAL 3510 History of Italian Civilization

3 hours; 3 credits
A historical overview of the values, institutions, and cultural heritage of Italy from the origins to the mid-twentieth century. Discussions and frequent writing assignments using a variety of approaches and supplementary materials from the Italian print, broadcast, and electronic media. Field trips to museums and cultural events. May be taken concurrently with or after Italian *2018 [4.8], 2024, or 2030W. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 1030 or permission of the chairperson.

## ITAL 3515 Contemporary Italy

3 hours; 3 credits
An exploration of the major features of contemporary Italy from 1939 to the present with particular attention to developing an understanding of the concepts of cultural identity and difference within the changing European context. Discussions and frequent writing assignments using a variety of approaches and supplementary materials from the Italian print, broadcast, and electronic media. Field trips to museums and cultural events. May be taken concurrently with or after Italian *2018, 2024, or 2030 W. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 1030 or permission of the chairperson.

3 hours; 3 credits
An in-depth look at some of Italy's most important cities through a study of their culture, traditions, literature, and representation in films and documentaries. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 1030 or permission of the chairperson.

## ITAL 3525 Contemporary Italian Culture in America

3 hours; 3 credits
An exploration of the contemporary Italian-speaking community in the United States from 1945 to the present with particular attention to developing an understanding of the concepts of cultural identity. Discussions and frequent writing assignments using a variety of approaches and supplementary materials from the print, broadcast, and electronic media. Field trips to museums and cultural events. May be taken concurrently with or after Italian *2018, 2024, or 2030W. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 1030 or permission of the chairperson.

## ITAL 3610 Landmarks of Italian Literature

3 hours; 3 credits
An introductory course designed to familiarize students with major literary works in Italian within a chronological and cultural framework. Representative texts from the Italian-speaking world, providing an overview of Italian writngs that have shaped the lives of generations of readers. Frequent writing assignments in Italian to strengthen students' individual competencies. This core of texts, reviewed periodically by the department, serves as a foundation for advanced literature courses. (Not open to students who have completed Italian 18.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite or corequisite: Italian 2120 [15.50] or permission of the chairperson.

## ITAL 3620 Thematic Readings in Italian Poetry

3 hours; 3 credits
Representative selections from medieval times to the present within a specific thematic and cultural context. Course description available in department office prior to registration.Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2020 [11.1] or 2030W [11.12W] or 3610 [17.50] or permission ofthe chairperson

## ITAL 3621 Thematic Readings in the Italian Novel

3 hours; 3 credits
Representative works from the age of Enlightenment to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2020 [11.1] or 2030W [11.12W] or 3610 [17.50] or permission of the chairperson.

ITAL 3622 Thematic Readings in Italian Short Fiction
3 hours; 3 credits

Representative stories and short novels from medieval times to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2020 [11.1] or 2030W [11.12W] or 3610 [17.50] or permission of the chairperson.

## ITAL 3623 Thematic Readings in Italian Theater

3 hours; 3 credits
Representative works from the Renaissance to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2020 [11.1] or 2030W [11.12W] or 3610 [17.50] or permission of the chairperson.

## ITAL 3624 Thematic Readings in the Italian Essay

## 3 hours; 3 credits

Representative works of Italian expository prose from the Renaissance to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2020 [11.1] or 2030W [11.12W] or 3610
[17.50] or permission of the chairperson.

## ITAL 3710 Women in Italian Literature

3 hours; 3 credits
The image of women as expressed in selected Italian literary works. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2020 [11.1] or 2030W [11.12W] or 3610
[17.50] or permission of the chairperson.

## ITAL 3720 Autobiographical Literature in Italian

## 3 hours; 3 credits

Autobiographical fiction and nonfiction in Italian literature. Memoirs, letters, diaries, journals, confessions. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## ITAL 3730 Moral and Religious Themes in Italian Literature

3 hours; 3 credits
Religious beliefs and practices as expressed in selected Italian literary works. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## ITAL 3740 Historical and Social Visions in Italian Literature

3 hours; 3 credits
Italian history and/or society, past and present, as reflected in selected literary works. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2020 [11.1] or 2030W or 3610 [17.50] or permission ofthe chairperson

## ITAL 3810 Italian Literature and Film

3 hours; 3 credits
The relationship between Italian literary works and the films they inspired. Course description available in department office prior to registration. (Not open to students who have completed Italian [21].) This course is the same as Film 2121. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## ITAL 3915 Italian Literature and the Arts

3 hours; 3 credits
The relationship between Italian literary works and the visual and/or performing arts. Outside lectures, visits to exhibitions and/or museums, attendance at musical and/or theatrical performances. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## ITAL 4710 Writings of a Major Italian Author

3 hours; 3 credits
An in-depth, monographic study concentrating either on the opus of a major Italian writer or on one of the masterpieces of Italian literature. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 2020 [11.1] or 2030W or 3610 [17.50] and two courses from Tiers II and/or III, or permission of the chairperson.

## ITAL 4715 Dante's Divina Commedia

3 hours; 3 credits
An in-depth study of selections from Dante's Divina Commedia. (Not open to students who have completed Italian 53.1 or 53.2.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Italian 3610 [17.50] and two courses from Tiers II and/or III, or permission of the chairperson.

## ITAL 5070 Tutorial in Literature and Culture

1 hour conference, minimum 8 hours independent work§; 3 credits Study of a special topic at an advanced level. Periodic reports or a final paper or examination. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: junior or senior standing and 12 credits in advanced Italian courses with an average of 3.0 or higher. Approval of topic
by chairperson.

## Honors courses

## ITAL 5084 Seminar

1 hour conference, minimum 8 hours independent work§; 3 credits Study of a literary topic, including but not limited to periods, genres, or major writers. Substantial paper in Italian. May not be taken concurrently with Italian 5085 [85]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: junior or senior standing and 15 credits in advanced Italian courses approved by the chairperson with an average of 3.5 or higher. Students may take this course for credit twice, but may not repeat topics.

## ITAL 5085 Seminar and Senior Thesis

1 hour conference, minimum 8 hours independent work§; 3 credits Research thesis, written in Italian, on a literary, linguistic, or cultural topic. May not be taken concurrently with Italian 5084 [84.1]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: senior standing and 18 credits in advanced Italian courses with an average of 3.5 or higher. Approval of the research topic by the instructor and the chairperson

## Japanese

## JAPN 1010 Elementary Japanese I

3 hours, 1 hour multimedia laboratory; 3 credits
First in a two-semester sequence for beginners and those who have had one year or less of high school study. Introduction to phonetics and writing systems. Development of communicative skills and cultural awareness through extensive classroom interaction and a variety of multimedia materials. (Not open to heritage speakers or to students who have completed more than one year of high school Japanese.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: none.

## JAPN 1020 Elementary Japanese II

3 hours, 1 hour multimedia laboratory; 3 credits
Second in a two-semester sequence. Expanded acquisition of phonetics and writing systems. Development of communicative skills and cultural awareness through extensive classroom interaction and a variety of multimedia materials. Designed to prepare students for Japanese 1030. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Japanese 1010 or permission of the chairperson.

## JAPN 1030 Intermediate Japanese I

3 hours, 1 hour multimedia laboratory; 3 credits
First in a two-semester sequence for students who have completed Japanese 1010 and 1020 or the equivalent, or have had four years of high school study. Continued development of oral fluency and writing in social interaction and in systematic vocabulary building. Increased awareness of cultural diversity in areas where language is spoken. (Not open to heritage speakers or to students who have completed Japanese 3.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Japanese 1020 or permission of the chairperson.

## JAPN 2010 Intermediate Japanese II

3 hours, 1 hour multimedia laboratory; 3 credits
Second in a two-semester sequence for students who have completed Japanese 1030 or its equivalent. Further refinement of oral fluency and writing in social interaction and in systematic vocabulary building. Expanded awareness of cultural diversity through study of literary and nonliterary texts and other media of communication. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Japanese 1030 or permission of the chairperson.

## Korean

## KORE 1010 Elementary Korean I

3 hours, 1 hour multimedia laboratory; 3 credits
First in a two-semester sequence for beginners. Development of communicative skills and cultural awareness through extensive classroom interaction and a variety of multimedia materials. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisites: Only open to students with no prior experience with the language. All other students must take the Brooklyn College language placement test.

## KORE 1020 Elementary Korean II

3 hours, 1 hour multimedia laboratory; 3 credits Second in a two-semester sequence. Expanded acquisition of phonetics and the Hangul writing system. Further development of verbal and written communicative skills and cultural awareness through extensive classroom interaction and a variety of multimedia materials. Designed to prepare students for KORE 1030. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: KORE 1010, the appropriate score on the Brooklyn College language placement test, or permission of the chairperson

## Modern Greek

## GRKM 1038 Basic Writing and Reading Skills for Heritage Speakers

3 hours, 1 hour multimedia laboratory; 3 credits
Fundamentals of writing and reading for students whose knowledge of modern Greek is limited to spoken communication. Emphasis on writing and the distinctions among various levels of dialect and language. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: permission of the chair

## GRKM 2048 Intermediate Writing and Reading Skills for Heritage Speakers

3 hours, 1 hour multimedia laboratory; 3 credits
Further development of writing and reading skills for students with basic knowledge of the structure of modern Greek. Continued practice in reading and understanding authentic literary and nonliterary texts on a variety of levels. Qualifies as a LOTE
(Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Modern Greek 1038 [3.8] or permission of the chairperson.

## Portuguese

## PORT 1010 Elementary Portuguese I

3 hours, 1 hour multimedia laboratory; 3 credits The first course in a three-semester sequence for beginners and those who have one year or less of high school study. Development of reading, writing, speaking, listening, and cultural awareness through classroom interaction and practice, utilizing a variety of multimedia materials. (Not open to heritage speakers or to students who have completed more than one year of high school Portuguese.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

## PORT 1020 Elementary Portuguese II

3 hours, 1 hour multimedia laboratory; 3 credits Third in the three-semester sequence. Continued development of reading, writing, speaking, listening, and cultural awareness through extensive classroom interaction, practice, and a variety of multimedia materials. Designed to prepare students for Portuguese 2010. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Portuguese 1010 or permission of the chairperson

## PORT 2010 Intermediate Language Skills for Nonheritage

## Speakers

3 hours, 1 hour multimedia laboratory; 3 credits Continued development of language skills and cultural understanding using a variety of authentic materials including film, video, and short literary texts. Class discussions, group activities, and team projects. Individual writing assignments with emphasis on accuracy and style. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Portuguese 1035 [3.2], or the level 3 Regents examination with a passing grade, or four years of high school Portuguese, or permission of the chairperson.

## PORT *2012 Intermediate Conversation for the Professions for Nonheritage Speakers

2 hours, 2 hours multimedia laboratory; 2 credits A supplementary course providing conversational practice in career-oriented situations such as interviews, telephone conversations, taking and leaving messages, providing and obtaining information. May be taken concurrently with or independently of Portuguese 2010 [4]. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Portuguese 1035 [3.2] or permission of the chairperson.

## Russian

3 hours, 1 hour multimedia laboratory; 3 credits
First in a two-semester sequence for beginners and those who have had one year or less of high school study. Introduction to phonetics and writing systems. Development of communicative skills and cultural awareness through extensive classroom interaction and a variety of multimedia materials. (Not open to heritage speakers or to students who have completed more than one year of high school Russian.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: none.

## RUSS 1020 Elementary Russian II

3 hours, 1 hour multimedia laboratory; 3 credits
Second in a two-semester sequence. Expanded acquisition of phonetics and writing systems. Development of communicative skills and cultural awareness through extensive classroom interaction and a variety of multimedia materials. Designed to prepare students for Russian 1030. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 1010 or permission of the chairperson.

## RUSS 1030 Intermediate Russian I

3 hours, 1 hour multimedia laboratory; 3 credits
First in a two-semester sequence for students who have completed Russian 1010 and 1020, or have had four years of high school study. Continued development of oral fluency and writing in social interaction and in systematic vocabulary building. Increased awareness of cultural diversity in areas where language is spoken. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 1020 or permission of the chairperson.

## RUSS 1038 Basic Writing and Reading Skills for Heritage Speakers

3 hours, 1 hour multimedia laboratory; 3 credits Fundamentals of writing and reading for students whose knowledge of Russian is limited to spoken communication. Emphasis on spelling, word order, and verb tenses, based on authentic literary and nonliterary texts. Practice in written selfexpression. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: permission of the chairperson.

## RUSS 1510 Russian Civilization, with Emphasis on the Soviet Period

3 hours; 3 credits
Religion, education, and literature and the other creative arts in the Soviet Union in relation to their development in prerevolutionary Russia. Conducted in English.

## RUSS 1610 Russian Literature in Translation

3 hours; 3 credits
Selected masterpieces of Russian literature. Background lectures.
Readings and discussions in English.
Prerequisite: English 1012 [2] or permission of the chairperson.

3 hours, 1 hour multimedia laboratory; 3 credits
Further development of writing and reading skills for students with basic knowledge of the structure of Russian. Continued practice in reading and understanding authentic literary and nonliterary texts on a variety of levels. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 1038 [3.8] or permission of the chairperson.

## RUSS 2021 Intermediate Russian II

3 hours, 1 hour multimedia laboratory; 3 credits
Second in a two-semester sequence for students who have completed Russian 1030. Further refinement of oral fluency and writing in social interaction and in systematic vocabulary building. Expanded awareness of cultural diversity through study of literary and nonliterary texts and other media of communication. (Not open to students who have completed a course in Russian numbered 2024 or higher. The Department therefore recommends that 2021 be taken before any courses having a higher number.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 1030 or permission of the chairperson.

## RUSS 2024 Advanced Language Skills I

3 hours; 3 credits
Development of advanced language skills for nonheritage speakers; analytical practice and self-expression in the written and spoken language; use of authentic literary and nonliterary texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 1030 or 2018 or permission of the chairperson.

## RUSS 2030W Advanced Language Skills II

## 3 hours; 3 credits

Continued practice in advanced written expression and in textual analysis for heritage and nonheritage speakers; composition modeled on selected literary texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: English 1012, Russian 2018 [4.8] or permission of the chairperson.

## RUSS 2120W Understanding Texts in Russian

## 3 hours; 3 credits

Development of reading and analytical skills in Russian. Short, authentic texts, both literary and nonliterary, representing diverse contemporary styles and genres. Discussions and frequent writing assignments using a variety of approaches and supplementary materials available in the multimedia laboratory. Rewrites obligatory. A paper of a minimum of ten pages will be produced by the end of the semester. (Not open to students who have completed Russian 3610 [17.50] or more advanced literature courses.) Writing-intensive course. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: English 1012 [2], Russian 1030 or permission of the chairperson.
Corequisite: Russian 2018 [4.8] or 2024 or permission of the chairperson

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Russian is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2030W [11.12] or permission of the chairperson.

## RUSS 2432 Russian for Business

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Russian is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2030W [11.12] or permission of the chairperson.

## RUSS 2433 Russian for Criminal Justice

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Russian is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2030W [11.12] or permission of the chairperson.

## RUSS 2435 Russian for the Media

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Russian is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2030W [11.12] or permission of the chairperson.

## RUSS 2436 Russian for Social Sciences

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Russian is routinely used. Designed to familiarize students with
common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2030W [11.12] or permission of the chairperson.

## RUSS 2437 Russian for Social Work

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Russian is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2030W [11.12] or permission of the chairperson.

## RUSS 3240 Translation for the Professions

## 3 hours; 3 credits

Practical and theoretical approaches to translating materials drawn from a variety of texts and to integrating translation resources available in the multimedia laboratory. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2030W [11.12] or permission of the chairperson.

## RUSS 3260 Literary Translation

3 hours; 3 credits
Practical and theoretical approaches to translating literary texts including poetry, plays, and narrative fiction. Analysis of selected published translations and of the cultural factors bearing upon the process of translation. Integration of resources available in the multimedia laboratory. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2030W or permission of the chairperson.

## RUSS 3290 Translation Practicum

One hour conference, minimum 9 hours independent work§; 3 credits
Individual translation project designed in consultation with a faculty supervisor and leading to a portfolio containing successive and final drafts. May be taken twice provided the project is different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 3240 or 3260 or permission of the chairperson.

## RUSS 3510 History of Russian Civilization

3 hours; 3 credits
A historical overview of the values, institutions, and cultural heritage of Russia and East-Slavic cultures from their origins to the mid-twentieth century. Discussions and frequent writing
assignments using a variety of approaches and supplementary materials from Russian broadcast and electronic media. Field trips to museums and cultural events. May be taken concurrently with or after Russian 2018 [4.8] or 2024. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 1030 or permission of the chairperson.

## RUSS 3515 Contemporary Russia

3 hours; 3 credits
An exploration of the major features of contemporary Russian society and the Russian-speaking parts of the world, which arose due to the expansion of the Soviet state, from 1917 to the present, with particular attention to developing an understanding of the concepts of cultural identity and difference within the changing European and Central Asian context. Discussions and frequent writing assignments using a variety of approaches and supplementary materials from the Russian print, broadcast, and electronic media. Field trips to museums and cultural events. May be taken concurrently with Russian 2018 [4.8] or 2024. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian1030 or permission of the chairperson.

## RUSS 3610 Landmarks of Russian Literature

3 hours; 3 credits
An introductory course designed to familiarize students with major literary works in Russian within a chronological and cultural framework. Representative texts from the Russianspeaking world, providing an overview of writings that have shaped the lives of generations of readers. Frequent writing assignments in Russian to strengthen students' individual competencies. This core of texts, reviewed periodically by the department, serves as a foundation for advanced literature courses. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 1030 or 2018 [4.8] or permission of the chairperson.

## RUSS 3620 Thematic Readings in Russian Poetry

3 hours; 3 credits
Representative selections from medieval times to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## RUSS 3621 Thematic Readings in the Russian Novel

3 hours; 3 credits
Representative works from the great age of the Russiannovel to the present, within a specific thematic and culturalcontext. Course description available in department officeprior to registration. Students may take the course twiceprovided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2020 [11.1] or 2030 W or 3610 [17.50] or permission ofthe chairperson

## RUSS 3622 Thematic Readings in Russian Short Fiction

## 3 hours; 3 credits

Representative stories and short novels from early times to the present within a specific thematic and cultural context. Course description available in the department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## RUSS 3623 Thematic Readings in Russian Theater

3 hours; 3 credits
Representative drama and theater from early times to the present within a specific thematic and cultural context. Course description available in the department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## RUSS 3624 Thematic Readings in the Russian Essay

3 hours; 3 credits
Representative works of Russian expository prose from the Middle Ages to the present within a specific thematic and cultural context. Course description available in department prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## RUSS 3710 Women in Russian Literature

## 3 hours; 3 credits

The image of women as expressed in selected Russian literary works. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## RUSS 3720 Autobiographical Literature in Russian

3 hours; 3 credits
Autobiographical fiction and nonfiction in Russian literature. Memoirs, letters, diaries, journals, confessions. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson

## RUSS 3730 Moral and Religious Themes in Russian Literature

3 hours; 3 credits
Religious beliefs and practices as expressed in selected Russian literary works. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## RUSS 3740 Historical and Social Visions in Russian Literature

3 hours; 3 credits
Russian history and/or society, past and present, as reflected in selected literary works. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## RUSS 3810 Russian Literature and Film

3 hours; 3 credits
The relationship between Russian literary works and the films they inspired. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## RUSS 3910 Reading Russian Historians

## 3 hours; 3 credits

Historical literature that goes back to the eighteenth-century. Authors covered: Karamzin, Shcherbatov, Tarle, Tolstoy. In Russian. If enough students without Russian are interested, translations are available, but see Professor Barran as soon as possible. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

## RUSS 3915 Russian Literature and the Arts

3 hours; 3 credits
The relationship between Russian literary works and the visual and/or performing arts. Outside lectures, visits to exhibitions and/or museums, attendance at musical and/or theatrical performances. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## RUSS 4710 Writings of a Major Russian Author

## 3 hours; 3 credits

An in-depth, monographic study concentrating either on the opus of a major Russian writer or on one of the masterpieces of Russian literature. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 2020 [11.1] or 2030 W or 3610 [17.50] and two courses from Tiers II and/or III, or permission of the chairperson.

## RUSS 4715 Tolstoy's War and Peace

3 hours; 3 credits
An in-depth study of Tolstoy's War and Peace. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Russian 3610 [17.50] and two courses from Tiers II and/or III, or permission of the chairperson.

## RUSS 5070 Tutorial in Literature and Culture

1 hour conference, minimum 8 hours independent work§; 3 credits Study of a special topic at an advanced level. Periodic reports and a final paper or examination. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: junior or senior standing and 12 credits in advanced Russian courses with an average of 3.0 or higher. Approval of topic by chairperson.

## Honors courses

## RUSS 5084 Seminar

1 hour conference, minimum 8 hours independent work§; 3 credits Study of a literary topic, including but not limited to periods, genres, or major writers. Substantial paper in Russian. May not be taken concurrently with Russian 5085 [85]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: junior or senior standing and 15 credits in advanced Russian courses approved by the chairperson with an average of 3.5 or higher. Students may take this course for credit twice, but may not repeat topics.

## RUSS 5085 Seminar and Senior Thesis

1 hour conference, minimum 8 hours independent work\&; 3 credits Research thesis, written in Russian, on a literary, linguistic, or cultural topic. May not be taken concurrently with Russian 5084 [84.1]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: senior standing and 18 credits in advanced Russian courses with an average of 3.5 or higher. Approval of the research topic by the instructor and the chairperson.

## Spanish

## SPAN *1010 Basic Language Skills I

3 hours, 1 hour multimedia laboratory; 3 credits
The first in a three-semester introductory sequence for beginners. Emphasis on basic social functions, simple conversation, readings, and writing. Introduction to the cultures where Spanish is spoken. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisites: Open only to students with no prior experience with the language. All other students must take the Brooklyn College language placement test.

## SPAN 1011 Basic Language Skills I

3 hours, 1 hour multimedia laboratory; 3 credits The first in a six-semester introductory sequence for high school students who have had no prior instruction in Spanish. Emphasis on basic social functions, simple conversation, readings, and writing. Introduction to the cultures where Spanish is spoken. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

## SPAN 1012 Basic Language Skills I

3 hours, 1 hour multimedia laboratory; 3 credits
The second in a six-semester introductory sequence for high school students who have had no prior instruction in Spanish. Emphasis on basic social functions, simple conversation, readings, and writing. Introduction to the cultures where Spanish is spoken. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

## SPAN *1015 Intensive Elementary Spanish

5 hours recitation, 1 hour laboratory; 4 credits
First in a two-semester intensive sequence for beginners and those who have had one year or less of high school study. Development of reading, writing, speaking, listening, and cultural awareness through extensive classroom interaction, practice, and a variety of multimedia materials. Designed for students wishing to proceed at an accelerated pace. Credit given only upon completion of Spanish *1035 [3.2]. (Not open to heritage speakers or to students who are enrolled in or have completed Spanish *1010 [1] or 1310 [1.5] or more than one year of high school Spanish.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

## SPAN *1020 Basic Language Skills II

3 hours, 1 hour multimedia laboratory; 3 credits Second in a three-semester introductory sequence. Continued emphasis on basic social functions, simple conversations, readings, and writing. Narration and description of past and future events. Increased understanding of the cultures where Spanish is spoken. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish *1010 [1], or the appropriate score on the Brooklyn College online placement test, or permission of the chairperson.

## SPAN 1021 Basic Language Skills II

3 hours, 1 hour multimedia laboratory; 3 credits
The third in a six-semester introductory sequence. Continued emphasis on basic social functions, simple conversations, readings, and writing. Narration and description of past and future events. Increased understanding of the cultures where Spanish is spoken. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1012 [1.12] or permission of the chairperson.

## SPAN 1022 Basic Language Skills II

3 hours, 1 hour multimedia laboratory; 3 credits
The fourth in a six-semester introductory sequence. Continued emphasis on basic social functions, simple conversations, readings, and writing. Narration and description of past and future events. Increased understanding of the cultures where Spanish is spoken. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1021 [2.11] or permission of the chairperson.

## SPAN *1030 Basic Language Skills III

3 hours, 1 hour multimedia laboratory; 3 credits
Third in a three-semester introductory sequence. Further
emphasis on basic social functions and practice in longer, more complex conversations, readings, and writing on a broader range of familiar topics. Communication of needs, ideas, and emotions. Continued study of cultures where Spanish is spoken. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish *1020 [2], or the appropriate score on the Brooklyn College online placement test, or permission of the chairperson.

## SPAN 1031 Basic Language Skills III

3 hours, 1 hour multimedia laboratory; 3 credits
The fifth in a six-semester introductory sequence. Further emphasis on basic social functions and practice in longer, more complex conversations, readings, and writing on a broader range of familiar topics. Communication of needs, ideas, and emotions. Continued study of cultures where Spanish is spoken. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1022 [2.12] or permission of the chairperson.

## SPAN 1032 Basic Language Skills III

3 hours, 1 hour multimedia laboratory; 3 credits The sixth in a six-semester introductory sequence. Further emphasis on basic social functions and practice in longer, more complex conversations, readings, and writing on a broader range of familiar topics. Communication of needs, ideas, and emotions. Continued study of cultures where Spanish is spoken. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1031 [3.11] or permission of the chairperson.

## SPAN *1034 Fundamentals of Reading and Writing for Nonheritage Speakers

2 hours recitation, 1 hour multimedia laboratory; 2
Review and further development of intermediate-level reading and writing skills with special attention to grammar and style. An optional transitional course designed to prepare students for Spanish *2010 [4]. May be taken concurrently with Spanish 2011 [3.6]. (Not open to heritage speakers or to students who have recently completed four years of high school Spanish or are enrolled in or have completed Spanish *1035 [3.2].) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish *1030 [3], or a passing grade on the level 3 Regents examination, or a significant time lag in language study at this level, or permission of the chairperson.

## SPAN 1035 Intensive Elementary Spanish II

5 hours, 1 hour multimedia laboratory; 4 credits
Second in a two-semester intensive sequence. Continued development of reading, writing, speaking, listening, and cultural awareness through extensive classroom interaction, practice, and a variety of multimedia materials. Designed to prepare students for Spanish *2010 [4]. (Not open to heritage speakers or to students who are enrolled in or have completed Spanish *1010 [1], 1310 [1.5], 1020 [2], 1030 [3], or 3.7.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish *1310 [1.5] or permission of the chairperson.

## SPAN 1038 Basic Writing and Reading Skills for Heritage Speakers

3 hours recitation, 1 hour multimedia laboratory; 3 credits Fundamentals of writing and reading for students whose knowledge of Spanish is limited to spoken communication. Emphasis on writing and the distinctions among various levels of dialect and language. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: permission of the chairperson.

## SPAN *1310 Elementary Spanish for Teachers of Other Languages

3 hours, 2 hours multimedia laboratory; 3 credits
Fundamentals of the Spanish language for teachers with a background and experience in second-language acquisition. Essential grammar, authentic materials, self-expression. Intensive individual practice in multimedia laboratory. Offered only at the Brooklyn College Summer Institute for Teachers in Madrid, Spain. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

## SPAN *1320 Intermediate Spanish for Teachers of Other Languages

3 hours, 2 hours multimedia laboratory; 3 credits
Intermediate Spanish language for teachers with a background and experience in second-language acquisition. Review of grammar, short literary texts, written and oral expression. Intensive individual practice in multimedia laboratory. Offered only at the Brooklyn College Summer Institute for Teachers in Madrid, Spain. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish *1310 [1.5] or permission of the chairperson.

## SPAN *1610 Spanish-American Literature in Translation

3 hours; 3 credits
Selected masterpieces of Spanish-American literature. Background lectures. Reading and discussion in English.

Prerequisite: English 1012 [2] or permission of the chairperson.

## SPAN *2011 Basic Conversation Workshop

1 hour recitation, 2 hours multimedia laboratory; 1 credit A supplementary course providing additional practice speaking Spanish on everyday topics using authentic materials from a variety of contemporary media such as newspapers, magazines, radio, television, and film. For nonheritage speakers who have completed Spanish * 1030 [3], 1035 [3.2], or their equivalent. May be taken concurrently with or independently of Spanish *1034 [3.4]. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish *1030 [3] or 1035 [3.2], or a passing grade on the level 3 Regents examination, or four years of high school study, or permission of the chairperson.

## SPAN 2012 Intermediate Conversation for the Professions for Nonheritage Speakers

2 hours, 2 hours multimedia laboratory; 2 credits A supplementary course providing conversational practice in career-oriented situations such as interviews, telephone conversations, taking and leaving messages, providing and obtaining information. May be taken concurrently with or
independently of Spanish *2010 [4]. (Not open to heritage speakers.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1035 [3.2], 1034 [3.4], or 2011 [3.6], or permission of the chairperson.

## SPAN *2018 Intermediate Writing and Reading Skills for Heritage Speakers

3 hours, 1 hour multimedia laboratory; 3 credits
Further development of writing and reading skills for students with basic knowledge of the structure of Spanish. Continued practice in reading and understanding authentic literary and nonliterary texts on a variety of levels. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1038 [3.8] or permission of the chairperson.

## SPAN 2021 Integrated Language Skills

3 hours, 1 multimedia laboratory hour; 3 credits Continued development of language skills and cultural understanding using a variety of authentic materials including film, video, and short literary texts. Class discussions, group activities, and team projects. Individual writing assignments with emphasis on accuracy and style. (Not open to students who have completed a course in Spanish numbered 2024 or higher. The Department therefore recommends that 2021 be taken before any courses having a higher number.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1030 or the appropriate score on the Brooklyn College online placement test.

## SPAN 2024 Advanced Language Skills I

## 3 hours; 3 credits

Development of advanced language skills; analytical practice and self-expression in the written and spoken language; use of authentic literary and nonliterary texts. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1030 or 2018 or 2021, or the appropriate score on the Brooklyn College online placement test, or permission of the chairperson

## SPAN 2025 Tutorial in Writing

## 1 hour; 1 credit

Development of proficiency in written expression with attention to the particular needs of the specific student. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1], 2030W [11.12W], or 2110 [12.1].

## SPAN 2030W Advanced Language Skills II

## 4 hours; 4 credits

Continued practice in advanced written expression and in textual and linguistic analysis; composition modeled on selected literary texts. Writing-intensive course. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: English 1012, Spanish 1030 or 2018 or permission of the chairperson.

## SPAN 2110 Spanish Composition

3 hours; 3 credits
Practice in composition and translation. Problems in style. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1030 or 2018 or permission of the chairperson.

## SPAN 2115 Concurrent Workshop in Written and Oral SelfExpression

3 hours, 1 hour conference; 3 credits
Further enhancement of intermediate and advanced communication skills for personal and professional development and in conjunction with materials studied in a linked content course. Individualized attention according to level of oral and written proficiency of each student. Frequent writing assignments and revisions, journals, oral reports, final portfolio. Offered only at the Brooklyn College Summer Institute in Madrid, Spain, and only in conjunction with a previously specified content course. Students may take the course twice with permission of department chairperson but may not repeat topics. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Permission of the chairperson.

## SPAN 2120 Understanding Texts in Spanish

3 hours; 3 credits
Development of reading and analytical skills in Spanish. Short, authentic texts, both literary and nonliterary, representing diverse contemporary styles and genres. Discussions and frequent writing assignments using a variety of approaches and supplementary materials available in the multimedia laboratory. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1030 or permission of the chairperson. Corequisite: Spanish *2018 [4.8], 2024, 2030W or permission of the chairperson.

## SPAN 2204 Global Spanish: From Imperial Conquests to Latinx Diasporas

3 hours; 3 credits
Examination of the history and present-day realities of the diverse cultures comprising the Spanish-speaking world: Spain, Latin America and the Caribbean, Spanish-speaking Africa, and Latinx populations. Topics include language and empire, colonialism, economic and social structures of power, religion, the role of women, racial and ethnic identity, migration and immigration, and the role of the artist in society. (Not open to students who have completed Core Curriculum 3204.) 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement.

Prerequisite: English 1010 or permission of the department and junior standing.

## SPAN 2431 Spanish for the Arts

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Spanish is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive
practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2030W [11.12] or permission of the chairperson.

## SPAN 2432 Spanish for Business

## 3 hours; 3 credits

Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Spanish is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising fromcross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authenticmaterials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2030W [11.12] or permission of the chairperson

## SPAN 2433 Spanish for Criminal Justice

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Spanish is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2030W [11.12] or permission of the chairperson.

## SPAN 2435 Spanish for the Media

## 3 hours; 3 credits

Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Spanish is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2030W [11.12] or permission of the chairperson.

## SPAN 2436 Spanish for Social Sciences

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Spanish is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2030W [11.12] or permission of the chairperson.

## SPAN 2437 Spanish for Social Work

3 hours; 3 credits
Acquisition of the language skills, terminology, and procedures necessary to function in one or more specialized areas where Spanish is routinely used. Designed to familiarize students with common interactions within the professional environment and with problems arising from cross-cultural misunderstandings. Intensive practice in speaking and writing. Reading and discussion of authentic materials related to the topic. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2030W [11.12] or permission of the chairperson.

## SPAN 2440 Spanish Language and Cultural Competency for Health Personnel I

3 hours, 3 credits
Knowledge of the basic structures of the Spanish language and the specialized medical vocabulary needed to communicate effectively with Spanish-speaking patients in a variety of health care situations. Cultural readings in Spanish and English and interview techniques emphasize the health beliefs of Spanish-speaking countries and Spanish-speaking communities within the United States. Appropriate for all health-related disciplines. Course is taught in Spanish and English. Not the equivalent of Spanish *1010 [1]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

## SPAN 2445 Spanish Language and Cultural Competency for Health Personnel II

3 hours, 3 credits
Knowledge of the intermediate level structures of the Spanish language and the specialized medical vocabulary needed to communicate effectively with Spanish-speaking patients in a variety of health care situations. Cultural readings in Spanish and English and interview techniques emphasize the health beliefs of Spanishspeaking countries and Spanish-speaking communities within the United States. Appropriate for all health-related disciplines. Course is taught in Spanish and English. Not the equivalent of Spanish *1020 [2]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

## SPAN 2910 Spanish and Latin American Film

3 hours lecture, 1 hour multimedia laboratory; 3 credits The development of written and conversational skills using recent Spanish, Latin American, and Latino films that offer the student a broad introduction to contemporary Hispanic cultures. Designed for intermediate and advanced students who want to achieve fluency in listening, speaking, and writing. Also open to other students who are interested in deepening their knowledge of Latin America and Spain and of their current social contradictions and political debates. Class is taught in Spanish. Students will curate a film festival as part of the class. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite or Co-requisite: Spanish 1030 or permission of the chairperson

## SPAN 2915 Exploring Hispanic Cultures Through the Press

1 hour lecture, 2 hours language laboratory; 2 credits Improvement of oral skills while learning about current issues in Spain and Latin America. Readings of current news articles dealing with political issues, using Blackboard, oral presentations, and a weekly group discussion. Assignments match student's specialization or interests, in order to provide a vocabulary and the oral and writing skills that will be useful for professional careers. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1030 [3]

## SPAN 2950 Children's and Young Adult Literature

3 hours; 3 credits
Latin American, Caribbean and Latinx children's and young adult literature, poetry and songs, the history of children's books, picture books and their illustrators, and traditional storytelling (fables, fairy tales, folktales, myths, and parables); bilingualism in literature, reading culturally relevant texts, culturally sustaining pedagogy, translanguaging in literature. Course will be taught in Spanish. This course is the same as CHST 2950

Prerequisite or Corequisite: Spanish 1030 or a level 5 on the Brooklyn College online language placement test or permission of the chairperson.

## SPAN 3240 Translation for the Professions

3 hours; 3 credits
Practical and theoretical approaches to translating materials drawn from a variety of texts and to integrating translation resources available in the multimedia laboratory. (French 3240 [20.03] not open to students who have completed French 54.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: SPAN 2030W [11.12] or permission of the chairperson.

## SPAN 3260 Literary Translation

3 hours; 3 credits
Practical and theoretical approaches to translating literary texts including poetry, plays, and narrative fiction. Analysis of selected published translations and of the cultural factors bearing upon the process of translation. Integration of resources available in the multimedia laboratory. (Not open to students who have completed Spanish 54.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: SPAN 2030W or permission of the chairperson.

## SPAN 3290 Translation Practicum

One hour conference, minimum 9 hours independent work§; 3 credits
Individual translation project designed in consultation with a faculty supervisor and leading to a portfolio containing successive and final drafts. May be taken twice provided the project is different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: SPAN 3240 or 3260 or permission of the chairperson.

## SPAN 3320 Regional Variations in Language

3 hours; 3 credits
Recent developments in linguistic expression, both oral and written, in a diversity of nations and societies. The foundations of language in its country of origin and its subsequent expansion throughout the world. Emphasis on regional similarities and differences in pronunciation, lexicon, syntax, and usage through the analysis of contemporary texts, films, television, and musical lyrics, as well as materials available on the Internet. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: SPAN 2020 [11.1] or 11.12 or 3610 [17.50] or permission
of the chairperson.

## SPAN 3390 Spanish in the United States

3 hours; 3 credits
Socio-historical introduction to Spanish in the US and to the varieties of Spanish spoken in the United States. Examination of the evolution of aspects of the morphosyntactic, phonological, and lexical components of the Spanish spoken by US communities. Exploration of sociolinguistic concepts such as codeswitching, translanguaging, linguistic variation, language and dialect contact, language change, language attitudes, and language policy paying special attention to how these concepts manifest in the US context. All lectures and class discussions will be conducted in Spanish. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: SPAN 2020 or $2030 W$ or 3610 or permission of the chairperson.

## SPAN 3510 History of Spanish Civilization

## 3 hours; 3 credits

A historical overview of the values, institutions, and cultural heritage of Spain from its origins to the mid-twentieth century. Discussions and frequent writing assignments using a variety of approaches and supplementary materials from the Spanish print, broadcast, and electronic media. Field trips to museums and cultural events. May be taken concurrently with or after Spanish *2018 [4.8], 2024 , or 2030W. (Not open to students who have completed Spanish 50 or 51.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1030 or permission of the chairperson.

## SPAN 3515 Contemporary Spain

## 3 hours; 3 credits

An exploration of the major features of contemporary Spain from 1939 to the present with particular attention to developing an understanding of the concepts of cultural identity and difference within the changing European context. Discussions and frequent writing assignments using a variety of approaches and supplementary materials from the Spanish print, broadcast, and electronic media. Field trips to museums and cultural events. May be taken concurrently with or after Spanish *2018 2024, or 2030W. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1030 or permission of the chairperson.

## SPAN 3520 History of Latin American Cultures

3 hours; 3 credits

A historical overview of the cultural heritage of Latin America from the Pre-Columbian era, the conquest and colonialperiods, to independence in the nineteenth century and the Spanish-American War of 1898. The creation of the multiple New World identities that emerged in the region from these historical events. Discussions and frequent writing assignments using a variety of approaches and supplementary materials from the print, broadcast, and electronic media. Field trips to museums and cultural events.
May be taken concurrently with or after Spanish *2018 [4.8], 2024 or 2030W. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1030 or permission ofthe chairperson

## SPAN 3525 Contemporary Latin American Cultures

3 hours; 3 credits
An exploration of the contemporary Latin American world from 1898 to the present with particular attention to developing an understanding of the concepts of multicultural identity in the Americas. Discussions and frequent writing assignments using a variety of approaches and supplementary materials from the print, broadcast, and electronic media. Field trips to museums and cultural events. May be taken concurrently with or after Spanish *2018 [4.8], 2024 or 2030W. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1030 or permission of the chairperson.

## SPAN 3565 Contemporary Cultures of the Rio de la Plata

## 3 hours; 3 credits

An examination of the role of geography, history and demography in the development of regional and national cultures in Argentina and Uruguay. Focus on the role of immigration in that process, and on integration of immigrant groups into the traditional societies of this region, as represented in their literary works. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish *2010 [4] or permission of the chairperson.

## SPAN 3610 Landmarks of Spanish and LatinAmerican

 Literatures3 hours; 3 credits
An introductory course designed to familiarize students with major literary works in Spanish within a chronologicaland cultural framework. Representative texts from the Spanish-speaking world, providing an overview of Spanish and Latin American writings that have shaped the lives of generations of readers. Frequent writing assignments in Spanish to strengthen students' individual competencies. This core of texts, reviewed periodically by the department, serves as a foundation for advanced literature courses. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 1030 or 2018 [4.8] or permission of the chairperson

## SPAN 3611 Readings in Medieval Spanish Literature

3 hours; 3 credits
A study of the seminal works of Spanish literature from the Poem of the Cid to the Celestina. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish *2010 [4] or 2018 [4.8].

## SPAN 3620W Thematic Readings in Spanish Poetry

4 hours; 3 credits
Representative selections from medieval times to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Writing-intensive section. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson; English *1012 [2].

## SPAN 3621 Thematic Readings in the Spanish Novel

3 hours; 3 credits
Representative works from the Golden Age to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## SPAN 3622 Thematic Readings in Spanish Short Fiction

3 hours; 3 credits
Representative stories and short novels from medieval times to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## SPAN 3623 Thematic Readings in Spanish Theater

3 hours; 3 credits
Representative works from the Golden Age to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## SPAN 3624 Thematic Readings in the Spanish Essay

3 hours; 3 credits
Representative works of Spanish expository prose from the Middle Ages to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## SPAN 3625 Thematic Readings in Spanish Poetry

3 hours; 3 credits
Representative selections from medieval times to the present
within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## SPAN 3627W Thematic Readings in Spanish Theater

## 4 hours; 3 credits

Representative works from the Golden Age to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice, provided the theme and content are different. Writing-intensive section. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or $2030 W$ or 3610 [17.50] or permission of the chairperson; English *1012 [2].

## SPAN 3630 Thematic Readings in Latin American Poetry

3 hours; 3 credits
Representative selections from colonial times to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## SPAN 3631 Thematic Readings in the Latin American Novel

3 hours; 3 credits
Representative novels from colonial times to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## SPAN 3632 Thematic Readings in Latin American Short Fiction

3 hours; 3 credits
Representative stories and short novels from colonial times to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or $2030 W$ or 3610 [17.50] or permission of the chairperson.

## SPAN 3633 Thematic Readings in Latin American Theater

## 3 hours; 3 credits

Representative plays from colonial times to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different.

Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## SPAN 3634 Thematic Readings in the Latin American Essay

3 hours; 3 credits
Representative works of Latin American expository prose from colonial times to the present within a specific thematic and cultural context. Course description available in department office prior to registration. Students may take the course twice provided the theme and content are different. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or $2030 W$ or 3610 [17.50] or permission of the chairperson.

## SPAN 3645 Contemporary Caribbean Literature in Spanish

3 hours; 3 credits
The literary production of the Spanish-speaking Caribbean since the early twentieth century. (Not open to students who have completed Spanish 49 or 59.1 topic "Caribbean Literature in Spanish.") Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 3610 [17.50] or permission of the chairperson.

## SPAN 3660 The Fantastic Genre in the Literature of Argentina and Uruguay

3 hours; 3 credits
Examination of the fantastic as practiced in twentieth-century Argentina and Uruguay. Consideration of one of the most innovative literary genres of the twentieth century and its influence throughout Latin America as well as in Europe and the United States. Survey of the most important authors of fantastic literature (Lugones, Borges, Cortázar, Bioy Casares) as well as some more recent developments. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish *2010 [4] or permission of the chairperson.

## SPAN 3665 The "New Historical Novel" in Argentina and Uruguay

3 hours; 3 credits
Analysis of changes in the historical novel in Argentina and Uruguay, particularly in the last three decades; connecting these novels and the contemporary concerns. Examination of the questioning of official texts and creation of apocryphal alternative histories. Consideration of how these novels assimilate innovations in narrative technique originally introduced by Latin American novelists of the 1960's. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish *2010 [4] or permission of the chairperson.

## SPAN 3710 Women in Hispanic Literatures

3 hours; 3 credits
The image of women as expressed in selected Spanish and/or Latin American literary works. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## SPAN 3720 Autobiographical Literatures in Spanish

3 hours; 3 credits
Autobiographical fiction and nonfiction in Spanish and/or Latin American literatures. Memoirs, letters, diaries, journals, confessions. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or $2030 W$ or 3610 [17.50] or permission of the chairperson.

## SPAN 3730 Moral and Religious Themes in Hispanic

 Literatures
## 3 hours; 3 credits

Religious beliefs and practices as expressed in selected Spanish and/or Latin American literary works. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or $2030 W$ or 3610 [17.50] or permission of the chairperson.

## SPAN 3740 Historical and Social Visions in Hispanic <br> Literatures

3 hours; 3 credits
Spanish and/or Latin American history and/or society, past and present, as reflected in selected literary works. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## SPAN 3810 Hispanic Literatures and Film

3 hours; 3 credits
The relationship between Spanish and/or Latin American literary works and the films they inspired. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or $2030 W$ or 3610 [17.50] or permission of the chairperson.

## SPAN 3910 Special Topics

## 3 hours; 3 credits

Special topic or theme not otherwise covered in the regular curriculum. Topics vary and reflect special interests of students and faculty. Course description available in department office prior to registration. Students may take the course more than one time, but may not repeat the topic or theme. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: SPAN 2020 [11.1] or 2030W or 3610 [17.50] or permission
of the chairperson.
SPAN 3915 Hispanic Literatures and the Arts
3 hours; 3 credits

The relationship between Spanish and/or Latin American literary works and the visual and/or performing arts. Outside lectures, visits to exhibitions and/or museums, attendance at musical and/or theatrical performances. Course description available in department office prior to registration. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## SPAN 3920 Spain as a Cultural Crossroad in the Middle Ages and Renaissance

3 hours, minimum of 6 hours fieldwork and excursions; 6 credits A consideration of the complex cultural heritage of medieval and Renaissance Spain. Turbulent relations versus peaceful coexistence between and among Christians, Moslems, and Jews. Birth of a nation and consecration of a language. Influence of Africa, European countries, and the New World. Study of history, literature, art, architecture, and music enriched by visits to museums. Excursions to cities and castles. All written work to be done in Spanish.Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## SPAN 3925 The Golden Age of Spanish Literature and the

## Arts

3 hours, minimum of 6 hours fieldwork and excursions; 6 credits An examination of the cultural heritage of the Spanish Golden Age through a comparative study of representative masterpieces of Renaissance and baroque literature, art, architecture, and music. Spanish life under the rule of the House of Austria (1515-1700). Economic prosperity and decline, Reformation and CounterReformation, and the exploration and colonization of the Americas as a backdrop for various works. Excursions. Visits to museums. All written work to be done in Spanish. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## SPAN 3926 From Reason to Revolution in Spanish History, Literature, and the Arts during the Lifetime

2 hours, minimum of 2 hours fieldwork and excursions; 3 credits An examination of a major period of social upheaval and cultural transition in Europe and the Americas, documented in Spain. The influence of France; the Napoleonic invasion and subsequent War of Independence. The struggle between liberalism and absolutism in Spain and between colonial dependency and freedom in the Americas. The life and works of Goya as a historical, social, and cultural backdrop for the study of neoclassicism, romanticism, and costumbrismo in literature and the arts. Visits to museums. Excursions. All written work to be done in Spanish. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## SPAN 3927 City \& Society in the Realistic Novels of Benito Pérez Galdós \& Leopoldo Alas ("Clarín")

2 hours, minimum of 2 hours fieldwork and excursions; 3 credits An on-site exploration of the city and its inhabitants in the final quarter of the nineteenth century as major components of the
narrative fiction of Spain's two most important realistic novelists. Visits to important locations and museums. Excursions. All written work to be done in Spanish. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030W or 3610 [17.50] or permission of the chairperson.

## SPAN 3928 The Emergence of Modern Spain as Conceived and Captured by Writers and Artists

2 hours, minimum of 2 hours fieldwork and excursions; 3 credits An integrated examination of the historical, ethical, and aesthetic concerns of Spanish intellectuals and creative artists in the cultural renaissance that took place during the early decades of the twentieth century as expressed in narrative fiction, poetry, painting, music, and film. Visits to museums. Excursions. All written work to be done in Spanish. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030 W or 3610 [17.50] or permission of the chairperson.

## SPAN 3929 The Image of Spain in Contemporary Spanish Culture and Society

2 hours, minimum of 2 hours fieldwork and excursions; 3 credits An on-site examination of the image contemporary Spaniards hold of themselves as expressed in literature, the press, and the arts. Unity versus diversity in geography, society, politics, culture, and language. Visits to museums, newspaper offices, and the parliament. Excursions. All written work to be done in Spanish. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 3610 [17.50] or permission of the chairperson.

## SPAN 3990 Urban Experience and the Symbolic Construction of the City in the Spanish-speaking World

## 3 hours; 3 credits

Examination of the project of modernity through the renewal of urban experience, viewed in a transatlantic context. Exploration of the connections between urbanization, identities, and social life at the end of the Spanish Empire and the birth of the young American republics. Focus on four case studies: Buenos Aires, the new "Southern European" polis; Madrid, the capital of the old empire; Barcelona, the Mediterranean alternative to the court, and New York, the epitome of alterity. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish *2010 [4] or permission of the chairperson.

## SPAN 4710 Writings of a Major Spanish Author

3 hours; 3 credits
An in-depth, monographic study concentrating either on the opus of a major Spanish writer or on one of the masterpieces of Spanish literature. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030W or 3610 [17.50] and two courses from Tiers II and/or III, or permission of the
chairperson.

## SPAN 4715 Cervantes' Don Quijote de la Mancha

## 3 hours; 3 credits

An in-depth study of Don Quijote de la Mancha. (Not open to
students who have completed Spanish 53.) Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 3610 [17.50] and two courses from Tiers Iland/or III, or permission of the chairperson

## SPAN 4720 Writings of a Major Latin American Author

3 hours; 3 credits
An in-depth, monographic study concentrating either on the opus of a major Spanish-American writer or on one of the masterpieces of Spanish-American literature. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Spanish 2020 [11.1] or 2030W or 3610 [17.50] and two courses from Tiers II and/or III, or permission of the chairperson.

## SPAN 5070 Tutorial in Literature and Culture

Minimum of 14 hours conference meetings and independent work§; 3 credits
Study of a special topic at an advanced level. Periodic reports and a final paper or examination. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: junior or senior standing and 12 credits in advanced Spanish courses with an average of 3.0 or higher. Approval of topic by instructor or chairperson.

## Honors courses

## SPAN 5084 Seminar

1 hour conference, minimum 8 hours independent work§; 3 credits Study of a literary topic, including but not limited to periods, genres, or major writers. Substantial paper in Spanish. May not be taken concurrently with Spanish 5085 [85]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: junior or senior standing and 15 credits in advanced Spanish courses approved by the chairperson with an average of 3.5 or higher. Students may take this course for credit twice, but may not repeat topics.

## SPAN 5085 Seminar and Senior Thesis

1 hour conference, minimum 8 hours independent work§; 3 credits Research thesis, written in Spanish, on a literary, linguistic, or cultural topic. May not be taken concurrently with Spanish 5084 [84.1]. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: senior standing and 18 credits in advanced Spanish courses with an average of 3.5 or higher. Approval of the research topic by the instructor and the chairperson.

The following inactive course(s) will only be offered if there is sufficient demand:
CHIN 2310 Peer Tutoring I

CHIN 2320 Peer Tutoring II
CHIN 2420 Fieldwork in Communities and Professional Environments II
CHIN 3350 Teaching and Learning Language for Communication
FREN 2130 Writing, Research, and Resources
FREN 2310 Peer Tutoring I
FREN 2320 Peer Tutoring II
FREN 2355 Introduction to Romance Linguistics (French)
FREN $2410 \quad 60.03$ Fieldwork in Communities and Professional Environments I
FREN 2420 Fieldwork in Communities and Professional Environments II
FREN 3320 Regional Variations in Language
FREN 3350 Teaching and Learning Language for Communication
FREN 3901 Modern Languages: Special Topics Minicourse
GERM 2130 Writing, Research, and Resources
GERM 2310 Peer Tutoring I
GERM 2320 Peer Tutoring II
GERM 2420 Fieldwork in Communities and Professional Environments II
GERM 3240 Translation for the Professions
GERM 3290 Translation Practicum
GERM 3350 Teaching and Learning Language for Communication
GERM 3360 Language and Technology
GERM 3901 Modern Languages: Special Topics Minicourse
GERM 3910 Special Topics
GRKM 2310 Peer Tutoring I
GRKM 2320 Peer Tutoring II
ITAL 2130 Writing, Research, and Resources
ITAL 2310 Peer tutoring I
ITAL 2320 Peer Tutoring II
ITAL 2355 Introduction to Romance Linguistics
ITAL 2410 Fieldwork in Communities and Professional Environments I
ITAL 2420 Fieldwork in Communities and Professional Environments II
ITAL 3350 Teaching and Learning Language for Communication
ITAL 3901 Modern Languages: Special Topics Minicourse
ITAL 3910 Special Topics
JAPN 2310 Peer Tutoring I
PORT 2310 Peer Tutoring I
RUSS 2130 Writing, Research, and Resources
RUSS 2310 Peer Tutoring I
RUSS 2320 Peer Tutoring II
RUSS 2420 Fieldwork in Communities and Professional Environments I
RUSS 3350 Teaching and Learning Language for Communication

RUSS 3901
SPAN 2130
SPAN 2310
SPAN 2320
SPAN 2355
SPAN 2410
SPAN 2420
SPAN 3350
SPAN 3901

Modern Languages: Special Topics Minicourse
Writing, Research, and Resources
Peer Tutoring I
Peer Tutoring II
Introduction to Romance Linguistics(Spanish)
Fieldwork in Communities and Professional Environments I
Fieldwork in Communities and Professional Environments II
Teaching and Learning Language for Communication
Modern Languages: Special Topics Minicourse

## Music, Conservatory of

Department office: 422 Whitehead Hall
Phone: 718.951.5286
Full-time Faculty
Distinguished Professor: Oppens
Professors: Eckardt, Geers, Grubbs, Gythfeldt, Rothman, Taylor
Associate Professors: Jensen-Moulton, Merriweather, Palmquist, Zalben
Assistant Professor: Devaney
Lecturers: Cohen, Lewis

The Conservatory of Music at Brooklyn College is one of New York City's leading institutions for music study and performance. Each year over two hundred music majors study with our distinguished faculty, which includes prominent performers, composers, conductors, musicologists, theorists, and music educators. Faculty members bring their research and professional experience to each classroom, rehearsal, and performance to provide our students with the training essential for a successful career in music. Conservatory faculty and students serve the greater Brooklyn College community through numerous public events, including symposia, master classes and guest speakers. More than one hundred yearly public concerts and recitals provide rich opportunities for students to perform repertory ranging from early music to works by living composers.

In addition to its classrooms and practice rooms, recording and teaching studios, a music-technology lab, a first-rate music library, and a student lounge, the Conservatory utilizes several Brooklyn College performance venues, including Woody Tanger Auditorium and a concert hall in the new Tow Center for the Performing Arts.

The Conservatory is home to the H. Wiley Hitchcock Institute for Studies in American Music (HISAM) and the Center for Computer Music, and is affiliated with the cutting-edge multi-media Brooklyn College program in Performance and Interactive Media Arts (PIMA). Our students also benefit from master classes by distinguished visiting composers and performers, a fullystaged opera production every semester, and the semiannual Electro-Acoustic Music Festival. Internship opportunities abound with the Brooklyn College Preparatory Center for the Performing Arts and other local performing arts agencies.

The Conservatory of Music offers a bachelor of arts (B.A.) in music, designed for students who seek a cogent music curriculum as well as elective credits in other disciplines. Students wishing to concentrate in music performance, music composition, or music education (for grades K-12 teaching certification) take a bachelor of music (B.Mus.) degree and complete additional music or education courses, according to the concentration. One of these degrees is usually required for acceptance into a master's degree program in music. The conservatory also offers a music concentration for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades 1-6). Students may also minor in music or music technology.

The department is also affiliated with the College's American Studies Program and offers a 15-credit interdisciplinary minor in American music and culture aimed at fostering a greater understanding of music and its contribution to society.

Entering students take a placement test to evaluate their ability to read musical notation and their knowledge of such musical rudiments as key signatures, scales, intervals, chords, rhythm, and meter. Depending upon placement, students take up to four semesters of keyboard workshop. All degree programs also include courses in ear training, harmonic and contrapuntal techniques, analysis, and history. In addition, music majors must audition in their primary instrument or in voice and take two to eight semesters of performance lessons, depending on their concentration, during which they also perform in a chorus, an orchestra, or a wind, contemporary, or jazz ensemble.

Our students go on to successful careers as music educators, orchestral players, Broadway pit musicians, professional singers, composers and arrangers, critics, college professors, music librarians, and in such fields as music technology, media arts, and music publishing and management. Students who wish to pursue graduate studies may apply to the advanced certificate as well as the master's and doctoral degree programs offered by or in conjunction with this department.

## Placement in music courses

Admission to Music 3211 through 3243, 3791 and ensemble courses Music 3700 through 3781 is only by placement examination given before
registration. Dates and times for examinations are available in the conservatory office. Music majors should demonstrate a minimum keyboard proficiency when they enter the program. Music majors must pass the performance audition required in all degree programs before registering beyond 60 credits.

## Admission to degree programs in music

An audition is required of all prospective music majors before they are admitted to a degree program in music. In addition, students in the bachelor of music degree program for music teacher (all grades) must be interviewed by the program coordinator. Students should indicate their intention to major in music on their application for admission to the College.

## B.A. degree program in music HEGIS code 1005; SED program code 02021

Program requirements ( 54 credits plus language other than English or proficiency)

Music is a writing intensive major.
All music courses offered to satisfy the requirements for a major in music must be completed with a grade of C or higher.
Three areas of specialization are offered in the bachelor of art degree program in music. They are music studies, music technology and American music and culture.

All students take the following:
Music 1300, 1400 ( 6 credits).
Students specializing in music studies take the following:
Music 3211, 3212, 3213, 3214 (8 credits).
Music 3221, 3222, 3223, 3224 (4 credits).
Music 3231 and 3232, or 3235; 3233 or 3236; 3234 or 3237 ( 12 credits).
Music 3241, 3242, 3243 (12 credits).
One course in American or non-western music, Music 4430 through 4449, or one specialized course in music theory, Music 4450 through 4479 (3 credits).
Music 3225 or 3791 and 3226 or 3792 ( 4 credits).
Two credits in ensemble performance from Music 3700 through 3781 as assigned by the Conservatory of Music ( 2 credits).
One seminar in music numbered in the 4900s or a suitable advanced course in another department or program, approved in advance by the director (3 credits).

Students who wish to be considered for performance lessons, Music 3791 and 3792, in place of advanced keyboard classes,Music 3225 and 3226, must demonstrate proficiency in an audition no later than the beginning of their junior year. Final approval will be given by the director.

Students specializing in music technology take the following:
Music 3101 (3 credits).
9 credits from Music 2100 through Music 2149 or Music 4440 (9 credits).\&\#8239;
Music 3260, 3261, 3262, 3263, 3264, 3322 (18 credits).
Music 3323 (3 credits).
Two semesters of Music 3744.\&\#8239; May substitute one semester with any ensemble from Music 3700 to Music 3781 as approved by the Chair. (2 credits).\&\#8239;
Music 5540 and a minimum of 4-credits from a combination of Music 5881, 5882, 5883 (7 credits)
Music 4870, 4871 ( 6 credits).
Students specializing in American music and culture take the following:
American Studies 1001 or 1010 (3 credits)
Music 3101 (3 credits)
12 credits from Music 2101 through 2107, Music 2109, Puerto Rican and Latino Studies 3125, Music 4430, Music 4431, or Music 4940 (12 credits)
6 credits from Music 3260 and Music 3322
Four semesters of Music 2791 or substitute by permission of instructor and advisor ( 12 credits)
Music 5540 and 3 credits from a combination of Music 5881, 5882, 5883(6 credits)
Music 4872 and 4873 ( 6 credits)

## B.Mus. degree program in music composition HEGIS code 1004.10; SED program code 02019

Music is a writing intensive major.
Program requirements (72 credits plus foreign language or proficiency)
For academic year 2020-2021 only: The department chair may allow up to six credits of course substitutions for one or more of these requirements consistent with the educational goals of the program.

All of the following:
Music 1300, 1400 ( 6 credits).
Music 3211, 3212, 3213, 3214 (8 credits).
Music 3221, 3222, 3223, 3224 (4 credits).
Music 3231 and 3232, or 3235 ; 3233 or 3236 ; 3234 or 3237 ( 12 credits).
Music 3241, 3242, 3243 (12 credits).
Music 3251, 3252, 3253, 3254, 3255, 3256 (18 credits).
Music 3315 or 4360 (3 credits).
One course in American or non-western music, Music 4430 through 4449, or one specialized course in music theory, Music 4450 through 4479 or one seminar in music numbered in the 4900s (3 credits).
Music 3225 or 3791 and 3226 or 3792 ( 4 credits).
Two credits in ensemble performance from Music 3700 through 3781 as assigned by the Conservatory of Music (2 credits).
In addition to the courses listed above, a faculty approved portfolio and approval of the Conservatory faculty are required for the bachelor of music
degree. The portfolio will consist of representative works from required (Music 3251 through Music 3256), elective, and honors composition courses.

Students must submit a portfolio of work for review by a music composition jury at the end of each semester of Music 3251-3256 or 4861-4862 (Music Composition). A special jury for students in Music 3252 includes evaluation of overall progress in the program, on the basis of which permission to continue in the music composition program is granted or denied.

Students who wish to be considered for performance lessons, Music 3791 and 3792, in place of advanced keyboard classes, Music 3225 and 3226 , must demonstrate proficiency in an audition no later than the beginning of their junior year. Final approval will be given by the director.

All music courses offered to satisfy the requirements for a major in music must be completed with a grade of C or higher.

## B.Mus. degree program in performance <br> HEGIS code 1004; SED program code 02018

Music is a writing intensive major.
Program requirements ( 69 credits plus foreign language or proficiency)
For academic year 2020-2021 only: The department chair may allow up to six credits of course substitutions for one or more of these requirements consistent with the educational goals of the program.

All of the following:
Music 1300, 1400 ( 6 credits).
Music 3211, 3212, 3213,3214 ( 8 credits).
Music 3221, 3222, 3223, 3224 ( 4 credits).
Music 3231 and 3232, or 3235 ; 3233 or 3236 ; 3234 or 3237 ( 12 credits).
Music or 3241 , or 3242 , or 3243 ( 12 credits).
One course in American or non-western music, Music 4430 through 4449, or one specialized course in music theory, Music 4450 through 4479 or one seminar in music numbered in the 4900s (3 credits).
Music 3791, 3792, 3793, 3794, 3795, 3796 (12 credits).
Four semesters of performance studio class, Music 3675 (4 credits).
Eight credits in ensemble performance from Music 3700 through 3781 as assigned by the Conservatory of Music.
In addition to the course listings above, an approved recital, and approval of the faculty are required for the bachelor of music degree.
A successful jury examination in performance must be completed at the conclusion of each semester of Music 3791-3796 or 4841
(Performance). Students taking Music 3793 will present to the faculty a longer performance jury, at which time their overall progress in the program will be evaluated, and permission to continue in the program granted or denied. Music majors aiming toward professional careers as performers are strongly urged to take additional ensembles each semester, including at least two terms of Music 3741, 3742, 3743, 3780 or 3781 (i.e., Contemporary Music Ensemble, Brass Ensemble, Woodwind Chamber Music, Jazz Big Band, or Small Jazz Ensemble).

All music courses offered to satisfy the requirements for a major in music must be completed with a grade of C or higher.
The list of the music performance faculty is available online at http://www.brooklyn.cuny. edu/web/academics/schools/mediaarts/departments/music/faculty.php

## B.Mus. degree program in music education HEGIS code 0832; SED program code 26815

Adolescence education (grades 7-12) and special subject programs are writing intensive.
Departmental Requirements: (88 credits plus foreign language or proficiency)
For academic year 2020-2021 only: The department chair may allow up to six credits of course substitutions for one or more of these requirements consistent with the educational goals of the program.

Students must complete the Conservatory of Music and Department of Secondary Education requirements in sections I, II, and III below for the B.Mus. degree program in music education.
I. Music core (63 credits)

Music 1300, 1400 ( 6 credits).
Music 3211, 3212, 3213, 3214 (8 credits).
Music 3221, 3222, 3223, 3224 (4 credits).
Music 3231 and 3232 , or 3235 ; 3233 or 3236 ; 3234 or 3237 ( 12 credits).
Music 3241, 3242, or 3243 (12 credits).
One course in American or non-western music, Music 4430 through 4449, or a course in American or non-western cultures approved by the director of the Conservatory of Music (3 credits).
Music 3700-3781, as assigned by the Conservatory of Music ( 6 credits).
Music 3791, 3792, 3793, 3794, 3795 and 3796 (12 credits).
II. Music education courses (19 credits)

Music 3350 or 3352 (3 credits).
Music 2510 ( 0 credits; minimum of four terms of 2510 required).
Music 2520 and 3590, or 2530 (3 credits).
Music 3581, 3582, and 3583 (9 credits).
Music 3600-3661 (4 credits chosen from these courses).
III. Education courses (12 credits)

In addition to the required Bachelor of Music in Music Education curriculum, music education majors must complete the following pedagogical courses, including student teaching ( 15 credits):
Secondary Education 2001 and 2002 ( 6 credits).
Secondary Education 4413 ( 6 credits).
Completion of a special subjects program as part of a major in music education qualifies students for New York State initial certification in special subjects for all grades.

Admission requirements and academic standing
Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

Students must have a B- in both Secondary Education 2001 and 2002 and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

To take Secondary Education 4413 students must have a GPA of 2.75 or higher and permission of the head of the program.
To take Secondary Education 4401-4406, students must have a GPA of 2.75 or higher, a B- or better in both Secondary Education 3401 and 3402, and/or permission of the head of the program.

To take Secondary Education 4407-4412, students must earn a B- or higher in Secondary Education 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of the program.

All music courses offered to satisfy the requirements for a major in music must be completed with a grade of C or higher.

## Program recommendations

Music majors should complete Music 3211 and 3221 in the lower-freshman term. Students planning to obtain New York State music teacher certification (all grades) should consult a Conservatory of Music counselor in their first term.

## Departmental Minor(s)

## Minor in Music

Department Requirements
12 credits of advanced electives in music (2101 or higher), selected in consultation with the Director or Deputy Director of the Conservatory of Music.

## Minor in Music Technology

Department requirements (12-credits)
Study of the computer-based tools for the creation and production of music in the twenty-first century. Students completing this minor will have a foundation in the skillsets necessary within the discipline of music technology.

12-credits selected from the following music courses:
Introduction to Music Technology (Music 3260), Introduction to Electro-Acoustic Music (Music 3261), Electro-Acoustic Music (Music 3262), Techniques for Recording Music (Music 3322), 3-credits of advanced electives in music (numbered 2000 or higher) selected in consultation with the Director or the Deputy Director.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Music

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in music must complete 30 credits in the Conservatory of Music with a grade of C or higher in each course.

Concentration requirements ( 30 credits minimum):

For academic year 2020-2021 only: The department chair may allow up to six credits of course substitutions for one or more of these requirements consistent with the educational goals of the program.

One course chosen from Music 1400, 1500, 3235.
Four courses chosen from Music 3700 through 3781.
Two credits chosen from Music 3211, 3221, 3222, 3223, 3600, 3661.
Five courses chosen from Music 2101, 2102, 2103, 2104, 2105, 2106, 3247, 4440.
Music 3581 and 3583.
A placement examination is required for certain theory, performance, and history/repertoire courses.

## Recommendations for prospective graduate students

Prospective graduate students in music are strongly urged to complete a foreign language (French, German, Italian, or Spanish) through level III (or its equivalent) during their undergraduate studies.

## Graduate Studies

The Conservatory of Music offers the following graduate programs: master of arts degree program in musicology; advanced certificate in music
education (K-12); advanced certificate and advanced diploma in music performance; master of arts degree program for music teacher (all grades); master of music degree program in performance; master of music degree program in composition. Some courses may be creditable toward the CUNY doctoral degree. For information, students should consult the conservatory's assistant director for graduate studies.

## Courses

*Courses marked with an asterisk (*) are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in the conservatory.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

Courses Music 3700 through 3781 may be taken for credit each term the student is enrolled.

## MUSC 1300 Music: Its Language, History, and Culture

## 3 hours; 3 credits

Introduction to music through the study of works representing different times, places, and peoples. The grammar, syntax, and communicative purposes of music; the musical dialects of different cultures and how these have changed over time. Recorded, concert, and classroom performances. Satisfies Pathways Flexible Core Creative Expression requirement. (Not open to students who have completed Core Studies 2.2, Music 11.1, or Core Curriculum 1130).

## MUSC * 1400 Fundamentals of Music

3 hours; 3 credits
Introduction to music beginning with notation, reading in treble and bass clefs, scale constructions, intervals, simple chord progressions, basic cadences, elementary ear training, and use of a musical score in following performances and recordings. Starting Spring 2018 Satisfies Pathways Flexible Core Creative Expression requirement.

## MUSC 2101 African American Music

3 hours; 3 credits
African American music from its African roots to the present. Synthesis of tradition and distinct African elements in American musical culture. This course is the same as Africana Studies 3236.

## MUSC 2102 Music of the United States

3 hours; 3 credits
Music in the United States from a historical perspective, including folk, popular, jazz, and concert hall traditions. Interaction of European, African, and various ethnic styles in America. Relationship of music to select movements in American theater, dance, and art. Not open to students who have completed Music 50. This course is the same as American Studies 3702.

Prerequisite: Core Studies 2.2 or Core Curriculum 1130 [1.3] or Music 1300 or permission of the director.

## MUSC 2103 Music in New York City

2 hours lecture and 3 field hours per week; 3 credits Exploration of music performance in the music institutions and diverse cultural resources of New York City. Students will attend musical performances and carry out field documentation of a local music culture or institution. Not open to students who have completed Music 3. This course is the same as American Studies 3704.

Prerequisite: Core Studies 2.2 or Core Curriculum 1130 [1.3] or Music 1300 or permission of the director.

## MUSC 2104 History of Jazz

3 hours; 3 credits
Origin, early development, and history of jazz to the present. Required reading and listening. Not open to students who completed Music 20.4. This course is the same as Africana Studies 3237.

Prerequisite: Core Studies 2.2 or Core Curriculum 1130 [1.3] or Music 1300 or permission of the director.

## MUSC 2105 Opera

3 hours; 3 credits
A study of opera through live performance, videotape, and film. Required listening and reading, and attendance at opera performances. Not open to students who completed Music 20.3.

Prerequisite: Core Studies 2.2 or Core Curriculum 1130 [1.3] or Music 1300 or permission of the director.

## MUSC 2106 Popular Music and Technology

3 hours; 3 credits
Developments in American popular music traced through an examination of the history of sound technology. The impact of technological mediation on musical aesthetics, with particular emphasis on blues, folk, jazz, rock'n'roll, soul, hip hop, and electronic music. This course is the same as American Studies 3706. (Not open to students who took Music 3493 [49.3] or American Studies 3902 [60] in Spring 2007).

Prerequisite: Core Studies 2.2 or Core Curriculum 1130 [1.3] or Music 1300 or permission of the director.

## MUSC 2107 Performing America: Nation, Identity, and the Arts

4 hours; 4 credits
Explores the ways in which American national identity has been performed and how performance plays a role in citizens' selfconception. Examples drawn from early US drama, nineteenthcentury melodrama and minstrelsy, Broadway musicals, opera, film, television, and digital media as well as performances of self in everyday life. This course is the same as American Studies 3708.

Prerequisite or corequisite: American Studies 1001 or permission of the director.

## MUSC 2109 Special Topics

3 hours; 3 credits

Special topics in problem, figure, style, form, or genre not otherwise covered in the regular courses of the curriculum. Topics vary and reflect the special interests of students and faculty. May be taken twice for credit, but topics may not be repeated.

Prerequisite: Core Studies 2.2 or Core Curriculum 1130 [1.3] or Music 1300 or permission of the director.

## MUSC 2791 American Music Practice

2 hours lecture, 2 hours practicum; 3 credits
Workshop for American Music BA students to learn practical applied music skills in four different general areas of American music. Students will learn group performance skills in vocal or instrumental areas, connections between the history, culture, and practice of the genre, and develop digital and/or place-based group performances as final projects. Topics in the regular rotation will include: R\&B and Hip Hop; Pan-Caribbean Practices; Gospel \& Praise Band; and Music Theater, and/or a Special Topic. As part of their degree, students may take American Music Practice up to four times with permission of the advisor or instructor, or they may substitute another practical course in Music with permission of the advisor or instructor.

Pre/Co-requisites: Students must take MUSC 1300 and/or MUSC 1400 either prior to or concurrently with their first semester of MUSC 2791.

## MUSC 3101 Music in Global America

3 hours; 3 credits
The transnational roots of America's vernacular music traditions. The diaspora of folk and popular styles from Africa, Europe, Latin America and the Caribbean, and Asia, and the transformation and hybridization of those music styles in diverse U.S. ethnic and cultural communities. Loops of ongoing transnational interaction between contemporary U.S.music styles and urban musics around the world. (Not open to students who have completed Core Curriculum 3213.) 2017-2018: Satisfies Pathways College Option requirement. 2018-2019 Satisfies Pathways Flexible Core U.S. Experience in Its Diversity requirement and College Option requirement. Starting Fall 2019 Satisfies Pathways Flexible Core U. S. Experience in Its Diversity requirement and also qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

Prerequisite: English 1010 or permission of the department.

## MUSC 3211 Introductory Studies in Musicianship: Ear Training I

3 hours recitation, 2 hours laboratory; 2 credits Intensive training in sight-reading and dictation. Study in bass and treble clefs of diatonic melodies, rhythms through quadruple subdivisions of the beat with syncopation, chords (functions and types), and intervals. Not open to students who completed Music 6.1. C grade or better required to progress to Music 3212. May be retaken only once if not passed the first time.

Prerequisite or Corequisite: placement examination. Corequisite: Music 3221 [22.1]

## MUSC 3212 Eighteenth-Century Studies: Ear Training II

3 hours recitation, 2 hours laboratory; 2 credits
Continuation of Music 3211. Musical language and repertory of the pre-Classical and Classical eras. Two-part and harmonic dictation. The C-clef. (Not open to students who have completed Music 6.2.). C grade or better required to progress to Music 3112. May be
retaken only once if not passed the first time. C grade or better required to progress to Music 3213. May be retaken only once if not passed the first time.

Prerequisite or Corequisite: Music 6.1 or 3211 with a grade of C or better, and 3221; or placement examination.
Corequisite: Music 3222 [22.2]

## MUSC 3213 Nineteenth-Century Studies: Ear Training III

3 hours recitation, 2 hours laboratory; 2 credits
Continuation of Music 6.2 and 3212 [21.2].
Musical language and repertory of the Romantic era. Not open to students who have completed Music 6.3 or 21.3. C grade or better required to progress to Music 3214. May be retaken only once if not passed the first time.

Prerequisites or Corequisite: Music 6.2 or 3212, and 3222; or placement examiniation.
Corequisite: Music 3223 [22.3]

## MUSC 3214 Twentieth-Century Studies: Ear Training IV

3 hours recitation, 2 hours laboratory; 2 credits
Continuation of Music 6.3 and 3213 [21.3]. Musical language and repertory of the modern era. (Not open to students who have completed Music 6.4 or 21.4). May be retaken only once if not passed the first time.

Prerequisite or Corequisite: Music 6.3 or 3213 with a grade of $C$ or above, and 3223; or placement examination.
Corequisite: Music 3224 [22.4]

## MUSC 3221 Keyboard workshop I

2 hours recitation, a minimum of 6 hours independent practice; 1 credit
Introduction to keyboard: reading in treble and bass clefs, fingering, coordination drills. Keyboard theory: intervals, chords, scales. Simple repertoire for two hands. Sight-reading, transposition exercises, melodic harmonization using primary chords, creative improvisation activities and ensemble work. C grade or better required to progress to Music 3222. May be retaken only once if not passed the first time.

Prerequisite: placement examination.

## MUSC 3222 Keyboard Workshop II

2 hours recitation, a minimum of 6 hours independent practice; 1 credit
Continuation of Music 69.1 or 3221. Keyboard theory: scales in all keys, triads and their inversions, dominant seventh chords, chord progressions. Easy repertoire by Bartók, Beethoven, Diabelli, Haydn, Mozart. Sight-reading, transposition, melodic harmonization using various accompaniment styles, creative improvisation activities and ensemble work. C grade or better required to progress to Music 3223. May be retaken only once if not passed the first time.

Prerequisite: Music 3221 with a C or better or placement examination.

## MUSC 3223 Keyboard Workshop III

1 hour recitation, a minimum of 6 hours independent practice; 1 credit
Continuation of Music 3222 [22.2]. Keyboard theory: chord progressions, scale harmonization, secondary dominants. Technical
studies, selected repertoire- intermediate level, sight-reading, transposition, melodic harmonization using minor chords, secondary dominants, creative improvisation and ensemble work. C grade or better required to progress to Music 3224. May be retaken only once if not passed the first time.

Prerequisite: Music 3222 with a C or better or placement examination.

## MUSC 3224 Keyboard Workshop IV

1 hour recitation, a minimum of 6 hours independent practice; 1 credit
Continuation of 3223 [22.3]. Keyboard theory: altered chords and modulation. Twentieth-century idioms: clusters, serialism, mixed meters. Informal idioms: 12-bar blues, ragtime, Latin rhythms. Technical studies, selected intermediate-advanced repertoire, sight-reading, melodic harmonization using altered chords, secondary dominants, accompanying, score reading. May be retaken only once if not passed the first time.

Prerequisite: Music 3223 with a C or better or placement examination.

## MUSC 3225 Advanced Keyboard Workshop 1

3 hours; 2 credits
Advanced level of keyboard studies for music composition majors and bachelor of arts in music majors whose primary instrument is the piano, as well as students who have completed the 4 -semester keyboard sequence and wish to continue their keyboard studies. Enhance and further develop greater technical facility, proficiency in sight-reading and score-reading, and provide the opportunity to work on advanced level repertoire. (May be retaken only once if not passed the first time.)

Prerequisite: Music 3224 with a grade of C or better or permission of the director

## MUSC 3226 Advanced Keyboard Workshop 2

3 hours; 2 credits
A continuation of Music 3225. Advanced level of keyboard studies for music composition majors and bachelor of arts in music majors whose primary instrument is the piano, as well as students who have completed the 4 -semester keyboard sequence and wish to continue their keyboard studies. Enhance and further develop greater technical facility, proficiency in sight-reading and scorereading, and provide the opportunity to work on advanced level repertoire. (May be retaken only once if not passed the first time.)

Prerequisite: Music 3225 with a grade of $C$ or better or permission of the director

## MUSC 3235 Theory I: Eighteenth-Century Studies

4 hours; 4 credits
Exploration of music of the Baroque and Classic eras through analysis of relevant works and compositional exercises. Topics include part-writing using triads and seventh chords, non-chord tones, and secondary dominants and modulations using common chords. Contrapuntal forms such as the chorale prelude, two-part invention, and fugue will also be examined. Not open to students who have completed Music 7.1 or 3231. C grade or better required to progress to Music 3236. May be retaken only once if not passed the first time.

Prerequisites: Music 1400; or placement examination.

Corequisites: Music 3211 and either 3221 or 3222.

## MUSC 3236 Theory II: Nineteenth-Century Studies

4 hours; 4 credits
Exploration of music of the Romantic era through analysis of relevant works and compositional exercises. Topics include advanced modulations, mode mixture, Neapolitan and augmentedsixth chords, common-tone diminished chords, and extended tonality. C grade or better required to progress to Music 3237. May be retaken only once if not passed the first time.

Prerequisites: Music 3235 (or 7.2, 23.2, or 3232) with a C or better; and Music 3212 and either 3221 or 3222; or a placement examination.
Corequisites: Music 3212 and 3222 or 3223.

## MUSC 3237 Theory III: Modern and Contemporary Studies

4 hours; 4 credits
Exploration of music of the modern and contemporary eras through analysis of relevant works and compositional exercises. Topics include modal, tonal, octatonic, and whole-tone collections; new metric and rhythmic resources; polytonality; set-class analysis; 12-tone music; aleatory; phase techniques; and new timbral and electronic resources. May be retaken only once if not passed the first time.

Prerequisite: Music 3236 (or 7.3 or 3233) with a C or better; and also 3213 and 3222 or 3223; or placement examination.
Corequisite: Music 3213 and 3223 or 3224.

## MUSC 3241W Music History and Score Analysis I: Ancient Music through 1750

4 hours; 4 credits
Western music from ancient traditions through the mid-eighteenth century. Parallel discussion of Western traditions with musical traditions and iconography of cultures such as those of India, China, and Northern Africa. Major genres, forms, styles, composers, cultural features. Score analysis of notated traditions. Writing intensive. (Not open to students who have completed Music 11.2 or 24.1). May be retaken only once if not passed the first time.

Prerequisite: Music 3211, 3221, and Core Curriculum 1130 or Music 1300 or Music 3247, and English 1012; or permission of the director.

## MUSC 3242 Music History and Score Analysis II: Late 18th and 19th Century

4 hours; 4 credits
Western music from the mid-eighteenth century through the beginning of the 20th century. Parallels drawn between European art music and influential musics from areas such as the United States, Latin America/Caribbean, Africa, the Mid-east, Asia, and Eastern Europe (folk traditions). Major genres, forms, styles, composers, cultural features. Score analysis. (Not open to students who have completed Music 11.3 or 24.2.) May be retaken only once if not passed the first time.

Prerequisites: Music 3212, 3222, 3235; 3241 [24.1] or 11.2; or permission of the director.

## MUSC 3243 Music History and Score Analysis III: Twentieth-Century to the Present

## 4 hours; 4 credits

American and European art music from 1900 to the present. Influence of Latin American/Caribbean, African, Mid-eastern, and

Asian musics; world popular musics and dance music traditions; jazz; music of Worlds Fairs; new approaches to notation. Major genres, forms, styles, composers, cultural features. Score analysis. (Not open to students who have completed Music 11.4 or 24.3.) May be retaken only once if not passed the first time.

Prerequisites: Music 3213, 3223, 3236; 3242 [24.2] or 11.3; or permission of the director.

## MUSC 3247 Music History and Score Analysis I: Introductory Studies

3 hours; 3 credits
Techniques of score analysis as a tool for the perception of musical styles and forms in Western art music. Aural approach to selected non-Western traditions. Introduction to a basic music repertoire; historical eras; sources and techniques for writing about music.

Prerequisite: Music 3211 [6.1] and 3235 [7.1] and English 1010 [1], and two core studies courses (Core Studies 2.1 and 4 or Core Curriculum 1120 and 1220 or Art 1010 and History 3005 are recommended); or permission of the director.

## MUSC 3249W Music History and Score Analysis I: Introductory Studies

4 hours; 3 credits
Techniques of score analysis as a tool for the perception of musical styles and forms in Western art music. Aural approach to selected non-Western traditions. Introduction to a basic music repertoire; historical eras; sources and techniques for writing about music. Writing-intensive section.

Prerequisite: Music 3211 and 3235 and English *1012 [2], and two core studies courses (Core Studies 2.1 and 4 or Core Curriculum 1120 and 1220 or Art 1010 and History 3005 are recommended); or permission of the director.

## MUSC 3251 Composition I

2 hours lecture, 1 hour recitation, at least 6 hours independent work§; 3 credits
Original writing in various forms and media. (Not open to students who are enrolled in or have completed Music 4861 [86.1].)

Prerequisite: Music 69.2 or 3222 [22.2]; and permission of the director.

## MUSC 3252 Composition II

2 hours lecture, 1 hour recitation, at least 6 hours independent work§; 3 credits
Continuation of Music 3251 [25.1].
Prerequisite: Music 3251 [25.1] and permission of the director.

## MUSC 3253 Composition III

2 hours lecture, 1 hour recitation, at least 6 hours independent work§; 3 credits
Continuation of Music 3252 [25.2].
Prerequisite: Music 3252 [25.2] and permission of the director.

## MUSC 3254 Composition IV

2 hours lecture, 1 hour recitation, at least 6 hours independent work§; 3 credits
Continuation of Music 3253 [25.3].

Prerequisite: Music 3253 [25.3] and permission of the director.

## MUSC 3255 Composition V

2 hours lecture, 1 hour recitation, at least 6 hours independent work§; 3 credits
Continuation of Music 3254 [25.4].
Prerequisite: Music 3254 [25.4] and permission of the director.

## MUSC 3256 Composition VI

2 hours lecture, 1 hour recitation, at least 6 hours independent work§; 3 credits
Continuation of Music 3255 [25.5].
Prerequisite: Music 3255 [25.5] and permission of the director.

## MUSC 3260 Introduction to Music Technology

## 3 hours; 3 credits

Introduction to an array of available software for the creation, documentation, and instruction of music. Designed for any musician interested in computer-based tools to enhance a musical life and career. Topics include digital audio, MIDI, music notation, music on the Internet, presentation of one's work, and pedagogical tools.

Prerequisite: Core Studies 2.2 or Core Curriculum 1130 [1.3] or Music 1300 or permission of instructor.

## MUSC 3261 Electroacoustic Music I

3 hours; 3 credits
This class is an exploration of creativity with digital sound. It is meant to be an introduction to music composition with computer software and hardware. The course treats topics of electroacoustic sound and methods of composition that are distinct to this medium, with a focus on concepts derived from musique concrète, acousmatic music, and related styles, coupled with explanation and application of digital signal processing techniques. Students complete a series of projects exploring these concepts, culminating in a major final project.

Prerequisite: Music 3260 or permission of the director.

## MUSC 3262 Electroacoustic Music II

3 hours; 3 credits
This course will explore music composition employing techniques of sound synthesis, both analog and digital. First topics include simple oscillators and then progress through others including subtractive synthesis, modulation, granular, and physical modeling. Discussion of techniques will also be related to historical and contemporary creators and their works. Control and compositional use of synthesis techniques will be explored via a series of assignments exploring these concepts, culminating in a major final project.

Prerequisite: Music 3260 or permission of the director.

## MUSC 3263 Building Electronic Music Instruments

3 hours; 3 credits
How to design, program, and build students' own electronic music instruments and installations, including both hardware and software. Topics include essentials of electronic circuits, interfacing them with computers, and instrument programming. Although the focus is on music, many aspects of the course topics are also applicable to interactive electronic art and theater.

Prerequisite: Music 3262 or permission of instructor.

## MUSC 3264 Introduction to Music Computing

3 hours: 3 credits
Introduction to how computers can be used for a range of artistic, scientific, and technological musical applications. This course has a particular focus on the creation and control of digital sound through digital signal processing, sound analysis, and sound synthesis. Applications of these techniques to composition, sound design, new musical instruments, and games will be explored. This course is the same as CISC 2600.

Prerequisite: MUSC 3260

## MUSC 3315 Orchestration

3 hours; 3 credits
Scoring for strings, winds, full orchestra, and concert band.
Prerequisite: Music 6.3 and 7.3 or 3213 [21.3] and 3233 [23.3]; and either 8.3 and 9.3 , or 11.3 or 3242 [24.2].

## MUSC 3322 Techniques for Recording Music

3 hours; 3 credits
Special problems and techniques of audio recording as they relate to the professional musician. Audio engineering with analog and digital systems.

Prerequisite: permission of the director.

## MUSC 3323 Advanced Audio Recording and Engineering Techniques

## 3 hours: 3 credits

Advanced theories and techniques of sound recording, mixing, and mastering. Live versus studio recording. Microphone techniques, equalization, and application of other signal processing algorithms. Adjusting sound across multiple recordings to match them as a single sonic work.

Prerequisite: MUSC 3322

## MUSC 3335 The Mechanism and Maintenance of the Piano

1 hour; 1 credit
Introduction to the basic principles of tuning, the function of action, voicing regulation. Readings, demonstrations, and some practical work in regulation.

## MUSC 3350 Conducting I

3 hours; 3 credits
Principles of conducting based on analysis of representative orchestral and choral compositions. Instruction and training in baton technique and rehearsal techniques. Students attend rehearsals of the conservatory's performing organizations.

Prerequisite: Music 6.3 and 7.3 or 3213 [21.3], and 3233 [23.3] or 3236 ; and either 8.3 and 9.3 , or 11.3 or 3242 [24.2].

## MUSC 3352 Conducting and Rehearsal Techniques

3 hours; 3 credits
Intensive practical instruction in conducting, rehearsal techniques, and materials applicable to vocal and instrumental performance ensembles in the public schools. Emphasis on conducting, score study, rehearsal planning, organization and pacing, error detection
and correction, student motivation, repertoire and concert programming, music performance curriculum, large and small choral andinstrumental ensembles. Field observations and fieldwork in the public schools.

Prerequisite: Music 6.3 or 3213 [21.3], 7.3 or 3233 [23.3] or 3236, and 11.2 or 3241 [24.1]; 3611 [61.1] or 3621 [62.1]; and 3630 [63], 3640 [64], and 3650 [65]; or permission of the director. Corequisite: Music 2510 [51].

## MUSC 3491 Special Topics

1 hour, 1 credit
Special topic, problem, figure, style, form, or genre not otherwise covered in the regular courses of the curriculum. Topics vary and reflect the special interests of students and faculty. May be taken more than once for credit, but topics may not be repeated.

Prerequisite: permission of the director.

## MUSC 3492 Special Topics

2 hours; 2 credits
Special topic, problem, figure, style, form, or genre not otherwise covered in the regular courses of the curriculum. Topics vary and reflect the special interests of students and faculty. May be taken more than once for credit, but topics may not be repeated.

Prerequisite: permission of the director.

## MUSC 3493 Special Topics

3 hours; 3 credits
Special topic, problem, figure, style, form, or genre not otherwise covered in the regular courses of the curriculum. Topics vary and reflect the special interests of students and faculty. May be taken more than once for credit, but topics may not be repeated.

Prerequisite: permission of the director.

## MUSC 3671 Piano Repertory Class

2 hours; 0 credits
Study of solo piano repertoire from the 1600 s to the present through critique of student performance. Piano history, literature, performance practice, and performance. Practical application in solo performance settings as assigned. May be taken more than once.

Prerequisite: permission to take Music 3791 [79.1]-3796 [79.6], or $79.12-79.62$, or 4841 [84.1], or 4842 [84.2] or permission of the director. Corequisite: Music 3791 [79.1]-3796 [79.6], or 4841 [84.1], or 4842 [84.2], as applicable.

## MUSC 3672 String Repertory Class

2 hours; 0 credits
Performance by string majors of solo and chamber music repertory in a master-class setting. Guided discussion of important issues and areas of technique and interpretation to enhance performance, increase self-confidence, and eliminate performance anxiety. Constructive observations and suggestions from class members, string faculty, and invited guests. Required of all string majors.

Prerequisite: permission of the director.

## MUSC 3675 Studio Class

2 hours practicum; 1 credit
Performance training and study of repertoire (solo and chamber) in
a masterclass setting. Guided discussion of important issues and areas of technique and interpretation to enhance performance, increase self-confidence, and eliminate performance anxiety. Constructive observations and suggestions from class members, faculty, and invited guests. May be repeated each semester a student is enrolled.

Prerequisite: permission of the director.
Corequisite: a course in the Music 3791-3796 or Music 48414842 sequence.

## MUSC 3676 Practicum in Lyric Diction for Singers

2 hours practicum; 1 credit
Essentials of effective singing diction in English, Italian, French, and German. Review of the International Phonetic Alphabet (IPA) and its applications with Italian, French, German, Spanish, and English. Thorough study of standard lyric pronunciation in two European languages, with fundamentals of their respective phonetics and the rules governing their pronunciation. Supervised singing of solo vocal repertoire with clarity and expression. Languages of focus will rotate from term to term. (May be taken twice for credit, provided that the languages of focus are different.) Permission required by voice department coordinator.

## MUSC 3681 Accompanying at the Keyboard I

2 hours recitation, minimum 2 hours practicum; 3 credits Skills for instrumental and vocal accompanying at the keyboard. Repertory includes instrumental sonatas, vocal songs, and orchestra reductions of string, wind, operatic, and choral literature. Sight-reading and transposition. Practical application in performing situations, as assigned. (Not open to students who completed Music 3493 [49.3] in fall 2000.)

Prerequisite: Music 3791 [79.1] (in piano, organ, or harpsichord) and permission of the director.

## MUSC 3682 Accompanying at the Keyboard II

2 hours recitation, minimum 2 hours practicum; 3 credits
Continuation of 3681 [68.1]. (Not open to students who completed Music 3493 [49.3] in fall 2000.)

Prerequisite: Music 3681 [68.1] and 3792 [79.2] (in piano, organ, or harpsichord) and permission of the director.

## MUSC 3700 Opera Workshop

3 hours; 1 credit
Study and performance of scenes from operas. Fundamentals of operatic techniques, coordination of singing and stage movement. May be taken for credit each semester the student is enrolled.

Prerequisite: audition.

## MUSC 3701 Techniques in Performance for Singers

3 hours; 1 credit
An investigation into practical techniques for dynamic and truthful story-telling in singing using songs in the singer's native language. Exercises will explore the kinesthetic, vocal, and facial modes: how to expand their vocabulary and strength, and how to release tensions that arise as each of the performance modes are asked to channel higher levels of performance energy. Specific attention will be given to how we combine the modes into the unique form of opera/musical theater. The first half of class is dedicated to exploratory exercises, and the second half of class is dedicated to
putting discoveries from those exercises into practical use in singing repertoire in a master class setting. The class will culminate in a performance of the selected songs in the singer's native language. May be taken for credit each semester the student is enrolled.

Prerequisite: audition

## MUSC 3710 Symphonic Choir

3 hours; 1 credit
Study and performance of choral literature from a multiplicity of genres and style periods, with particular emphasis given to the development of fundamental musicianship skills, music literacy, and vocal technique. This ensemble welcomes all students without audition. May be taken for credit each semester the student is enrolled

## MUSC 3711 Conservatory Singers

3 hours; 1 credit
Brooklyn College's premiere choral ensemble performs literature from a multiplicity of genres and style periods, including major works with orchestra. Open by audition. May be taken for credit each semester the student is enrolled.

Prerequisite: audition.

## MUSC 3712 Glee Club

3 hours; 1 credit
A vocal ensemble for beginning to intermediate singers that strives to build musicianship and music literacy skills through a repertoire and performance based curriculum. A diverse selection of repertoire from the Renaissance through contemporary musical theatre will offer opportunities to examine social, political, and historical aspects related to the music. May be taken for credit each semester the student is enrolled.

## MUSC 3713 Vocal Repertory Practicum for Oratorio and Opera

3 hours; 1 credit
A vocal repertory course to for advanced singers to explore appropriate repertoire for future engagements. The course strives to build the repertory of each singer as well as provide the experience of learning a role for important oratorio and opera settings. The repertoire will be tailored to the participants of the class. Selected repertoire from the Renaissance through the twentieth century will offer opportunities to examine social, political, and historical aspects related to the music. May be taken for credit each semester the student is enrolled.

Prerequisite: audition

## MUSC 3720 Percussion Ensemble

3 hours; 1 credit
Study and performance of music for percussion. May be taken for credit each semester student is enrolled.

Prerequisite: audition.

## MUSC 3730 Collegium Musicum

3 hours; 1 credit
Singing and playing of old and new compositions scored for small groups. May be taken for credit each semester student is enrolled.

Prerequisite: audition.

## MUSC 3740 Chamber Music

3 hours; 1 credit
Playing of trios, quartets, and various ensembles of stringed and wind instruments with and without pianoforte. May be taken for credit each semester student is enrolled.

Prerequisite: At least two terms (in any combination) of Music 3741 [74.1], 3742 [74.2], 3743 [74.3], 74.5, 3780 [78], or 3781 [78.1]; and permission of the director.

## MUSC 3741 Contemporary Music Ensemble

3 hours; 1 credit
Study and performance of contemporary music. May be taken for credit each semester student is enrolled.

Prerequisite: audition.

## MUSC 3742 Brass Ensemble

3 hours; 1 credit
Experience for both small and large chamber groups in the study and performance of traditional and contemporary music for brass instruments. Emphasis on developing basic musicianship through systematic work on intonation, phrasing, balance, and interpretation. Study of brass instrument history, technique, repertoire, and pedagogy. May be taken for credit each semester student is enrolled.

Prerequisite: audition.

## MUSC 3743 Woodwind Chamber Music

3 hours; 1 credit
Study and performance of music for woodwind chamber ensembles. May be taken for credit each semester student is enrolled.

Prerequisite: audition.

## MUSC 3744 Electroacoustic Music Ensemble

3 hours; 1 credit
Ensemble music performance skills with electronic music instruments, combining diverse timbres and approaches to sound production and control. Instruments will include completely electronic ones as well as hybrids that combine acoustic instruments with digital signal processing. Instrument creation, networked interaction, incorporation of improvisation, and arrangement of amplified sound sources. Students will perform existing repertoire and have the opportunity to compose new works. The goal of each semester will be two or more public performances. May be taken for credit each semester the student is enrolled,

Prerequisite: Music 3262 or permission of instructor.

## MUSC 3745 Guitar Ensemble

3 hours; 1 credit
The guitar ensemble works on original works written for plucked instruments and explores historical literature through primary and secondary sources. The course is a strongly recommended corequisite for guitar majors, and open to others through audition and permission of the instructor. The ability to read music in both treble as well as bass clef is a prerequisite for joining the ensemble.

May be taken for credit each term the student is enrolled.
Prerequisite: permission of the director.

## MUSC 3750 Orchestra

5 hours; 1 credit
Study and performance of literature for orchestra. May be taken for credit each semester student is enrolled.

Prerequisite: audition.

## MUSC 3751 String Orchestra

3 hours; 1 credit
Study and performance of literature for string orchestra. May be taken for credit each semester student is enrolled.

Prerequisite: audition.

## MUSC 3760 Wind Ensemble

3 hours; 1 credit
Study and performance of literature for band. May be taken for credit each semester student is enrolled.

Prerequisite: audition.

## MUSC 3770 Ensemble in Non-Western Music

3 hours; 1 credit
Performance of non-Western music scored for small groups. May be taken for credit each semester student is enrolled.

## MUSC 3771 Global Music Ensemble

3 hours; 1 credit
This course performance class will be dedicated to styles and repertoires of musics that lie outside the realms of standard Western Art Music and American Jazz. Each semester the ensemble will focus on a specific musical tradition form one of the following areas: Latin America, the Caribbean, Africa, Eastern Europe, the Mid-East, and South and East Asian. May be taken for credit each semester the student is enrolled.

Prerequisite: audition

## MUSC 3780 Jazz Big Band

3 hours; 1 credit
Study and performance of old and new jazz literature. May be taken for credit each semester student is enrolled.

Prerequisite: audition.

## MUSC 3781 Small Ensemble Jazz

3 hours; 1 credit
Study and performance of music for small jazz combo, including practical experience with jazz improvisation techniques and styles. May be taken for credit each semester student is enrolled.

Prerequisite: audition.

## MUSC 3791 Performance I

2 hours lecture, 1 hour recitation, at least 8 hours independent work§; 2 credits
Intermediate and advanced performance in voice or on an instrument. One weekly repertoire class and one hour individual
instruction.

Prerequisite or corequisite: all of the following: candidacy for the B. A or B.Mus. degree in music, Music 6.1 or 3211 [21.1], 69.1 or 3221 [22.1], 7.1 or 3231 [23.1] or 3235; or permission. Corequisite: one or more ensemble course(s) (Music 3700 [70] through 3781 [78.1]) as assigned through audition and permission of the director.

## MUSC 3792 Performance II

2 hours lecture, 1 hour recitation, at least 8 hours independent work§; 2 credits
Continuation of Music 3791 [79.1]. Students must continue in voice or on the instrument studied in Music 3791 [79.1].

Prerequisite or corequisite: all of the following: candidacy for the B. A. or B.Mus. degree in music, Music 6.2 or 3212 [21.2], 7.2 or 3232 [23.2] or 3235 , and 11.2 or 3241 [24.1]; Music 69.2 or 3222 [22.2]; or permission of the director.
Corequisite: one or more ensemble course(s) (Music 3700 [70] through 3781 [78.1]) as assigned through audition and permission of the director.

## MUSC 3793 Performance III

2 hours lecture, 1 hour recitation, at least 8 hours independent work§; 2 credits
Continuation of Music 3792 [79.2]. Students must continue in voice or on the instrument studied in Music 3792 [79.2].

Prerequisite or corequisite: all of the following: candidacy for the B. A. or B.Mus. degree in music, Music 6.3 or 3213 [21.3], 7.3 or 3233 [23.3] or 3236, and 3247 [11.1] or Core Curriculum 1130 [1.3] or Music 1300; and permission of the director.
Corequisite: one or more ensemble course(s) (Music 3700 [70] through 3781 [78.1]) as assigned through audition and permission of the director.

## MUSC 3794 Performance IV

2 hours lecture, 1 hour recitation, at least 8 hours independent work§; 2 credits
Continuation of Music 3793 [79.3]. Students must continue in voice or on the instrument studied in Music 3793 [79.3].

Prerequisite or corequisite: all of the following: candidacy for the B. A. or B.Mus. degree in music, Music 6.4 or 3214 [21.4], 7.4 or 3234 [23.4] or 3237, and 11.2 or 3241 [24.1]; and permission of the director.
Corequisite: one or more ensemble course(s) (Music 3700 [70] through 3781 [78.1]) as assigned through audition and permission of the director.

## MUSC 3795 Performance V

2 hours lecture, 1 hour recitation, at least 8 hours independent work§; 2 credits
Continuation of Music 3794 [79.4]. Students must continue in voice or on the instrument studied in Music 3794 [79.4].

Prerequisite: candidacy for the B.A. or B.Mus. degree in music, Music 11.3 or 3242 [24.2] and Music 3794 [79.4] and permission of the director.
Corequisite: one or more ensemble course(s) (Music 3700 [70] through 3781 [78.1]) as assigned through audition and permission of the director.

## MUSC 3796 Performance VI

2 hours lecture, 1 hour recitation, at least 8 hours independent work§; 2 credits
Continuation of Music 3795 [79.5]. Students must continue in voice or on the instrument studied in Music 3795 [79.5].

Prerequisite: candidacy for the B.A. or B.Mus. degree in music, Music 11.4 or 3243 [24.3] and Music 3795 [79.5] and permission of the director.
Corequisite: one or more ensemble course(s) (Music 3700 [70] through 3781 [78.1]) as assigned through audition and permission of the director.

## MUSC 4360 Advanced Ear Training

3 hours; 3 credits
Development of advanced skills in sight-reading and dictation.
Prerequisite: Music 6.4 or 3214 [21.4], 7.4 or 3234 [23.4] or 3237
and 11.4 or 3243 [24.3].

## MUSC 4430 American Music

3 hours; 3 credits
Exploration of distinctive American repertories from a cultural perspective. Concert music, African-American traditions, experimental innovations, the role of women. Relationships to the European past, composers, and audiences; the impact of technology, the effects of pluralism.

Prerequisite: Music 6.4 or 3214 [21.4], 7.4 or 3234 [23.4] or 3237, and 11.4 or 3243 [24.3]; or permission of the director.

## MUSC 4431 The Jazz Tradition I

3 hours; 3 credits
Jazz history from its origins to 1950. Analysis of recordings, arrangements, and transcriptions. Cultural, economic, and sociological issues that have influenced the development of jazz. Connections between jazz and the aesthetic and philosophical principles of African American artistic expression.

Prerequisite: Music 6.4 or 3214 [21.4], 7.4 or 3234 [23.4] or 3237 , and 11.4 or 3243 [24.3]; or permission of the director.

## MUSC 4432 The Jazz Tradition II

3 hours; 3 credits
Survey of styles, genres, and forms of jazz from 1950 to the present.
Analysis of selected works.
Prerequisite: Music 3214, 3234 or 3237, and 3243; or permission of the director.

## MUSC 4435 Disability in America

## 3 hours; 3 credits

This course explores how American culture has and continues to shape and reflect ideas about ability and disability. Topics include: History of disability in the social, political, and environmental fabric of American society; talking about disability in medical ethics; negotiating constructed boundaries, stereotypes, and representations of disability; disability in arts and performance; American disability memoires. Students will be expected to participate in class and group work, do low-risk writing, give presentations, and complete final papers/projects. This course is the same as AMST 3710 and PHIL 3304.

Prerequisites: ENGL 1010

## MUSC 4440 Music of the World's People

3 hours; 3 credits
Cross-cultural studies of world music repertories. Development of new perspectives on music and its role in diverse societies.
Emphasis on the ways in which musicians acquire and exercise their art and on the uses and meanings of music.

Prerequisite: Music 6.4 or 3214 [21.4], 7.4 or 3234 [23.4] or 3237 , and 11.4 or 3243 [24.3]; or permission of the director.

## MUSC 4450 Linear Analysis of Tonal Music

3 hours; 3 credits
Study of voice-leading and harmony in selected works from the eighteenth and nineteenth centuries. Concept of structural levels; techniques of prolongation and embellishment; sources of continuity and coherence.

Prerequisite: Music 6.4 or 3214 [21.4], 7.3 or 3233 [23.3] or 3236, and 11.3 or 3242 [24.2]; or permission of the director.

## MUSC 4455 Eighteenth-Century Counterpoint

3 hours; 3 credits
Composition and analysis of 2- and 3-part counterpoint in the eighteenth-century style. Students will compose short contrapuntal exercises in two and three voices leading to a chorale prelude, a 2part invention and 3-part fugue. Analyses and discussions of contrapuntal techniques, formal designs, and stylistic attributes will inform creative work.

Prerequisite or Corequisite: Music 3236; or permission of the director.

## MUSC 4460 Analysis of Twentieth-Century Music

3 hours; 3 credits
Analytic approaches to the study of twentieth-century music. The emphasis is on methods and projects that enhance hearing. Expanded tonality, circular progressions, symmetry, motives and sets, concepts of orders: rhythm, timbre, texture, form.

Prerequisite: Music 6.4 or 3214 [21.4], 7.4 or 3234 [23.4] or 3237 , and 11.4 or 3243 [24.3]; or permission of the director.

## MUSC 4470 Advanced Musicianship: Jazz

3 hours; 3 credits
Work in advanced ear-training, harmonic function, chordal progression, blues patterns, and vocabulary of jazz; aural recreations and written transcriptions of improvisations; principles of major/minor, modal, pentatonic, altered, and whole-tone scale constructions; exploration of the relationship between improvisation and harmonic context.

Prerequisite: Music 6.4 or 3214 [21.4], 7.4 or 3234 [23.4] or 3237, or permission of the director.

## MUSC 4870 Music Technology Seminar I

3 hours: 3 credits
In this course, BA Music Technology students investigate the professional opportunities of their field and begin developing the capstone projects for their degree. The course features several guest talks from experienced artists, researchers, and production specialists in the fields of professional music and audio.

Prerequisite: MUSC 1400

## MUSC 4871 Music Technology Seminar II

3 hours: 3 credits
In this course, BA Music Technology students will be guided to complete the capstone projects for their degree. The course includes professional development components and features guest presentations from experienced artists, researchers, and production specialists in the fields of professional music and audio.

Prerequisite: MUSC 4870

## MUSC 4872 Capstone Seminar in American Music I

3 hours, 3 credits
In this course, BA American Music and Culture students explore the professional opportunities of their field and begin developing the capstone projects for their degree. The course features guest talks from experienced artists, activists, researchers, and community members in the fields of music and cultural studies.

Pre/Co-requisites: Students must take MUSC 1300 and/or MUSC 1400 either prior to or concurrently with Music 4872.

## MUSC 4873 Capstone Seminar in American Music II

3 hours, 3 credits
In this course, BA American Music and Culture students explore the professional opportunities of their field and complete the capstone projects for their degree, culminating in a public/virtual presentation. The course features guest talks from experienced artists, activists, researchers, and community members in the fields of music and cultural studies.

Pre/Co-requisites: Music 4872.

## MUSC 5540 Music Entrepreneurship

3 hours; 3 credits
Students will be instructed in topics related to building a career as an independent musician, including self-marketing, applying for jobs, behavior at job interviews and auditions, financial literacy, contracts, copyright, licensing, writing grant applications, and other areas pertinent to a musician's career development.

Prerequisite: MUSC 1300

## Honors courses

## MUSC 4841 Advanced Performance I

Minimum of 10 hours conference and independent work $\S ; 3$ credits Preparation and presentation of a public performance. Students must continue in voice or on the instrument studied in Music 3796 [79.6].

Prerequisite: Music 3796 [79.6] and permission of the director. Corequisite: an ensemble course (Music 3700 [70] through 3781 [78.1]) as assigned through audition and permission of the director.

## MUSC 4842 Advanced Performance II

Minimum of 10 hours conference and independent work $\S ; 3$ credits Continuation of Music 4841 [84.1]. Students must continue in voice or on the instrument studied in Music 4841 [84.1].

Prerequisite: Music 4841 [84.1] and permission of the director. Corequisite: an ensemble course (Music 3700 [70] through 3781
[78.1]) as assigned through audition and permission of the director.

## MUSC 4861 Advanced Composition I

Minimum of 9 hours conference and independent work§; 3 credits Individual work in advanced music composition in extended form. Required composition of an original work.

Prerequisite: completion of an approved program of advanced music courses and permission of the director.

## MUSC 4862 Advanced Composition II

Minimum of 9 hours conference and independent work $\S 3$ credits Continuation of Music 4861 [86.1].

Prerequisite: Music 4861 [86.1] and permission of the director.

## MUSC 4865 Advanced Conducting I

Minimum of 9 hours independent work§, class meetings, and conference; 3 credits
Independent work in advanced conducting supervised by a faculty member. Students recruit and organize instrumental or vocal groups and train and prepare them for public performance.

Prerequisite or corequisite: all of the following: candidacy for the B. A. or B.Mus. degree in music, Music 6.3 or 3213 [21.3], 7.3 or 3233 [23.3] or 3236, and either 8.3 and 9.3, or 3247 [11.1] or 3241
[24.1]; and permission of the director.
Corequisite: an ensemble course (Music 3700 [70] through 3781
[78.1]) as assigned through audition and permission of the director.

## MUSC 4866 Advanced Conducting II

Minimum of 9 hours independent work§, class meetings, and conference; 3 credits
Continuation of Music 4865 [86.5].
Prerequisite: Music 4865 [86.5] and permission of the director.

## MUSC 5831 Independent Research in Music History I

Minimum of 9 hours conference and independent work§; 3 credits Independent research in music history supervised by a faculty member. Thesis or report.

Prerequisite: completion of an approved program of advanced music courses and permission of the director.

## MUSC 5832 Independent Research in Music History II

Minimum of 9 hours conference and independent work§; 3 credits Independent research in music history supervised by a faculty member. Thesis or report.

Prerequisite: completion of an approved program of advanced music courses and permission of the director.

## MUSC 5851 Independent Research in Music Education I

Minimum of 9 hours conference and independent work§; 3 credits Independent project or research in music education supervised by a faculty member. Thesis, report, or project.

Prerequisite: Completion of an approved program of advanced music courses and permission of the director.

## MUSC 5852 Independent Research in Music Education II

Minimum of 9 hours conference and independent work§; 3 credits

Independent project or research in music education supervised by a faculty member. Thesis, report, or project.

Prerequisite: Completion of an approved program of advanced music courses and permission of the director.

## MUSC 5871 Independent Research in Non-Western Music I

Minimum of 9 hours conference and independent work§; 3 credits Independent research in non-Western music supervised by a faculty member. Weekly conference. Thesis or report.

Prerequisite: completion of an approved program of advanced music courses, including Music 3770 [77], and permission of the director.

## MUSC 5881 Music Internship

3 hours; 1 credit
Supervised on- or off-campus work at least one day per week in an office or classroom of a business, educational facility, or other agency providing professional experience in music, music performance, or music research. Submission of a critical report on the experience. This course may be taken for credit twice, but students may not offer more than six credits from Music 5881 [88.1], 5882 [88.2], and 5883 [88.3] toward a degree.

Prerequisite: Music 6.3 or 3213 [21.3], 7.3 or 3233 [23.3] or 3236, 11.3 or 3242 [24.2]; junior or senior standing; permission of the director. Permission requires the submission of letters from two faculty members attesting to the student's capacity to complete successfully the proposed internship project.

## MUSC 5882 Music Internship

6 hours; 2 credits
Supervised on- or off-campus work at least one day per week in an office or classroom of a business, educational facility, or other agency providing professional experience in music, music performance, or music research. Submission of a critical report on the experience. This course may be taken for credit twice, but students may not offer more than six credits from Music 5881 [88.1], 5882 [88.2], and 5883 [88.3] toward a degree.

Prerequisite: Music 6.3 or 3213 [21.3], 7.3 or 3233 [23.3] or 3236 , 11.3 or 3242 [24.2]; junior or senior standing; permission of the director. Permission requires the submission of letters from two faculty members attesting to the student's capacity to complete successfully the proposed internship project.

## MUSC 5883 Music Internship

## 9 hours; 3 credits

Supervised on- or off-campus work at least one day per week in an office or classroom of a business, educational facility, or other agency providing professional experience in music, music performance, or music research. Submission of a critical report on the experience. This course may be taken for credit twice, but students may not offer more than six credits from Music 5881 [88.1], 5882 [88.2], and 5883 [88.3] toward a degree.

Prerequisite: Music 6.3 or 3213 [21.3], 7.3 or 3233 [23.3] or 3236, 11.3 or 3242 [24.2]; junior or senior standing; permission of the director. Permission requires the submission of letters from two faculty members attesting to the student's capacity to complete successfully the proposed internship project.

## Seminars

## MUSC 4900 Seminar in Advanced Analysis

Minimum of 9 hours independent work§, seminar meetings, and conference; 3 credits
Investigation of selected works from varied analytic standpoints. Independent research in special areas. Assigned projects. Students may take this course for credit twice but may not repeat topics.

Prerequisite: Music 6.4 or 3214 [21.4] and 7.4 or 3234 [23.4] or 3237 and either 11.4 or 3243 [24.3]; or 4440 [44] or 4450 [45].

## MUSC 4910 Seminar in Music History

Minimum of 9 hours independent work§, seminar meetings, and conference; 3 credits
Investigation of a period or problem in music history. Independent research in special areas. Assigned projects. Students may take this course for credit twice but may not repeat topics.

Prerequisite: Music 11.4 or 3243 [24.3] or permission of the director.

## MUSC 4920 Seminar in Style Criticism

Minimum of 9 hours independent work§, seminar meetings, and conference; 3 credits
Investigation of principles of evaluation in music. Comparative studies of styles and trends. Critical study of selected compositions. Independent research in special areas. Assigned projects. Students may take this course for credit twice but may not repeat topics.

Prerequisite: Music 6.4 or 3214 [21.4] and 7.4 or 3234 [23.4] or 3237 and 11.4 or 3243 [24.3].

## MUSC 4930 Seminar in Contemporary Music

Minimum of 9 hours independent work§, seminar meetings, and conference; 3 credits
Examination of changing concepts during the twentieth century through detailed study of selected major works. Independent research, conferences, and seminar projects. Students may take this course for credit twice but may not repeat topics.

Prerequisite: Music 6.4 or 3214 [21.4], and 7.4 or 3234 [23.4] or 3237 , and 11.4 or 3243 [24.3].

## MUSC 4940 Seminar in American Music

3 hours; 3 credits
Studies in the development of folk, popular, religious, and art music in North America from the time of the first European settlers. Selected topics. Independent research, conferences, and seminar projects. Students may take this course for credit twice but may not repeat topics.

Prerequisite: Music 11.4 or 3243 [24.3] or permission of the director.

## MUSC 4941 Seminar in Jazz History

3 hours; 3 credits
Selected topics in the history of jazz, from its origins to the present. Research and analysis of recordings, transcriptions, and arrangements. Emphasis on social and cultural context. Students may take this course for credit twice but may notrepeat topics.

Prerequisite: Music 11.4 or 3243 [24.3] or permission of the director.

## MUSC 4950 Seminar in Performance Practice

3 hours; 3 credits
Study of documents and vocal and instrumental techniques relating to the authentic performance practice of music from the seventeenth through the twentieth century. Topic to be announced. Students may take this course for credit twice but may not repeat topics.

Prerequisite: Music 3796 [79.6] or permission of the director.

## MUSC 4960 Philosophy of Music

## 3 hours; 3 credits

Critical examination of philosophical issues pertaining to music.
Consideration of such issues as: the definition or concept of music, the ontology of music, musical meaning and understanding, musical expressiveness and arousal, musical representation, musical performance and authenticity of performance, the power and value of music, and the aesthetics of jazz, rock, and popular music.
Classical and contemporary philosophers. (This course is the same as Philosophy 3512.)

Prerequisite: one course in Philosophy or Core Studies 10 or Core Curriculum 1210 [2.1]; or one course in Music, or permission of the chairperson of the offering department.

## Music education

## MUSC 2510 Music Education Colloquium

1 hour; 0 credit
A colloquium for music education majors. Guest speakers, student and faculty presentations, discussions of current topics in music education. Required of music education majors for four semesters. Field observations and teaching in the public schools. Assigned grades of $P$ or $F$.

## MUSC 2520 Introduction to Music Education

2 hours; 1 credit
Overview of the music education profession: philosophy, history, pedagogical approaches, standards and practices of the profession, current issues, and practical applications. Field observations in the public schools.

Corequisite: Music 2510 [51].

## MUSC 2530 Basic Concepts in Music Education

3 hours lecture, 1 hour field work; 3 credits Introduction to the music education profession including philosophy, history, psychology, pedagogical approaches, standards and practices, current issues and practical applications. Organization and structure of preK-12 musical program, curriculum and assessment, legal and ethical responsibility, technology, inclusion and school diversity. Fieldwork experience in the public schools is required. (Not open to students who have completed MUSC. 2520 and MUSC.3590.)

Prerequisite: Ability to read music and permission of the director. Corequisite: Music 2510.

## MUSC 3570 Teaching Music Concepts

1 hour; 1 credit
Overview of approaches to teaching music elements and aspects common to all instrumental instruction (tone quality, pitch, rhythm,
etc.) emphasizing musicianship. Course is paired with an instrumental workshop in the Music 3611-3661 series that entails field observations and fieldwork in the public schools.

Prerequisite: Music 6.1 or 3211 [21.1] and 7.1 or 3231 [23.1] or 3235 ; or permission of the director.
Corequisite: Music 2510 [51]; and 3611 [61.1], 3621 [62.1], 3630 [63], 3640 [64], 3650 [65], or 3661 [66.1].

## MUSC 3581 Music in the Elementary Schools

3 hours, including fieldwork; 3 credits
Techniques, methods, and materials used in teaching music in the elementary schools including instruction for prekindergarten children. Development and application of music, teaching, and observation skills; assessment and organization in the context of the overall elementary school music program; child development. Includes observation and supervised teaching in public schools.

Prerequisite: Music 6.2 or 3212 [21.2], 7.2 or 3232 [23.2] or 3235 and 2520 [52].
Corequisite: Music 2510 [51].

## MUSC 3582 Music in the Secondary Schools

3 hours, including fieldwork; 3 credits
Techniques, methods, and materials used in teaching music in the secondary schools, including choral and instrumental ensembles and general music courses. Recruitment, curriculum, materials analysis, assessment, adolescent development, technology, special learners, and current issues. Includes observation and supervised teaching in public schools.

Prerequisite: Music 6.2 or 3212 [21.2], 7.2 or 3232 [23.2], and 2520 [52], or permission of the director. Corequisite: Music 2510 [51].

## MUSC 3583 Music in Special Education

3 hours, including fieldwork; 3 credits
Techniques, methods, and materials used in teaching music to special learners of different ages and developmental levels, especially in an inclusive classroom setting. Current issues. Field observation.

## MUSC 3590 The School Music Program: Choral, Instrumental, and General

2 hours, including fieldwork; 2 credits
Organization and structure of overall musical program (preK-12), including curriculum, technology, inclusion, legal and governmental aspects, relationships with parents, administrators, teachers, structure of the New York City and state educational systems, budgets, funding, evaluation, assessment, etc.

Prerequisite: Music 3581 [58.1] or 3582 [58.2]; or permission of the director.
Corequisite: Music 2510 [51].

## MUSC 3600 Voice Production

2 hours; 1 credit
Principles of singing, breath support, tone placement, phrasing, enunciation, diction. Practice in singing simple songs. Individual and group instruction. (Not open to students who have completed Music 3791 [79.1] in voice.)

Prerequisite: Music 6.2 or 3212 [21.2], and 7.2 or 3232 [23.2], and

3241 [11.2 or 24.1] or permission of the director.

## MUSC 3611 String Class: Violin and Viola

3 hours; 1 credit
Tuning, bowing, and positions for violin and viola. Practice in reading simple compositions. For beginners. No previous knowledge of a stringed instrument required. (Not open to students who have completed Music 3791 [79.1] in violin or viola.)

Prerequisite: ability to read music and permission of the director.

## MUSC 3621 String Class: Violoncello and Bass Viol

3 hours; 1 credit
Tuning, bowing, and positions for bass viol and violoncello. Practice in reading simple compositions. For beginners. No previous knowledge of a stringed instrument is required.

Prerequisite: ability to read music and permission of the director.

## MUSC 3630 Woodwind Class

3 hours; 1 credit
Mechanism, embouchure, and tone production of the flute, oboe, clarinet, bassoon. Practice in reading simple compositions. For beginners. No previous knowledge of a woodwind instrument is required. (Not open to students who have completed Music 3791 [79.1] on a woodwind instrument.)

Prerequisite: ability to read music and permission of the director.

## MUSC 3640 Brass Class

3 hours; 1 credit
Fingering, embouchure, and tone production of the trumpet, French horn, trombone, tuba. Practice in reading simple compositions. For beginners. No previous knowledge of a brass instrument is required.

Prerequisite: ability to read music and permission of the director.

## MUSC 3650 Percussion Class

3 hours; 1 credit
Principles of percussion technique. Practice in reading simple compositions. For beginners. No previous knowledge of a percussion instrument is required.

Prerequisite: Ability to read music and permission of the director.

## MUSC 3661 Fretted Instrument Workshop

3 hours; 1 credit
Tuning, sound production, and positions for fretted instruments (guitars and lutes). Practice in reading simple compositions. Primarily for use in public school teaching. No previous knowledge of a fretted instrument is required. Prerequisite: ability to read music and permission of the director

The following inactive course(s) will only be offered if there is sufficient demand:
MUSC 1500 Basic Music Skills
MUSC 3752 Theater Orchestra

## Philosophy

Department office: 3308 Boylan Hall
Phone: 718.951.5311

## Full-time Faculty

Professors: Campos, Chopra, Khader, Lurz, Moore, Nuzzo, Steinberg, Trivedi
Associate Professors: Arlig, Gotlib, Menser, Vitrano
Assistant Professors: Lindauer, Shottenkirk
Lecturers: Maumus, Repetti
Philosophy examines fundamental and perennial questions: What is the nature of reality? What is knowledge and how is it acquired? What is moral behavior? What is the basis for aesthetic judgments? The Department of Philosophy acquaints students with the variety of viewpoints found in historical and current philosophical literature. Philosophy also examines the concepts, theories, methodologies, and moral issues of the natural sciences, social sciences, arts, and professional areas. The sciences and social sciences developed from the study of branches of philosophy, especially logic, epistemology, metaphysics, ethics, and natural philosophy. For instance, the field of psychology grew from epistemology. As the founding discipline, philosophy clarifies other fields. The department offers a course on the philosophy of science, for example.

While philosophy's greatest value may be in the uplifting satisfaction gained through greater understanding, philosophy is also a practical area of study. It is one of the ten most popular majors at Brooklyn College. The department offers a bachelor of arts in philosophy as well as minors in philosophy; philosophy and the arts; philosophy and the sciences; philosophy, culture and the social sciences; logic, reasoning and rationality; and professional and applied ethics. The department also offers a concentration for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades 1-6). In addition, we offer a minor in cognitive science in conjunction with the Department of Computer and Information Science and the Department of Psychology; a minor in corporate social responsiblity in conjunction with the Department of Business Management; and a minor in global studies in conjunction with several other departments.

The training that Brooklyn College philosophy students receive is an excellent basis for many careers, and internships related to student interests may be arranged. Philosophical training improves reasoning, analytic, and judgment skills. It enhances the ability to develop and defend positions. Careful analysis of texts and arguments makes philosophy an excellent foundation for law and law-related careers. (See Option II below.) Systematic examination of abstract, complex issues and rigorous training in communication skills also make a strong springboard for business careers in management, finance, and technology. (See Option IV below.) Students majoring in philosophy have the opportunity to take an honors major in philosophy. (See Option V below.) Students who wish to pursue graduate studies should speak to Department Chairperson and faculty advisor for advice and support.

## B.A. degree program in philosophy HEGIS code 1509; SED program code 02057

Philosophy is a writing-intensive major.
Department requirements (25-38 credits)

## Option I: Philosophy

Recommended for students for whom a broad background in philosophy is desirable.
The department Chair, with the approval of the chair of the department's curriculum committee, may allow substitutions for one or more course requirements, consistent with the educational goals of our program.

Two courses in history of philosophy from the following group (1):

1) Philosophy 3111 or 3112 or 3113 or 3114 or 3121 or 3122 or 3123 .

One course from each of the following groups (2), (3), (4), (5), (6), and (7):
(2) Methods and Reasoning: Philosophy 3203 or 3204 or 3210 or 3212
(3) Value Theory: Philosophy 3320 or 3326 or 3501 or 3703 or 3704
(4) Metaphysics and Epistemology: Philosophy 3401 or 3410 or 3420
(5) Pluralistic Methods and Traditions: Philosophy 3130 or 3308 or 3702 or 3720 or 3721 or 3722 or 3723 or 3724 or 3725 or 3726
(6) Seminar: Philosophy 4105 or 4110 or 5101 or 5102 or 5110 or 5111
(7) Elective: Any course 3000-level or above

Option II: Philosophy and Law
Recommended for students planning careers involving public affairs, law, or planning and management.
The department Chair, with the approval of the chair of the department's curriculum committee, may allow substitutions for one or more course requirements, consistent with the educational goals of our program.

All of the following: Philosophy 3105, 3320, 3410, 3703, 3704, 3740.
One course chosen from Philosophy 3203, 3210, 3212
One course chosen from any of the following groups:
(1) Applied Ethics: Philosophy 3306-3331
(2) History: Philosophy 3111, 3121-3141, 3145
(3) Other: Philosophy 3232, 3420, 3422, 3423, 3530-3605, 3701, 3702, 3714, 3724-3731, 3805-4110, 4201-5111

## Option III: Philosophy and Other Fields

Recommended for students planning careers in medicine, cognitive science, the arts, and for other students interested in acquiring a knowledge of philosophy that also contributes to the understanding of another field.

The department Chair, with the approval of the chair of the department's curriculum committee, may allow substitutions for one or more course requirements, consistent with the educational goals of our program.

Students must satisfy $\mathrm{A}, \mathrm{B}$, and C below.
A. One course from each of the following groups, (1), (2), (3), and (4):
(1) Philosophy 3111 or 3121.
(2) Philosophy 3203 or 3204 or 3210 or 3212 or 3232.
(3) Philosophy 3320 or 3501 or 3704.
(4) Philosophy 3401 or 3410 or 3420.
B. Three courses: One course from each of the following groups, (1), (2), and (3) below. The course chosen from each group may not be used to satisfy any of the above Option III-A requirements or any other Option III-B requirement.
(1) One course chosen from Philosophy 3130, 3215-3232, 3318-3335, 3401-3423, 3501-3740, 3805, 3910-4110, or 4201-5111.
(2) One course chosen from Philosophy 3105-3145, 3502, 3620, 3621, or 3703.
(3) One course chosen from Philosophy 3305-3317, 3422, 3520, 3720, or 3805.
C. One of the following, (1) or (2) or (3) or (4) below:
(1) At least 12 credits in courses taken in a single department or program outside the Philosophy Department.
(2) At least 12 credits in any selection of the following science courses: Biology 1001, 1002; Chemistry 1040, 1050, 1100, 2050, 2100, 2500, 3510 or both 3511 and 3512,3520 or both 3521 and 3522; Health and Nutrition Sciences 2109 or 2130; Physics 1100, 1111, 1112, 1150, 1190, 2100, 2150.
(3) A Minor in Cognitive Science or a Minor in Global Studies or a Minor in Corporate Social Responsibility. (Philosophy courses taken to complete a minor in cognitive science or to complete a minor in global studies or to complete a minor in corporate social responsibility can also be applied towards the satisfaction of Option III-A and Option III-B requirements for a major in philosophy.)
(4) A Minor in Philosophy and the Arts, or a Minor in Philosophy and the Sciences, or a Minor in Philosophy, Culture and the Social Sciences, or a Minor in Professional and Applied Ethics, or a Minor in Logic, Reasoning and Rationality. (Philosophy courses taken to complete a minor in philosophy and the arts, or to complete a minor in philosophy and the sciences, or to complete a minor in philosophy, culture and the social sciences or to complete a minor in professional and applied ethics, or to complete a minor in logic, reasoning and rationality can also be applied towards the satisfaction of the above Option III-A and Option III-B requirements for a major in philosophy.)

Option IV: Philosophy and Business
Recommended for students planning careers in business.
The department Chair, with the approval of the chair of the department's curriculum committee, may allow substitutions for one or more course requirements, consistent with the educational goals of our program.

Philosophy 3314 and 3320.
One course from each of the following groups, $A$ ), $B), ~ C), ~ D)$, and $E$ ).
The course chosen from each group many not be used to satisfy any other Option IV requirement.
A) Philosophy 3203, 3210, 3212, 3231 or 3232.
B) Philosophy 3401, 3410, 3422, 3423, or 3530.
C) Philosophy 3105, 3111, 3121-3141 or 3703 .
D) Philosophy 3704 or 3740 .
E) Philosophy 3145, 3305-3325, 3331, 3335, 3605, 3702, 3714, 3720, 3725, 3726, 3731, 3910-4110 or 4201-5111.

One of the following groups, either Marketing/Management or Finance:

- Marketing/Management:

All of the following: Business 3240 or Psychology 3172; Business 3100, 3130, 3200.

- Finance:

Accounting 2001 and either Business 3400 or Economics 3400.
Two of the following: Economics 3320, [Business 3310] or Finance 3310, [Business 3330] or Finance 3330.

## Option V: Philosophy Honors

The department Chair, with the approval of the chair of the department's curriculum committee, may allow substitutions for one or more course requirements, consistent with the educational goals of our program.

Students must satisfy A, B, C and D below.
A. All of the following: Philosophy 3111, 3121, 3320.

One of: Philosophy 3203 or 3204.
One of: Philosophy 3401 or 3410.
B. One course chosen from group (1), and one course chosen from group (2). The course chosen from each group may not be used to satisfy any of the above Option V-A requirements or any other Option V-B requirement.
(1) One of: Philosophy 3212-3232, 3401-3429, 3530, 3601, 3610, 3611, 3620, 3621; and
(2) One of: Philosophy 3105, 3111-3159, 3307-3311, 3316-3319, 3323-3331, 3501-3520, 3605, 3701-3921, 5201, 5210.
C. A student must complete at least one of the following seminars with honors credit and with a grade of B or higher:

Philosophy 4105 or 4110 or 4201 or 5101 or 5102 or 5110 or 5111.
D. A student must have an academic index of 3.50 or higher in philosophy courses taken to satisfy the major.

## Option VI: Philosophy and Medical Ethics

Department requirements (44-48 credits; 29-33 in philosophy courses, and 15 credits in approved science courses or a philosophy minor)
Requirements:
Philosophy 3311 and 3316 and 3320.
Philosophy 3601 or Philosophy 3611.
One course chosen from the following: Philosophy 3203, 3204, 3231, 3210, 3212, 3232.
One course chosen from the following: Philosophy 3703 or Philosophy 3704.

One course chosen from the following: Philosophy 3401, 3410, 3420, 3422, 3421, 3423.
One of course chosen from the following: Philosophy 3105, 3111, 3121, 3122, 3130, 3141, 3142, 3305, 3306, 3307, 3308, 3309, 3323, 3325, $3326,3331,3501,3502,3511,3512,3520,3530,3702,3711,3714,3720,3721,3722,3723,3724,3725,3726,3730,3731,3740,3805$.

One course chosen from the following: Philosophy 4105, 4110, 4120, 4201, 5110, 5111.
Either at least 15 credits in any selection of the following science courses: Biology 1001, 1002, Chemistry 1100, 1040, 1050, 2050, 2100, 3511, 3512, 3521, 3522, 4570, 4571, 4572, 4580, Physics 1100, 1111, 1112, 2100; or

A Minor in Philosophy, or a Minor in Philosophy and Science, or a Minor in Professional and Applied Ethics, or a Minor in Logic, Reasoning and Rationality, or a Minor in Cognitive Science, or a Minor in Philosophy of the Arts, or a Minor in Philosophy, Culture and the Social Sciences, or a Minor in Corporate Social Responsibility, or a Minor in Global Studies.

## Departmental Minor(s)

## Minor in Philosophy

Department requirements:
At least 12 credits in at least four advanced electives in philosophy, with a grade of $C$ or higher.

## Minor in Philosophy and the Arts

Department requirements:
An interdisciplinary minor in philosophy and the arts, offered by the Philosophy Department, requiring 15 credits:
Philosophy 3501 or 3502.
Two of the following: Philosophy 3315, 3511, 3512, or 3520.
At least six credits in at least two arts or literature courses, offered by other departments in the College. These may be chosen from any courses offered by: the Art Department, the Film Department, and the Conservatory of Music. Courses may also be chosen from other departments in the College, including English, Modern Languages and Literatures, and Theater, with permission of the chairperson of the Philosophy Department.

## Minor in Philosophy and the Sciences

Department requirements:
One of the following: Philosophy 3601 or 3620.
One of the following: Philosophy 3203 or 3204 or 3232.
One of the following: Philosophy 3421, 3610, 3611, 3621.
One of the following: Philosophy 3309, 3316, 3317.
One course that is at least three credits and that is offered by any of the following departments, Biology, Chemistry, Geology, or Physics, or that is offered by another department or program and that is approved by the chairperson of the Philosophy Department.

## Minor in Philosophy, Culture, and the Social Sciences

Department requirements ( 15 credits)
Each course may be used to satisfy only one requirement below.

1. One of: Philosophy 3701 or Philosophy 3702.
2. Three courses selected as follows:

At least one of the following: Philosophy 3711 or 3714 or 3421 or 3712.
Not more than one of the following: Philosophy 3701, 3702, 3703, 3704.
Not more than one of the following: Philosophy 3720, 3721, 3722, 3723, 3724.
3. At least one course in one of the following departments or programs: Africana Studies, Anthropology, Economics, Education, History, Political Science, Puerto Rican and Latino Studies, Psychology, Sociology, Women's and Gender Studies.

## Minor in Logic, Reasoning and Rationality

Department Requirements (12 credits):

Philosophy 3203 or 3204.
Philosophy 3215 or 3220 or 3231 or 3410 or 3610.
Two additional courses (not selected above) chosen from the following: Philosophy 3203, 3204, 3210, 3215, 3220, 3231, 3232, 3530, 3610.

## Minor in Professional and Applied Ethics

Department requirements:

Recommended for students interested in acquiring an in depth knowledge of ethical considerations, a familiarity with the literature and issues of professional and applied ethics, and a proficiency in making ethical decisions related to one or more of the following areas: medicine, law, public policy, scientific research, counseling, social work, business, education, personal and social relations, journalism and the media, international relations, communications, computer and information sciences, library science, the life sciences, the social sciences, environmental studies.

One of the following: Philosophy 3305, 3306, 3308, 3731, 3805.
Philosophy 3310 and 3320.
Two courses chosen from the following: Philosophy 3307, 3309, 3314, 3315, 3316, 3317, 3318W, 3920, 3740, or a course that is offered by a department or program outside the Philosophy Department and that is approved by the Chairperson of the Philosophy Department.

## Interdepartmental Minor(s)

## Minor in Cognitive Science

An interdisciplinary and interdepartmental minor, offered by the Department of Computer and Information Science, the Department of Philosophy, and the Department of Psychology.

## Program requirements: (19-20 credits)

## All of the following:

Philosophy 3422, Computer and Information Science 1115, Psychology 1000, Psychology 2530 or 3530.
One from each of the following groups, a) and b):
a) Philosophy 3123, 3401, 3410, 3420, or 3601.
b) Computer and Information Science 1410 or 3410, or Philosophy 3423, or Psychology 3580

## Minor in Corporate Social Responsibility

An interdepartmental minor, offered by the Department of Business Management and the Department of Philosophy.
All of the following: Business 3245 or Business 3250 or Women's and Gender Studies 3345; Business 3251 or Philosophy 3335; Philosophy 3314; Philosophy 3307 or Philosophy 3309 or Philosophy 3310.

Any two of the following: Accounting 3201, Business 3210, Business 3220, Classics 3233, Economics 3252, Business 3020 or Judaic Studies 3205; Philosophy 3310, Philosophy 3315 or Communication 3200, Philosophy 3318W or Computer and Information Science 2820W,

Philosophy 3307, Philosophy 3309.
Each course may be used to satisfy only one requirement.
A grade of C - or higher is required in each of the six courses offered for the minor.

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C- or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Philosophy

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in philosophy must complete one of the following 30-credit options in the Philosophy Department with a grade of C or higher in each course.

## Concentration requirements:

Option A: Philosophy 3210, 3306, 3711; 3130 or 3703; 3501 or 3511.
Two of the following courses: Philosophy 3308, 3309, 3314, 3720, 3722.
One course from each of the following groups. The course chosen from each group may not be used to satisfy any other Option A requirements.
a) Philosophy 3320, 3323, 3704.
b) Philosophy $3111,3112,3113,3114,3121,3122$.
c) Philosophy 3410, 3601, 3701, 3730.

Option B:
Philosophy 3111, 3121, 3210, 3320, 3410, 3703, 3704; 3306 or 3711.

## Department honors

To qualify for honors in philosophy, a student must complete at least three credits of honors work in philosophy with a grade of B-or higher and must have an academic index of 3.50 or higher in all philosophy courses completed.

## Recommendation for prospective graduate students

Prospective graduate students in philosophy should consider the Philosophy Honors Major (Option V), an independent study with a faculty advisor, and developing reading comprehension in at least one of the following languages: French, German, Greek, Latin.

## Courses

Advanced courses include Philosophy Department courses numbered 3101 or higher.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## Introductory courses <br> Problems/issues of philosophy <br> PHIL 2101 Introduction to the Problems of Philosophy

3 hours; 3 credits
Survey of basic philosophical problems and different solutions proposed by philosophers. Such topics as the nature and scope of knowledge, meaning and verification, the existence of God, determinism and free will, the mind-body problem, and the nature of moral judgments. Satisfies Pathways Flexible Core Individual and Society requirement. (Not open to students who are enrolled in or have completed Philosophy 1.2 or 3105 [2] or Core Studies 10 or CORC 1210.)

## PHIL 2200 The Outer Limits of Reasoning

## 3 hours; 3 credits

Paradoxes and limitations arising in computer science, the physical sciences, and mathematics. Reasoning conundrums and paradoxes with an emphasis on examples from mathematics. Limitations of reason, logic, mathematics and computing. Reasoning about infinity. The inability to prove everything that is true. Problems that cannot be solved computationally in a reasonable amount of time. Unsolvable problems. The boundary between what can and cannot be known. Starting Spring 2018 Satisfies Pathways Required Core Mathematics and Quantitative Reasoning requirement. This course is the same as Computer and Information Science 1002. (Not open to students who have completed CORC 3310.)

## PHIL 2501 Philosophical Issues in Literature

## 3 hours; 3 credits

Philosophical issues in major literary works and related classical and contemporary philosophical literature. Such issues as appearance and reality, personal identity, truth, freedom, evil, justice, and ideal government. (Not open to students who have completed Core Curriculum 3105.) 2017-2018: Satisfies Pathways College Option requirement. Starting Fall 2018 Satisfies Pathways Flexible Core Individual and Society requirement.

## Core areas of philosophy

## PHIL 3304 Disability in America

3 hours; 3 credits
This course explores how American culture continues to shape and reflect ideas about ability and disability. Topics include: History of disability in the social, political, and environmental fabric of American society; talking about disability in medical ethics; negotiating constructed boundaries, stereotypes, and representations of disability; disability in arts and performance; American disability memoires. Students will be expected to
participate in class and group work, do low-risk writing, give presentations, and complete final papers/projects. This course is the same as MUSC 4435 and AMST 3710.

Prerequisites: ENGL 1010

## History of philosophy

## PHIL 3105 Landmarks in the History of Philosophy

3 hours; 3 credits
Study of key philosophical works by such major Western philosophers as Plato, Aristotle, Augustine, Aquinas, Maimonides, Descartes, Hume, Kant, Marx, Russell, chosen from at least three of the following periods: ancient, medieval, modern, contemporary. Develops critical reading and writing skills, analytical skills, research methods.

## PHIL 3111 Ancient Philosophy

4 hours; 4 credits
Development of metaphysics, epistemology, and ethics in ancient thought. Influence on medieval and modern thought. Emphasis on Plato and Aristotle. (Not open to students who have completed Philosophy 11.)

## PHIL 3112 Hellenistic and Roman Philosophy

3 hours; 3 credits
The development of epistemology, metaphysics, ethics, natural philosophy, and logic in Hellenistic and Roman philosophy. Critical examination of such movements as Epicureanism, Stoicism, Skepticism, and of such philosophers as Cicero, Lucretius, Seneca, Philo Judaeus, Plotinus.

## PHIL 3113 Medieval Philosophy

3 hours; 3 credits
The development of epistemology, metaphysics, and ethics in medieval thought. Free choice of the will; the existence and properties of God; the nature of truth and human knowledge; the problem of universals. Jewish, Arabic, and Christian thought. Such medieval philosophers as Augustine, Abelard, Anselm, Maimonides, Aquinas, Scotus, Ockham. (Not open to students who are enrolled in or have completed Philosophy 41.)

## PHIL 3114 Renaissance Philosophy

## 3 hours; 3 credits

The development of epistemology, metaphysics, ethics, and logic in Renaissance philosophy. Critical examination of Renaissance Humanism, Platonism, Aristotelianism, Skepticism. Such thinkers as Ficino, Pico della Mirandola, Bruno, Bacon, Galileo, Montaigne, Machiavelli.

## PHIL 3121 Modern Philosophy

4 hours; 4 credits
Development of metaphysics, epistemology, and ethics since the Renaissance. Emphasis on Descartes, Spinoza, Locke, Leibniz, Berkeley, Hume, and Kant. (Not open to students who have completed Philosophy 12.)

## PHIL 3122 Nineteenth-Century Philosophy

## 3 hours; 3 credits

Critical examination of nineteenth-century philosophical movements and of such philosophers as Hegel, Schopenhauer, Kierkegaard, Nietzsche, and Marx. The empirical tradition, including such philosophers as J.S. Mill and Brentano, may also be explored. (Not open to students who have completed Philosophy 49.)

## PHIL 3123 Twentieth-Century Philosophy

## 3 hours; 3 credits

Such major trends in analytic philosophy as logical atomism, logical positivism, and ordinary language analysis. Critical examination of the writings of such exponents of these approaches as Russell, Moore, Ayer, Ryle, Austin, and Wittgenstein. Some continental philosophers may also be examined. (Not open to students who have completed Philosophy 55.)

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## PHIL 3130 American Philosophy

3 hours; 3 credits
Critical study of major philosophers, philosophical movements and traditions in American philosophy. Movements such as transcendentalism and pragmatism. African-American, Latino/a, Native American, and feminist traditions. Such authors as Sagoyewatha, Jonathan Edwards, Ella Lyman Cabot, Ralph Emerson, Charles Peirce, William James, John Dewey, W.E.B. Du Bois, George Santayana, Jane Addams, Alain Locke, Luther Standing Bear, Cornel West, and Maria Lugones.

## PHIL 3141 American Pragmatism, Past and Present

3 hours; 3 credits
The historical sources and origins of pragmatism in American philosophy. Pragmatism and logical positivism; pragmatism and analytic philosophy; pragmatism and naturalism; neo-pragmatism. The influence of American pragmatism on other philosophical traditions. Such philosophers as Peirce, James, Dewey, Mead, Davidson, Putnam, and Rorty.

## PHIL 3142 Existentialism and Phenomenology

## 3 hours; 3 credits

Phenomenological-existentialist critique of positivism, psychologism, and traditional humanism and the counter-claim to a deeper and more philosophical interpretation of man and his 'being in the world'. Readings from such philosophers as Husserl, Heidegger, Sartre, and Merleau-Ponty.

## PHIL 3145 Philosophical Foundations in Marxism

3 hours; 3 credits
Philosophical problems in Marxism. Early and Later Writings of Marx. Relationship of Marx to Hegel, Marx's concepts, methodology, theories of history and knowledge. Twentiethcentury Marxists such as Lukacs, Habermas, Korsch, Althusser, Marcuse.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## Logic and reasoning

## PHIL 3203 Introductory Formal Logic

## 3 hours; 3 credits

An introduction to modern sentential and predicate logic. Among the topics are validity, consistency and proof, formal analysis of sentences and arguments in natural language. (Not open to students who are enrolled in or have completed Philosophy 3204 [33].)

## PHIL 3204 Symbolic Logic

3 hours; 3 credits
Symbolic methods of modern deductive logic and their application to language. Metalogical techniques for the study of logistic systems. Alternative logics. Probability calculus. Higher functions. Type theory. Godellian incompleteness.

## PHIL 3210 Reasoning

## 3 hours; 3 credits

Examination and development of reasoning skills. Informal logic. Topics such as meaning, definition, the analysis of arguments, fallacies. Use of examples in reasoning to apply principles studied. Legal reasoning, support for claims about public policy, scientific and philosophical arguments.

## PHIL 3212 Elements of Philosophy

4 hours; 4 credits
An introduction to the methods and practices of philosophy, with an emphasis on the development of core philosophical skills. These skills include reasoning and logic, textual interpretation, argument analysis and reconstruction, and argument construction. Instructors will select appropriate philosophical materials for developing these skills.

Prerequisite: None

## PHIL 3220 Philosophy of Logic

3 hours; 3 credits
Philosophical problems of formal logic: logical truth, entailment, meaning and reference, ontology, logical and semantical paradoxes, semantic categories, relation of formal logic to natural languages.

Prerequisite: Philosophy 3203 [13] or 3204 [33], or an equivalent logic course or permission of the chairperson.

## PHIL 3231 Decision Theory

3 hours; 3 credits
Introduction to the theory of individual, group and social decisionmaking. Decision-making under risk and under ignorance.

Probability theory, utility theory, game theory and their paradoxes. Theory of collective choice. Applications of decision theory in ethics, political philosophy and the theory of action.

## PHIL 3232 Induction: Cause, Choice, and Chance

## 3 hours, 3 credits

An introduction to inductive logic. Philosophic problems of induction. Relation of induction to probability and scientific method. Causal reasoning. Mill's methods. Views of such philosophers as David Hume, Nelson Goodman, C. S. Peirce.

## Ethics, applied ethics, professional ethics

## PHIL 3305 Ethics and Personal Relations

## 3 hours; 3 credits

Critical examination of issues in personal ethics. Moral obligations to self, family, friends, love partners, neighbors, schoolmates, coworkers. Autonomy and integrity; responsibility and special obligation. Discussion of such topics as suicide, substance abuse, marriage, divorce, love and sex, parent-child relations, surrogacy, gambling, lying, and cheating. Conceptions of family, work, and leisure. Classical and contemporary philosophers.

## PHIL 3306 Ethics and Society

## 3 hours; 3 credits

Critical consideration of issues in social ethics. Discussion of such topics as racism and sexism, economic justice, civil disobedience, capital punishment, environmental pollution, nuclear power and weaponry, abortion, euthanasia, freedom of information, the right to privacy.

## PHIL 3307 Global Ethics

## 3 hours; 3 credits

Critical examination of issues in global ethics. Human rights and global justice; justice of war; self-determination of peoples; sovereignty of states; legitimacy of external intervention; humanitarian intervention; justice of sanctions; conditionality or imperativeness of economic aid; ethical issues in international development; global citizenship. Classical and contemporary readings.

## PHIL 3308 Race, Justice, and Equality

3 hours; 3 credits
A philosophical examination of race and racism centered around the moral values of justice and equality. Topics addressed include race as a social category, racial identity, the nature of racism, race neutrality and race consciousness, multiculturalism, and the relationships among values such as fairness, equality, and wellbeing. Contrasting points of view on measures designed to counter racism, including civil disobedience, affirmative action, racial reparations, and race-based restrictions on speech.

## PHIL 3309 Environmental Ethics

## 3 hours; 3 credits

Ethical aspects of human treatment of the natural environment, including the moral basis for pollution control, wilderness preservation, energy and resource conservation, protection of
endangered species, and sustaining the earth's ecological diversity. Major theories of environmental ethics and their valuational foundations will be examined critically.

## PHIL 3310 Fundamentals of Professional Ethics

3 hours; 3 credits
Conceptions of professions and their relationship to society. Professionals and ethics. Such topics as privacy, confidentiality, whistle-blowing, and conflicts of interest. Philosophical implications of Codes of Ethics of various professions.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## PHIL 3311 Neuroethics

## 3 hours; 3 credits

Philosophical examination of moral issues arising from emerging biomedical technologies. Critically focuses on resulting ethical dilemmas within personal identity, free will and moral responsibility, public policy and law, and neuroscience. Considers challenges to traditional conceptions of who we are; how we reason, make decisions and value judgments; how and why we remember (and forget). Addresses the implications of biotechnological cognitive enhancement strategies, "brain reading" and similar technologies, and virtual and other technologicallyfacilitated embodiments.

## PHIL 3314 Moral Issues in Business

3 hours; 3 credits
Basic approaches to moral reasoning and their application to such issues as justice and economic systems; corporate responsibility to society, the environment, and developing nations; and the duties of businesses to their employees, their customers, and their competitors.

Prerequisite: one course in philosophy, or one course in Accounting or Business or Economics, or Core Curriculum 1210 [2.1], or Core Studies 10.

## PHIL 3315 Communication Ethics

## 3 hours; 3 credits

Critical examination of ethical issues related to communication, information, and the media. Freedoms and responsibilities. Consideration of such issues as: privacy, confidentiality, censorship, deception, propaganda, accuracy, fairness, intellectual property rights, conflicts of interest, obscenity and pornography, civility and offensive speech. Classical and contemporary philosophers. (This course is the same as Communication 3200.)

Prerequisite: one course in philosophy or Communication 1000 or permission of the Chairperson of the Philosophy department.

## PHIL 3316 Medical Ethics

3 hours; 3 credits
Analysis and discussion of problems concerning the physicianpatient relationship, life and death, medicine on a social scale. (Not open to students who have completed Philosophy 24.)

## PHIL 3318W Computers and Ethics

3 hours; 3 credits
Analysis of ethical issues pertaining to computers and the
workplace, anonymity and privacy, copyright and patent law (as applied to software), computer crime, security, unauthorized use, codes of conduct for computer professionals, access and availability of computing technologies. Application of theoretical frameworks such as virtue ethics, deontological theories and utilitarianism to the ethical problems encountered in computing technologies. Writing intensive course. (This course is the same as Computer and Information Science 2820W.)

Prerequisite: Core 5.1 or Core Curriculum 1312 [3.12] or Computer and Information Science 1000 [1.0] or Computer and Information Science 1110 [1.5] or 1115, and English 1012 [2].

## PHIL 3319 Ethical Issues in the Electronic Mass Media

3 hours; 3 credits
Analysis and discussion of ethical issues related to television, Radio and Emerging Media. Case histories and role playing provide value judgments concerning entertainment, information, and advertising functions of mass media. This course is the same as Television, Radio and Emerging Media 3223. (Not open to students who have completed Philosophy [24.1])

Prerequisite: Television, Radio and Emerging Media 1165 [6.5]; Philosophy 3306 [6] or Core Studies 10 or Core Curriculum 1210 [2.1] or Philosophy 2101.

## PHIL 3320 Foundations of Ethics

4 hours; 4 credits
Systematic study of the nature and grounds of moral judgments. Methods of justifying moral standards. Analysis of moral concepts. Ethical theories of classical and contemporary writers critically examined.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## PHIL 3323 Virtue: Ideals of Human Goodness

3 hours; 3 credits
Comparative and critical analysis of contrasting ideals of human virtue and prescriptions for its attainment. Focus on philosophic and literary texts representing several different cultures and historical periods.

## PHIL 3325 Theory of Value

## 3 Hours; 3 Credits

Analysis of normative and evaluative concepts. Logic of justifying value judgments. Role of value in deliberation and decision making. Recent developments in the theory of value.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## PHIL 3326 Moral Psychology

## 3 hours; 3 credits

Moral decision-making and the conditions for moral agency. Topics include: egoism, the possibility of altruism, the place of sympathy and empathy in ethics, moral motivation, the structure of emotions, the possibility of weakness of will and self-deception, addiction and compulsion, shame and regret, character and circumstance.

## PHIL 3331 Happiness and the Meaning of Life

Philosophical theories of happiness and of what gives life its meaning. Topics include the role of happiness in the history of ethics; the nature, value, and sources of happiness; current interdisciplinary empirical research on happiness; a variety of approaches to the philosophical issue of the meaning of life. Classic and contemporary readings.

## PHIL 3335 Workplace Values and Happiness

3 hours; 3 credits
Issues relating to the integration of virtue and spiritual values such as creativity, integrity, social responsibility, economic justice, and environmental stewardship into the workplace and marketplace. Changing the corporate culture, importance of the mission statement, and leadership styles. Research on happiness and the role that meaningful work plays in happiness. Real life examples and cases to illustrate concepts and issues. This course is the same as BUSN 3251.

Prerequisite: Philosophy 3314 [14] or permission of the chairperson.

## Metaphysics, epistemology, philosophy of mind

## PHIL 3401 Metaphysics

4 hours; 4 credits
Classical and contemporary theories of being and reality. Analysis of such concepts as particular, quality, relation, personal identity, free will and determinism, universals, substance, mind, matter, space, and time. Possibility of metaphysical knowledge. The relationship between metaphysics and other disciplines.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## PHIL 3410 Epistemology: Theory of Knowledge

4 hours; 4 credits
Classical and contemporary theories of the nature of knowledge and belief. Discussion of skepticism, rationalism, empiricism, coherentism, foundationalism. Analysis of such concepts as probability, certainty, perception, evidence, truth.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## PHIL 3420 Philosophy of Mind

## 3 hours; 3 credits

Philosophic analysis of such mental and psychological concepts as intention, want, belief, emotion, will, desire, pleasure, imagination, and thought. Such contemporary problems as the identity thesis, behaviorism, the analysis of mental acts, and the intentionality thesis.

## PHIL 3421 Problems in the Philosophy of Psychology

## 3 hours; 3 credits

Philosophical questions raised by psychoanalysis, behaviorism, cognitive science, and sociobiology. Philosophical problems related to theories of unconscious mental processes, repressed memories, multiple personality, mental illness, innate knowledge, the origins of concepts of truth and moral rightness, animal cognition. Theories of classical and contemporary thinkers critically examined.

## PHIL 3422 Philosophical Issues in Cognitive Science

## 3 hours; 3 credits

Introduction to select foundational issues in cognitive science. Consideration of such topics as concept formation, meaning, representation, language, reasoning, consciousness, rationality, the human mind, and machine intelligence.

## PHIL 3423 Philosophy and Artificial Intelligence

3 hours; 3 credits
Contemporary issues in philosophy and psychology such as the mind-machine analogy, the artificial intelligence model of the human mind, intentionality, representation, consciousness, concept formation, free will, behaviorism, mechanism. Discussion and evaluation of contemporary work in the field. This course is the same as Computer and Information Science 1410 and Psychology 3580. (Not open to students who have completed Computer and Information Science 32.1.)

Prerequisite: Core Studies 5 or 5.1 or Core Curriculum 1312 [3.12] or a course in computer and information science, and Core Studies 10 or Core Curriculum 1210 [2.1] or one course in philosophy; or permission of the chairperson of the offering department.

## Philosophy and other fields

## Philosophy, the arts, literature and language

## PHIL 3501 Philosophy of Art

3 hours; 3 credits
Nature and value of art and aesthetic experience. Aesthetic theories examined abstractly and with reference to the living arts. Methods and criteria for forming aesthetic judgments.

## PHIL 3502 Philosophy of Beauty

## 3 hours; 3 credits

Concept of beauty in history of philosophy; Beauty in 18th century. British aesthetic theory; Kant's theory of beauty; contemporary theories of beauty; renewal of interest in beauty in philosophy; beauty and morality; beauty and environment; beauty and cognitive science; feminist theory and beauty.

## PHIL 3511 Philosophy of Literature and Film

## 3 hours; 3 credits

A critical examination of the philosophical dimensions of various theories of literature, literary criticism, and film. Examination of logical, metaphysical, epistemological, ethical, and aesthetic issues in narrative fiction.

## PHIL 3512 Philosophy of Music

3 hours; 3 credits
Critical examination of philosophical issues pertaining to music. Consideration of such issues as: the definition or concept of music, the ontology of music, musical meaning and understanding, musical expressiveness and arousal, musical representation, musical performance and authenticity of performance, the power and value of music, and the aesthetics of jazz, rock, and popular music. Classical and contemporary philosophers. (This course is the same as Music 4960.)

## PHIL 3520 Environmental Aesthetics

3 hours; 3 credits
Traditional and contemporary philosophical discussions of aesthetic experience of the natural environment. Beautiful, sublime and picturesque. Natural versus artifactual appreciation. Cultural and urban environments. Environmental and public art. Theories of aesthetic appreciation of environment. Science, emotions and imagination in aesthetic experience. Aesthetic judgments of nature. Aesthetics, ethics and environmental conservation. Urban environmental field trip.

## PHIL 3530 Philosophy of Language

## 3 hours; 3 credits

Survey of the main topics in the philosophy of language. Different approaches to the description of language. Types of grammar. Acquisition and use of language. Classification, definition, and meaning. Place of linguistic data in philosophical arguments.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## Philosophy and the sciences

## PHIL 3601 Philosophy of Science

## 3 hours; 3 credits

Logical structure of mathematics and of the natural sciences. Explanation in the physical sciences. Cognitive status of scientific laws and theories.

## PHIL 3605 Philosophy of Technology

3 hours, 3 credits
Philosophical examination of the nature and impact of technological systems and technical knowledge. Such philosophical topics as: What is technology?; the effects of technology on our conceptions of nature, human, science, and society; ethical issues concerning the development and use of technology. Various philosophical approaches including phenomenology, pragmatism, feminism, and analytic philosophy.

## PHIL 3610 Philosophy of Mathematics

3 hours, 3 credits
Introduction to philosophy of mathematics. Classical philosophers of mathematics (Pythagoreans, Plato, Aristotle, Kant, Mill). Major 20th-century schools (logicism, intuitionism, formalism). Recent developments (realism/nominalism debate, structuralism, philosophy of set theory).

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1] or permission of the chairperson.

## PHIL 3611 Philosophy of Biology

3 hours; 3 credits
Intensive study of selected areas in the philosophy of biology including the origin of life: teleological, functional, and mechanistic explanations; the theory of evolution and the neo-Darwinian synthesis; reductionism, genetics, and hierarchies; taxonomy and the species problem; and sociobiology.

## PHIL 3620 Philosophy of Nature

## 3 hours; 3 credits

A critical examination of the development of theories of nature, life, and cosmology. Classical and modern issues in natural philosophy. Such topics as the structure of the natural world, the nature of space and time, theories of the organism, classic debates concerning mechanism, vitalism, atomism and monism, determinism, the relation between God and nature. Views on issues in natural philosophy of such thinkers as Anaximander, Democritus, Plato, Aristotle, Epicurus, Aquinas, Descartes, Gassendi, Boyle, Locke, Leibniz, Hume.

## PHIL 3621 A History of Ideas in Physics

## 3 hours; 3 credits

Development of philosophical points of view in physics from ancient times to the present. Interplay of ideas from science, philosophy, and the world views of various societies. (Not open to students who have completed Physics 36.) This course is the same as Physics 1060.

Prerequisite: Core Studies 7.2 or its equivalent, or Core Curriculum 1331 [3.31]/Physics 1005 or its equivalent, or Core Studies 10, or Core Curriculum 1210 [2.1], or one course in philosophy, or permission of the chairperson.

## Philosophy, culture and the social sciences

## PHIL 3701 Philosophy of the Social Sciences

3 hours; 3 credits
Logic of social scientific inquiry. Behaviorism, functionalism, historicism, methodological individualism, and structuralism. Analysis of such basic social scientific concepts as culture, group, norm, person, action, and ideology. Values in the social sciences.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## PHIL 3702 Philosophy of Culture

## 3 hours; 3 credits

Philosophical examination of various facets of culture, including the arts, mass media, high art and low art, popular culture, the avantgarde, modernism, post-modernism, myth, language, religion, the sciences, society, race, class, gender, and sexuality. Classic and contemporary philosophers from a broad cross-section of philosophical traditions.

## PHIL 3703 Political Philosophy

4 hours; 4 credits
History of theories of the underlying principles of law and social organization. Principles of just distribution; rule of men versus rule of law; natural law and social contract theories; social justice versus individual liberty. Such philosophers as Plato, Aristotle, Hobbes, Locke, Rousseau, Kant, Hegel, Marx, Mill, Thoreau, Rawls, and Nozick are discussed. (Not open to students who have completed Philosophy 39.)

## PHIL 3704 Social Philosophy

4 hours; 4 credits
Philosophical theories of society and human nature. Analysis of such social concepts as authority, law, rights, the state, justice, the
common good, liberty, and sovereignty. Methods of justifying political principles. Social ideals and general theory of value. (Not open to students who have completed Philosophy 40.)

## PHIL 3711 Philosophy of Education

## 3 hours; 3 credits

Critical analysis of concepts of education; major philosophies of education; aims of education; social issues and education. (Not open to students who have completed Education 18.)

## PHIL 3712 Philosophy of History

3 hours; 3 credits
Philosophical problems involved in the study of history. Nature of historical knowledge and of explanation in history. Concept of progress in history. Historical inevitability. Meaning of history. Place of moral judgments in historical writing. Vico, Hegel, Marx, Tolstoy, Collingwood, Toynbee, Hempel, Berlin, Popper.

## PHIL 3714 Philosophy of Economics

3 hours; 3 credits
Philosophical analysis of the methodology of economics, and of the ethical implications of economic theory and its applications to public policy. Survey of major philosophical approaches to economic methodology, considering classical and contemporary sources. Rationality in economics and morality. Ethical analysis of such basic concepts of economic theory as welfare and efficiency, and their relationships to liberty, rights, equality and justice.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## PHIL 3720 Philosophy and Feminism

3 hours; 3 credits
Philosophical feminism. Critical examination of current issues in feminist scholarship. Issues of discrimination, equality, and difference; women in relation to science, epistemology, and political and moral philosophy. This course is the same as Women's and Gender Studies 3135.

Prerequisite: Core Curriculum 1210 [2.1], or Core Studies 10, or one philosophy course, or one Women's and Gender Studies course, or permission of the chairperson.

## PHIL 3721 Jewish Philosophy

## 3 hours; 3 credits

Jewish philosophers and philosophic movements. Historical roots and wider cultural context of Jewish philosophy. Existentialist, feminist, and postmodernist developments in Jewish philosophy. Classic and contemporary philosophers, such as Philo of Alexandria, Maimonides, Gersonides, Spinoza, Mendelssohn, Buber, Rosenzweig, Hermann Cohen, Leo Strauss, Emmanuel Levinas.

## PHIL 3722 Asian Philosophy

3 hours; 3 credits
Development of Indian thought in such sources as the Vedic hymns, the Upanishads, the Bhagavadgita, Jainism, Buddhism, and the darshana. Chinese, Indian, and Japanese thought through the ancient, medieval, and modern periods.

## PHIL 3723 African-American Philosophy

## 3 hours; 3 credits

Exploration of some of the central philosophical issues in AfricanAmerican philosophy. Such topics as race, gender, respect, social justice, reparations. Diverse philosophical perspectives, such as existentialism, analytic philosophy, pragmatism, post-structuralism. Classic texts and writings of contemporary philosophers.

## PHIL 3724 Latin American Philosophy

## 3 hours; 3 credits

Examination of some of the central issues in Latin American philosophy in the medieval, modern and contemporary periods. Such topics as the definition of humanity, morality and colonialism, independence, race, gender, identity, social justice, moral and aesthetic value. Various philosophical perspectives such as positivism, pragmatism, existentialism.

## PHIL 3725 Philosophy of Race

## 3 hours; 3 credits

Philosophical examination of race and the question of its validity as a scientific, social, and census category. Such issues as the metaphysical legitimacy and social reality of racial designations; race, subjectivity, and sense of self; mixed race persons; racial identities and their political effects; the relationship between the continued use of racial categories and the persistence of racism.

## PHIL 3726 Queer Philosophy

3 hours; 3 credits
Examination of metaphysical, epistemological and ethical issues arising from the experience of the LGBT community, including: philosophical critiques and defenses of the concept of sexual orientation; homosexuality in the Western philosophical tradition; LGBT marriage and familial relations; the ethics of outing and of being closeted; ethical issues affecting LGBT people in medicine, education and the law. This course is the same as Women's and Gender Studies 3137.

## PHIL 3729 Searching for God: Ancient Greeks, Jews, and Christians

3 hours; 3 credits
History of theology in the Mediterranean basin from ancient through medieval periods. Same as CLAS 3022, JUST 3023, and RELG 3022.

## PHIL 3730 Philosophy of Religion

## 3 hours; 3 credits

Philosophical interpretations of the data of religious experience. Religion and magic, science, ethics, and world views. Religious language. Criteria of religious knowledge.

## PHIL 3731 Philosophy of Sport

3 hours; 3 credits
Philosophical foundations of sport. Definitions and descriptive characteristics of sport in relation to games, play, exercise, and physical movement. Ethical, aesthetic, epistemological, and metaphysical issues in the practice and appreciation of sport. Sport and society.

## PHIL 3740 Philosophy of Law

4 hours; 4 credits
Basic legal concepts and philosophical problems relating to law. General legal theory; human and legal rights; legal responsibility; punishment; justice; property; judicial reasoning; the legal enforcement of morals.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## General courses

## Problems/issues of philosophy

## PHIL 3805 Philosophical Issues Concerning Animals

3 hours; 3 credits
Can animals think? Do animals have rights? Examination of such issues as animal consciousness, cognition, intelligence; obligations to animals; pets and pests; vegetarianism; experimentation with animal subjects; genetic engineering of animals; endangered species. Classical and contemporary philosophers.

## Special topics, seminars and customized courses

## Special topics

## PHIL 3910 Special Topics

## 3 hours; 3 credits

Special topic, problem, figure, or school of thought in philosophy not otherwise covered in the regular courses of the curriculum. Topics vary and reflect special interests of students and faculty. Course description may be obtained in the department office before registration. Students may take this course twice, with the permission of the department chairperson, but may not repeat topics.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## Internship/professional training

## PHIL 3920 Internship in Applied Philosophy I

1 hour conference, minimum of 6 hours unsupervised fieldwork; 3 credits
Field experience in professional organizations that contribute to the preparation for careers in such areas as law, government, medicine, business, teaching. Individual and group conferences with faculty mentor. Directed reading and writing in applied philosophy related to field experience. Preparation and presentation of a critical report of the experience.

Prerequisite: nine credits in philosophy courses, and permission of the chairperson.

## PHIL 3921 Internship in Philosophy II

1 hour conference, minimum of 6 hours unsupervised fieldwork; 3 credits
Field experience in professional organizations that contribute to the preparation for careers in such areas as law, government, medicine, business, teaching. Individual and group conferences with
faculty mentor. Directed reading and writing in applied philosophy related to field experience. Preparation and presentation of a critical report of the experience.

Prerequisite: Philosophy 3920

## Seminars and research courses

## Seminars

## PHIL 4105 Seminar in the Problems of Philosophy

3 hours and independent work§; 4 credits
A philosophical problem or set of connected problems. Course description may be obtained in the department office before registration. Students may take this course twice, with the permission of the department chairperson, but may not repeat topics.

Prerequisite: completion of a program, approved by the chairperson, of advanced Philosophy Department courses and permission of the chairperson.

## PHIL 4110 Seminar in the History of Philosophy

3 hours and independent work $\S ; 4$ credits
A period in history of philosophy, a school of philosophy, or an individual philosopher. Course description may be obtained in the department office before registration. Students may take this course twice, with the permission of the department chairperson, but may not repeat topics.

Prerequisite: completion of a program, approved by the chairperson, of advanced courses in philosophy and permission of the chairperson.

## PHIL 4120 Interdepartmental Humanities Seminar

4 hours; 4 credits
A significant recurrent theme in Western literature and philosophy. Course description may be obtained in the department office before registration. Reports and term paper. Offered jointly by the Departments of Classics, English, and Philosophy. This course is the same as Classics 5000, Comparative Literature 4602, English 4112.

Prerequisite: a grade of B or higher in six credits in advanced courses in the major field and permission of the instructors and the chairperson.

## PHIL 4201 Philosophy Research and Writing

Minimum of 9 hours of conference and independent work§; 3 credits
Intensive study of an area of philosophy. Approved reading, research, and writing assignments, and final examination.

Prerequisite: two courses in philosophy and permission of the instructor and of the chairperson.

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Honors seminars
Problems/issues of philosophy
PHIL 5101 Seminar I: Problems of Philosophy
3 hours; 3 credits
An honors seminar on a problem in philosophy. Topics vary and
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reflect the interests of faculty and students. Students may take this course twice, with the permission of the department chairperson, but may not repeat topics.

Prerequisite: Juniors and seniors only; and at least one course in philosophy.

## PHIL 5102 Seminar II: Problems of Philosophy

3 hours; 3 credits
An honors seminar on a problem in philosophy. Topics vary and reflect the interests of faculty and students. Students may take this course twice, with the permission of the department chairperson, but may not repeat topics.

Prerequisite: Juniors and seniors only; and at least one course in philosophy.

## History of philosophy

## PHIL 5110 Seminar I: Historical Figures

## 3 hours; 3 credits

An honors seminar on an outstanding philosophic thinker.
Philosophers selected vary and reflect the interests of faculty and students. Students may take this course twice, with the permission of the department chairperson, but may not repeat topics.

Prerequisite: Juniors and seniors only; and at least one course in philosophy.

## PHIL 5111 Seminar II: Historical Figures

## 3 hours; 3 credits

An honors seminar on an outstanding philosophic thinker. Philosophers selected vary and reflect the interests of faculty and students. Students may take this course twice, with the permission of the department chairperson, but may not repeat topics.

Prerequisite: Juniors and seniors only; and at least one course in philosophy.

## Independent study

## Areas of philosophy

## PHIL 5201 Independent Study I

Minimum of 9 hours conference and independent work§; 3 credits Independent study in a major area of philosophy supervised by a faculty member. Approved reading. Final examination.

Prerequisite: completion of a program, approved by the chairperson, of advanced courses in philosophy and permission of the instructor and the chairperson.

## History of philosophy

## PHIL 5210 Independent Study II

Minimum of 9 hours conference and independent work§; 3 credits Independent study of an outstanding philosophic thinker or group of related thinkers. Approved reading. Final examination.

Prerequisite: completion of a program, approved by the chairperson, of advanced courses in philosophy and permission of the instructor and the chairperson.

Thesis/comprehensive examination

## PHIL 5220 Independent Study for Comprehensive Honors

## Examination

Minimum of 9 hours conference and independent work§; 3 credits
Independent study for a comprehensive examination in the
student's major field supervised by a faculty member. Approved
reading. Examination.
Prerequisite: completion of a program, approved by the
chairperson, of advanced Philosophy Department courses and
permission of the instructor or the chairperson.
The following inactive course(s) will only be offered if there is sufficient demand:
PHIL 3211W Reasoning
PHIL 3215 Reasoning and Rationality
PHIL 3317 Ethical Issues in Biology

## Physics

Department office: 3438 Ingersoll Hall
Phone: 718.951.5418

## Full-time Faculty

Professors: Boutis, Nakarmi, Sahni, Shum, Suarez, Tomkiewicz, Tung
Associate Professors: Giovambattista, Miyano, Sandeman

The study of physics provides a foundation in fundamental science and develops skill sets that are highly valued in virtually every profession. Physics emphasizes logical, analytical thinking applied to understanding basic natural phenomena and solving practical problems. It requires strong mathematical skills and the ability to reason quantitatively and qualitatively.

The Department of Physics at Brooklyn College offers degree programs that students may tailor to their individual needs and interests. The bachelor of science degree prepares students for admission to graduate school in physics or closely related fields, including astronomy, biophysics, medical physics, materials science, and engineering. Research opportunities for undergraduates are available both within the department and through summer programs that are run at laboratories, colleges, and universities throughout the United States. For students who do not intend to become research physicists, the bachelor of arts degree provides an attractive alternative. It does not require as many advanced courses and can be combined with other interests. The B.A. confers a competitive edge in professions such as business, finance, law, and medicine. The department also offers a bachelor of arts degree in adolescence education for physics teachers as well as a minor in physics.

Engineering Programs. The Department of Physics proudly hosts the Coordinated Engineering and Engineering Honors programs. In these programs, students complete their first two years of study at Brooklyn College towards a Bachelor of Science degree in electrical, computer, mechanical, chemical, biomolecular, and civil engineering. Provided they meet the requirements of the individual institutions, they then transfer to one of the coordinating engineering schools, which are New York University Tandon School of Engineering (NYU-Tandon) and the Engineering Science program at the College of Staten Island, or to a school of their choice to complete their engineering degrees. Students have also transferred to the Grove School of Engineering at City College, Stony Brook University, Binghamton University, University of Buffalo, Johns Hopkins University, Columbia University.

Physicists with advanced degrees generally work in universities, government laboratories, or industry. They are frequently engaged in some kind of basic or applied research.
Students who wish to pursue graduate studies may apply to the master's and doctoral degree programs offered by or in conjunction with this department.

## Courses for reentering students

A student who has credit for courses in physics at Brooklyn College that are no longer offered and who wants to take additional courses in physics must consult a department counselor to determine which courses in the present numbering system are equivalent to those for which credit has already been earned.

## Recommendations for prospective physics majors

Prospective physics majors should consult a department counselor prior to registering for the lower-freshman term about the recommended program of study. Depending on their objectives, students follow one of the sequences of study outlined below.

## Coordinated Engineering and Engineering Honors Programs

Students interested in engineering should contact Professor Viraht Sahni by calling the office of the Department of Physics. For more information, see the "Coordinated Engineering" section of this Bulletin.

## B.A. degree program in physics <br> HEGIS code 1902; SED program code 02071

Sequence for students not planning graduate work toward a Ph.D. degree in physics or astronomy.

This sequence is intended for premedical and pre-dental students, for students preparing for teaching in secondary school, and for others for whom a broad background in physics is desirable.

Department requirements (46-47 1/2 credits)
To enroll in advanced physics courses, students must earn a grade of $C$ or higher in the physics and mathematics prerequisites of the courses, unless they are excused from this requirement by the chairperson. A student who receives a grade of C - or lower in a required physics or mathematics course must consult the chairperson before registering for another physics course. The student is usually advised to repeat the course.
a) Physics 1100 or 1150 ; and 2100 or 2150 .
b) All of the following: Physics 3100, 3900, 3950, 3500 or 3550, 4900W, 5500.
c) One physics course numbered in the 3600 s .
d) One physics course numbered between 3700 and 4400 .

With the permission of the chairperson, Physics 3200 and/or 3300 may be substituted for one or both of these courses required in parts cand d.
e) Chemistry 1100 and 2100; or Chemistry 1050, 2050, and 2100.
f) Mathematics 1201 and 1206.

## B.S. degree programs in physics <br> HEGIS code 1902; SED program code 02070

Sequence for students planning graduate work toward a Ph.D. degree in physics or astronomy.

## Department requirements 69 credits)

To enroll in advanced physics courses, students must earn a grade of $C$ or higher in the physics and mathematics prerequisites of the courses, unless they are excused from this requirement by the chairperson. A student who receives a grade of C - or lower in a required physics or mathematics course must consult the chairperson before registering for another physics course. The student is usually advised to repeat the course.

All of the following: Physics 1150, 2150, 3100, 4000, 3900, 3950, 3300, 4100, 4200, 4300, 4350, 4900W; Chemistry 1100 and 2100; Computer and Information Science 1110 or 1115; Mathematics 1201, 1206, 2101, 2201, 2206.

## Additional requirements for a B.S. degree

Candidates for a B.S. degree with a major in physics must complete at least 60 credits in science and mathematics; 24 of these 60 credits must be completed in advanced courses in the Physics Department. These 24 credits must be completed at Brooklyn College with a grade of C or higher in each course.

The following courses may be applied toward the 60 credits in science and mathematics:
A) All courses in the departments of biology, chemistry, computer and information science, earth and environmental science, mathematics, physics, and psychology.
B) Courses marked with a number sign (\#) in the Department of Health and Nutrition Sciences.
C)
---Anthropology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470, 4665.
----Core Studies 5, 5.1, 5.2, 7.1, 7.2, 8.1, 8.2.
---Core Curriculum [1300 through 1399]
----Math 1311, Biology 1010, Chemistry 1007, Physics 1005, Earth and Environmental Sciences 1010.
----Core Curriculum 3301 through 3399
---Economics 3400, 4410, 3410, 4422.
---Philosophy 3203, 3204, 3231, 3232, 3422, 3423, 3601, 3605, 3610.
---Kinesiology 3271, 3275, 3281, 3285, 4229, 4251.
---Sociology 2701.

## B.A. degree program in adolescence education: physics teacher HEGIS code 1902.01; SED program code 26808

The Department of Secondary Education and the Department of Physics jointly offer a program for students who plan to teach physics in grades 7 through 12. Additional information may be obtained from the Department of Secondary Education or the Department of Physics. Adolescence education (grades 7-12) and special subject programs are writing intensive. Students should consult a counselor as early as possible to plan their program.

Program requirements (78-79.5 credits):
To enroll in advanced physics courses, students must earn a grade of $C$ or higher in the physics and mathematics prerequisites of the courses, unless they are excused from this requirement by the chairperson. A student who receives a grade of C - or lower in a required physics or mathematics course must consult the chairperson before registering for another physics course. The student is usually advised to repeat the course.

Students must complete a) through g):
a) Physics 1100 or 1150 ; and 2100 or 2150 .
b) All of the following: Physics 3100, 3500 or $3550,3900,3950,4900 \mathrm{~W}, 5500$.
c) One physics course numbered in the 3600 s. With the permission of the chairperson, Physics 3200 or 3300 may be substituted for this course.
d) Chemistry 1100 and 2100; or Chemistry 1050, 2050, and 2100.
e) Mathematics 1201 and 1206 .
f) Biology 1001 or 1002 or 4 credits in biology.
g) Earth and Environmental Sciences 1100 or 1200.

Students must complete 26 credits in the Department of Secondary Education as specified below.
a) Secondary Education 2001, 2002, 3401, 3402 and 3456. These courses may be started in the lower-sophomore term, or upper-sophomore term.
b) Secondary Education 4480. This course may be taken in the junior year.
c) Secondary Education 4481, 4482, 4483, and 4484 in the senior year. Students must have successfully completed Secondary Education 4480 before taking any of these courses. The two student teaching field courses, Secondary Education 4482 and 4484, may be taken in the same semester.

Secondary Education 4404 is course equivalent to all of Secondary Education 4480, 4481, and 4482.
Secondary Education 4410 is course equivalent to all of Secondary Education 4480, 4483, and 4484.
Degree programs in Secondary Education include a major in an appropriate department of the college.
Completion of an adolescence education program as part of a major in one of the sciences qualifies students for New York State initial certification in adolescence education in that science content area for grades 7 through 12.

Students qualifying for the initial certification in adolescence science education may obtain an extension to teach sciences in grades 5 and 6 by taking Secondary Education 3454.

## Admission requirements and academic standing

Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002;

Students must have a B- in both Secondary Education 2001 and 2002 and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

Students who wish to register for student teaching seminar and field placement will need to file an application with the science education program head for permission. See program office for details.

To take Secondary Education 4480, students must have an overall GPA of 2.75 or higher and the permission of the Secondary Education science education program head, department chair, or deputy;

To take either Secondary Education 4481, 4482, 4483, and/or 4484, students must earn a B+ or higher in Secondary Education 4480, a GPA of 2.75 or higher in their major, and the permission of the Secondary Education science education program head, department chair, or deputy.

A student who takes either Secondary Education 4481 and/or 4482 prior to Secondary Education 4483 and/or 4484 must earn a B or better grade in Secondary Education 4481 and/or 4482 before taking either Secondary Education 4483 or 4484.

A student who takes either Secondary Education 4483 and/or 4484 prior to Secondary Education 4481 and/or 4482 must earn a B or better grade in Secondary Education 4483 and/or 4484 before taking either Secondary Education 4481 or 4482.

## Departmental Minor(s)

## Minor in Physics

Department Requirements
Physics 1100 or 1150; Physics 2100 or 2150; Math 1201
At least 12 credits of advanced electives in physics. All courses must be completed at Brooklyn College with a grade of C- or better.

## Graduate Studies

The Physics Department offers master of arts degree programs in physics and physics teacher (grades 7 through 12). Some courses may be creditable toward the CUNY doctoral degree. For information, students should consult the department's deputy for graduate studies. A Graduate Bulletin may be obtained in the Office of Admissions.

## Courses

*Courses marked with an asterisk (*) are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in this department.

## Honors courses

Students with superior records and the recommendation of a department faculty member may apply to the chairperson for permission to register for courses described below. Students may not register for more than six credits in honors courses in physics in one term. Permission to register for honors courses is usually given only to superior students in their senior year.

## First semester introductory courses

## PHYS *1100 General Physics I

3 hours lecture, 1 hour recitation, 3 hours laboratory; 5 credits Introduction to mechanics, heat, and sound. Intended for students interested in the biological sciences, medicine, or dentistry. (Not open to students who are enrolled in or have completed any of the following: Physics *1111 [1.1], *1112 [1.2], *1150 [1.5].) STEM variant course - Satisfies Pathways Flexible Core Scientific World requirement.

Prerequisite: a grade of B or higher in Mathematics *1011 [2.9] or 1026 [2.92] or 1012 or a grade of C or higher in Mathematics 1201 [3.3]; or placement in Mathematics *1201 [3.3] on the basis of the calculus placement test. Students who think they are insufficiently prepared in problem solving are advised to take Physics *1111 [1.1] and *1112 [1.2] instead of Physics *1100 [1].

## PHYS *1111 General Physics IA

2 hours lecture, 1 hour recitation, 1.5 hours laboratory; 3 credits Introduction to mechanics with more introductory material than is covered in Physics *1100 [1]. Physics *1111 [1.1] and *1112 [1.2] constitute a two-term sequence intended for students who are not prepared for Physics *1100 [1]. (Not open to students who are enrolled in or have completed Physics 0.7 or 1100 [1] or 1150 [1.5].)

Prerequisite: a grade of C or higher in Mathematics *1011 [2.9] or 1026 [2.92] or Mathematics 1201 [3.3]; or placement in Mathematics *1201 [3.3] on the basis of the calculus placement test.

## PHYS *1112 General Physics IB

2 hours lecture, 1 hour recitation, 1.5 hours laboratory; 3 credits

Continuation of Physics *1111 [1.1] and an introduction to heat and sound. Students who complete this course with a grade of C or higher may register for Physics *2100 [2]. (Not open to students who are enrolled in or have completed Physics *1100 [1] or 1150 [1.5].)

Prerequisite: a grade of C or higher in Physics *1111[1.1].

## PHYS *1150 Calculus-Based General Physics I

3 hours lecture, 1 hour recitation, 3 hours laboratory; 5 credits Introduction to mechanics and heat. Intended for students majoring in the physical sciences or engineering. (Not open to students who are enrolled in or have completed any of the following: Physics *1100 [1], 1111 [1.1], 1112 [1.2].) STEM variant course - Satisfies Pathways Flexible Core Scientific World requirement.

Prerequisite or corequisite: Mathematics *1206 [4.3].

## PHYS *1190 General Physics and the Computer

3 hours lecture, 3 hours laboratory; 4 credits Introduction to basic concepts in electricity and magnetism with application to electronics and computer technology. Intended for students majoring in computer and information science.

Prerequisite: a grade of C or higher in Mathematics *1011 [2.9] or in any mathematics course numbered higher than 1112 [2.9]; or placement in Mathematics *1201 [3.3] on the basis of the calculus placement test.

## Second semester introductory courses

## PHYS *2100 General Physics II

3 hours lecture, 1 hour recitation, 3 hours laboratory; 5 credits

Introduction to light, electricity, and modern physics. Intended for students interested in the biological sciences, medicine, or dentistry. (Not open to students who are enrolled in or have completed Physics *2150 [2.5].)

Prerequisite: Physics *1100 [1] or 1150 [1.5]; or Physics *1112 [1.2] with a grade of C or higher.

## PHYS *2150 Calculus-Based General Physics II

3 hours lecture, 1 hour recitation, 3 hours laboratory; 5 credits Introduction to wave phenomena, electricity, and magnetism. Intended for students majoring in the physical sciences or engineering. (Not open to students who are enrolled in or have completed Physics *2100 [2].)

Prerequisite: a grade of C or higher in Physics *1150 [1.5] and in Mathematics *1206 [4.3].
Prerequisite or corequisite: Mathematics *2201 [5.3].

## Survey and service courses

## PHYS 1005 Physics: The Simple Laws That Govern the

 Universe2 lecture, 2 laboratory hours; 3 credits
The development of physics, in historical context. Applications to everyday life. Laws of universal gravitation and the conservation of energy. Examination of a topic in modern physics in which these classical concepts are transformed, extended, and/or applied. Until Fall 2020 Satisfies Pathways Flexible Core Scientific World requirement. Starting Fall 2020 Satisfies Pathways Required Core Life and Physical Sciences requirement. (Not open to students who are enrolled in or have completed Physics 0.1 or 1100 or 1112 or 1150 or 1.6, Integrated Science 1 or Core Studies 7.2 or CORC 1331.)

## PHYS 1040 The Making of the Atomic Bomb

## 3 hours; 3 credits

The history of the development of the atomic bomb. The scientific breakthroughs of the first half of the 20th century that led to it. The political context in which the bomb developed. The personal stories of the leading scientists involved. The moral issues arising from the development and use of the bomb. (Not open to students who have completed Core Curriculum 3308.) 2017-2018 Satisfies Pathways College Option requirement. Starting Fall 2018 Satisfies Pathways Flexible Core Scientific World requirement.

## PHYS *1050 Introduction to Astronomy

3 hours; 3 credits
Organization of the universe. Time and distance scales. Stars and stellar evolution. Galaxies. The evolutionary universe.
Recommended for nonscience majors. (Not open to students who are enrolled in or who have completed Physics 0.6 or 31 or 32 .

Prerequisite: Core Studies 7.2 or its equivalent, or Core Curriculum 1331 [3.31]/Physics 1331/Physics 1005 or its equivalent.

## PHYS *1055 The Search for Life in the Universe

3 hours; 3 credits
The solar system. Exploration of the planets. Life in the solar system. The search for extraterrestrial intelligence. Interstellar communication and space travel. Recommended for nonscience
majors. Physics *1050 [0.11] is not a prerequisite for Physics *1055 [0.12]. (Not open to students who are enrolled in or who have completed Physics 0.6 or 31 or 32 .)

Prerequisite: Core Studies 7.2 or its equivalent, or Core Curriculum 1331 [3.31]/Physics 1331/Physics 1005 or its equivalent.

## PHYS 1070 Cosmology

3 hours; 3 credits
Organization and evolution of the universe. Methods of inquiry over large cosmological distances. The structure of space and time. Lifecycle of stars. The origin of chemical elements. Are we alone in the Universe? (Not open to students who have completed Core Curriculum 3301.) 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement. Starting Fall 2019 Satisfies Pathways Flexible Core Scientific World requirement.

## PHYS 1080 Energy Use and Climate Change

## 3 hours; 3 credits

Global energy balance as a function of the chemistry of the atmosphere and its effects on global and local climate. Climatic consequences of human energy use. The long history of climate and the relatively short history of human energy use. The socioeconomic and political issues involved in attempts to project and influence future energy use and its climatic consequences. (Not open to students who have completed Core Curriculum 3302.) 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement. Starting Fall 2019 Satisfies Pathways Flexible Core Scientific World requirement.

## PHYS 1090 Space-Time, Gravity, and the Quantum: The Role of Einstein in the Birth of Modern Physics

## 3 hours; 3 credits

A biographical treatment of the life of Albert Einstein, with emphasis on the scientific breakthoughs and struggles which formed his major contributions to modern science. His interactions with the other giants of 20th century physics, both personal and intellectual. The evolution of his political and social views, and how they paralleled that of his scientific thinking. The impact of his image as the leading iconic symbol of 20th century science. (Not open to students who have completed Core Curriculum 3320.) 2017-2018 and 2018-2019: Satisfies Pathways College Option requirement.

## Courses for physics majors \& engineering

## PHYS 3100 Introduction to Modern Physics

3 hours; 3 credits
Introduction to modern physics. Intended for students majoring in the physical sciences. (Not open to students who have completed Physics 14.1.)

Prerequisite: Physics *2150 [2.5]; or Physics *2100 [2] and Mathematics *1206 [4.3].

## PHYS 3200 Mechanics

4 hours; 4 credits
Vector treatment of static equilibrium of rigid bodies. Static analysis of trusses and other mechanical structures. Vector treatment of kinematics of particles and rigid bodies. Forces and
motion. Analysis of rotational motion; moments of inertia. (Not open to students who are enrolled in or have completed Physics 11 or 11.1 or 4100 [61.2].)

Prerequisite: Physics *1150 [1.5] or permission of the chairperson. Prerequisite or corequisite: Mathematics *2201 [5.3].

## PHYS 3300 Electric Circuits

4 hours; 4 credits
Passive and active circuit elements; Voltage, current, and power. Kirchhoff's laws; mesh and nodal analysis; Circuit analysis techniques: Linearity and Superposition; Source transformations; Thevenin's and Norton's theorems; The Operational Amplifier; Capacitors and inductors; Source-free and forced RL, RC, and RLC circuits; Sinusoidal steady state analysis; AC circuit power analysis; Complex frequency and the Laplace transform. (Not open to students who are enrolled in or have completed Physics 13 or 13.1 or 4200 [61.5].)

Prerequisite: Physics *2150 [2.5].
Prerequisite or corequisite: Mathematics 2206 [13].

## PHYS 3500 Astrophysics and Cosmology

3 hours; 3 credits
The nature of stars: physical properties, energy generation, and evolution. Structure, distribution, and evolution of galaxies.
Cosmological models of the universe. Observational cosmology. The big bang, the early universe, and the age of the universe.

Prerequisite: Physics *2100 [2] and Mathematics *1201 [3.3], or Physics*2150 [2.5].

## PHYS 3550 Physics in Medicine

3 hours; 3 credits
Blood flow. Sound waves and hearing, pulse echo-techniques. Electrocardiography. Optics of the eye. X-rays, CAT scanning. Nuclear radiation, emission tomography, MRI and PET scanning.

Prerequisite: Physics *2100 [2] and Mathematics *1201 [3.3], or Physics*2150 [2.5].

## PHYS 3600 Historical and Biographical Studies in Physics

## 2 hours; 2 credits

Studies of the lives of individuals important to the history of physics; emphasis on the cultural background and time period in which they made their contributions; personal, psychological, and philosophical profiles examined when available.

Prerequisite: Physics 3100 [10.5] and 4900W [67.1W].

## PHYS 3650 Issues in Physics and Society

## 2 hours; 2 credits

A technical and quantitative study of one of these issues: 1) nuclear weapons, effects, proliferation, arms control; 2) nuclear energy, prospects in fission and fusion, environmental problems; 3) renewable energy sources, such as solar and wind power, energy storage; 4) the global environment, sources of pollution, greenhouse gases, climatic effects.

Prerequisite: Physics 2100 or permission of the Chairperson.

## PHYS 3700 Advanced Modern Physics

3 Hours; 3 Credits
Advanced topics in modern physics. Introductory statistical, solid
state, nuclear, and particle physics.
Prerequisite: Physics 3100 [10.5].

## PHYS 3740 Topics in Condensed Matter Physics

3 hours; 3 credits
The nature of crystals; diffraction and periodicity; electrical properties of materials; semiconductors and semiconductor devices; interaction of light with solids; LED's and solid-state lasers; superconductivity; surfaces and interfaces.

Prerequisite: Physics 3100 [10.5] and 4900W [67.1W].

## PHYS 3800 Special Topics in Physics

3 hours; 3 credits
A topic in physics not covered in the regular curriculum. Topics vary from term to term and reflect the interests of students and faculty. Course description may be obtained in the department before registration. Topics may include optics, relativity, string theory, and nanophysics.

Prerequisite: permission of the chairperson.

## PHYS 3900 Electrical Measurements Laboratory

4 hours; 2 credits
Experimental study of passive and active circuits elements using digital devices. Experimental measurements and theoretical analysis of DC circuits using Kirchhoff's laws, Linearity and Superposition, and Thevenin's theorems. Study the basic principles of a digital oscilloscope. Experimental study of transient and frequency responses of source-free and forced RC, and RLC circuits. Construction of low-pass, high-pass, and band-pass filters.

Prerequisite: Physics *2100 [2] or 2150 [2.5].

## PHYS 3950 Modern Physics Laboratory

4 hours; 2 credits
Experiments illustrating important discoveries of twentieth century physics.

Prerequisite: Physics 3900 [18].
Prerequisite or Corequisite: Physics 3100 [10.5].

## Theoretical physics and advanced laboratories

## PHYS 4000 Introduction to Theoretical Physics

4 hours; 4 credits
Methods of theoretical physics applied to selected topics in mechanics, thermodynamics, electricity and magnetism, and wave phenomena.

Prerequisite: Physics *2150 [2.5].
Prerequisite or corequisite: Mathematics 2206 [13].

## PHYS 4100 Analytical Mechanics

## 3 hours; 3 credits

Review of Newtonian mechanics; oscillatory motion and resonance; Hamiltonian and Lagrangian mechanics; two-body motion; kinematics and the inverse square law; rigid-body motion; normal modes.

Prerequisite: Physics 4000 [16].

## PHYS 4200 Electromagnetic Theory

## 3 hours; 3 credits

Electrostatic and magnetostatic boundary value problems; systematic derivation of Maxwell's equations in vector notation; plane electromagnetic waves; spherical electromagnetic waves; application of Maxwell's equations to reflection, diffraction, dispersion, and scattering.

Prerequisite: Physics 4000 [16].

## PHYS 4300 Atomic Physics and Quantum Mechanics I

## 3 hours; 3 credits

Development of the Schroedinger equation and principles of quantum mechanics. Solutions of the Schroedinger equation; the one-electron atom; perturbation theory; thermal radiation.

Prerequisite: Physics *2150 [2.5] and 3100 [10.5] and 4000 [16].

## PHYS 4350 Atomic Physics and Quantum Mechanics II

## 3 hours; 3 credits

Further development of the principles of quantum mechanics with application to atomic, molecular, solid-state, and nuclear phenomena.

Prerequisite: Physics 4300 [62.6].

## PHYS 4400 Thermodynamics and Statistical Mechanics

3 hours; 3 credits
Thermodynamics; equations of state; Maxwell relations. Kinetic theory of an ideal gas; Maxwell distribution of velocities; collisions; Boltzmann H-theorem. Classical statistical mechanics; microcanonical ensemble, canonical ensemble; quantum statistical mechanics; Fermi and Bose statistics; electron gas; Bose gas; blackbody radiation.

Prerequisite: Physics 4300 [62.6].

## PHYS 4500 Solid-state Physics

## 3 hours; 3 credits

Structure of crystals; x-ray, electron, and neutron diffraction; specific heat and lattice vibrations; alloys, ionic crystals, dielectrics; free-electron theory of metals; band theory of solids; insulators and semiconductors; pn junctions; diamagnetism, paramagnetism and ferromagnetism.

Prerequisite: Physics 4300 [62.6].

## PHYS 4900W Advanced Laboratory I

4 hours; 2 credits
Advanced experiments in optics, electricity, electronics, and in atomic and nuclear physics. Writing-intensive course.

Prerequisite: Physics 3900 [18] and 3950 [19] and English *1012 [2].

## Honors courses

## PHYS 5700 Independent Study I

Minimum of 9 hours conference and independent work; 3 credits Independent study supervised by a faculty member. Approved reading. Written examination.

Physics Department courses and permission of the instructor and the chairperson.

## PHYS 5750 Independent Study II

Minimum of 9 hours conference and independent work; 3 credits Independent study supervised by a faculty member. Approved reading. Written examination.

Prerequisite: Physics 5700 [88.1] and permission of the instructor and the chairperson.

## PHYS 5800 Independent Research I

Minimum of 9 hours conference and independent work; 3 credits Independent research supervised by a faculty member. Weekly conference. Thesis or report.

Prerequisite: completion of an approved program of advanced Physics Department courses and permission of the instructor and the chairperson.

## PHYS 5850 Independent Research II

Minimum of 9 hours conference and independent work; 3 credits Independent research supervised by a faculty member. Weekly conference. Thesis or report.

Prerequisite: Physics 5800 [83.1] and permission of the instructor and the chairperson.

## Special topics, seminars and special projects

## PHYS 5100 Seminar I

3 hours; 3 credits
Group study of topics in physics or in its social, economic, moral, or ethical implications.

Prerequisite: permission of the chairperson.

## PHYS 5150 Seminar II

3 hours; 3 credits
Group study of topics in physics or in its social, economic, moral, or ethical implications.

Prerequisite: permission of the chairperson.

## PHYS 5500 Senior Project

6 hours conference and independent work; 2 credits Independent project or set of related projects supervised by a faculty member. Projects may include original design and prototype of lecture demonstration equipment, physics museum display, new equipment or procedures for undergraduate instructional laboratories, or a written thesis. Emphasis on the communication of physics concepts and their application. Presentation of projects at a departmental seminar is required.

Prerequisite: Physics 3100 [10.5], 3950 [19], and 4900W [67.1].

The following inactive course(s) will only be offered if there is sufficient demand:
PHYS 1010 Energy in a Technological Society
PHYS 1020 Survey of the Universe
PHYS 1060 A History of Ideas in Physics
PHYS 3350 Electronics
PHYS 3760 Topics in Nuclear Physics
PHYS 3970 Techniques of Experimental Research
PHYS 4950 Advanced Laboratory II

## Political Science

Department office: 3413 James Hall
Phone: 718.951.5306
Full-time Faculty
Distinguished Professors: Robin, Theoharis
Professors: Currah, Johnson, Lopes, Ness, Okome, Su, Ungar
Associate Professors: Alonso, Arnold, Estey, Law, London, Path

The mission of the Political Science Department is to help our students develop an understanding of the structures and operations of politics and power so that they can become engaged and critical thinkers. Our research and course offerings range from local to global, from theory to policy, from the state to the grassroots. Through our intellectually diverse curriculum students acquire the research, writing, and reading skills necessary to think and act in the world.

The department offers a bachelor of arts degree and a minor in political science as well as a bachelor of arts degree for social studies teachers. The department also participates in several interdisciplinary minors, including global studies, law and society, and democracy and civic engagement.

Our alumni pursue careers in law, policy research, government, business, journalism, nonprofit organizations, and education. Many choose to earn graduate degrees in political science and related fields.

## B.A. degree program in political science HEGIS code 2207; SED program code 02109

This is a writing intensive program.
Department Requirements (30-36 credits)

1. One 1000-level Political Science course excluding POLS 1230.
2. One of the following 3000-level writing-intensive seminars: Political Science 3012W, Political Science 3190W, Political Science 3191W, Political Science 3290W, Political Science 3390W, Political Science 3391W, Political Science 3392W, Political Science 3393W, Political Science 3490W, or Political Science 3491W.
3. One of the following research methods courses: Political Science 3014W, Research Strategies in Public Policy or Political Science 3423, Mapping Politics: GIS Methods in Political Science.
4. Political Science 4000W, Capstone Senior Seminar
5. A total of five additional courses from the 3000 level and above. Only one of Political Science 5001 and 5002 may be included. Only one course numbered 3603-3651 may be included, with the exception of 3650 . After satisfying the requirement in part 2 above students may take additional 3000-level writing-intensive seminars to satisfy this requirement.

## B.A. degree program in adolescence education: social studies teacher HEGIS code 2201.01; SED program code 26754

Adolescence education (grades 7-12) programs are writing intensive.

## Program requirements

Students who wish to pursue a bachelor of arts degree in Secondary Education for social studies teacher must complete a major in one of the following: Africana studies, American studies, anthropology, economics, history, political science, Puerto Rican and Latino studies, or sociology.

Study must include within the major, or in addition to courses in the major, study in economics, government, and at least 21 credits in the history and geography of the United States and the world, including Secondary Education 3584. Students preparing to become social studies teachers must fulfill the economics and government requirements by taking at least one course ( 3 credits) from among: History 3345, 3410, 3420, 3424, $3430,3441,3442,3450,3457$, or a course in Political Science numbered between 3101 and 3160; and at least one course (3 credits) from among: History 3332, 3470, 3472, 3512 or Economics 2002, 2100, 2200, 3102, 3152, or 3202.

The following pedagogical courses in the Department of Secondary Education: Secondary Education 2001, 2002, 3401, 3402, 4408, 3456,

4482 (total of 28 credits):
Secondary Education 2001, 2002, 3401, 3402. This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.

Secondary Education 3456 may be started after completing Secondary Education 2001 and 2002.
Student teaching: Secondary Education 4401, 4408, and 4482.
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department. Degree programs in adolescence education and include a major in an appropriate department of the college and in the case of social studies may also include an approved selection of interdepartmental courses.

Completion of an adolescence education program as part of a major in English, one of the appropriate social sciences, mathematics, or one of the sciences qualifies students for New York State initial certification in adolescence education for grades 7 through 12.

Students qualifying for the initial certification in adolescence education may obtain an extension to teach English, social studies, mathematics, a modern language, or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

Students must complete 26 credits in the Department of Secondary Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

Students must have a B- in both Secondary Education 2001 and 2002, New York City Department of Education Fingerprint clearance, and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

To take Secondary Education 4401, 4404 and 4482, students must earn a B- or higher in Secondary Education 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of the program.

Students must earn a B- or higher in Secondary Education 4401, 4404 and 4482 and a GPA of 2.75 or higher in their major.

## Departmental Minor(s)

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C- or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Minor in Political Science

Department Requirements
At least 12 credits of advanced electives in political science. Each course must be completed at Brooklyn College with a grade of C or higher. Students are advised to consult with a departmental counselor to plan their minor.

## Interdepartmental Minor(s)

## Minor in Law and Society

Department Requirements
Twelve credits chosen from the courses of two or more departments as specified below. Each course must be completed with a grade of C or higher.
Africana Studies 3330, 3331; Anthropology 3160, 3162; Classics 3234; Political Science 3120, 3121, 3130, 3123, 3122, 3240; Sociology 3503, 3504.

Courses in anthropology presented for this minor may not be counted toward the anthropology major.
Courses in political science presented for this minor may not be counted toward the political science major.
Courses in sociology presented for this minor may not be counted toward the sociology major.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Political Science

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in political science must complete at least 30 credits in the Political Science Department with a grade of C or higher in each course. Students must meet with a department adviser to declare their intention to complete this sequence.

Concentration requirements
Political Science 1001 or 1005.
Political Science 1002 or 1003 or 1004 or 1006 or 1007.
Two of the following 3000-level writing intensive seminars: Political Science 3012W, Political Science 3190W, Political Science 3191W, Political Science 3290W, Political Science 3390W, Political Science 3391W, Political Science 3392W, Political Science 3393W, Political Science 3490W, Political Science 3491W.

Between fourteen and sixteen credits of advanced electives chosen from courses listed in the following four fields. Total credits for all coursework in the concentration must be at least 30 credits. Students must select at least one course from each field. Writing-intensive seminars may be used to fulfill the requirements for completing a course in any of the four fields.

American and Urban Politics: Any course in Political Science 3100-3199.
International Politics: Any course in Political Science 3200-3299.
Comparative Politics: Any course in Political Science 3300-3399.
Political Theory and Methodology: Any course in Political Science 3400-3499.

## Department honors

Students who want to qualify for honors in political science must have:

1) an average of 3.50 or higher in all political science courses, except any political science course in the 1000-level range;
2) a grade of $B+$ or higher in the capstone seminar, POLS 4000 W ;
3) a grade of no less than A- in an honors independent studies course (5001 or 5002) or a grade of no less than A- in an advanced elective taken for honors credit.
All course work eligible for consideration for departmental honors must be taken at Brooklyn College.

## Recommendation for prospective graduate students

Prospective graduate students in political science should develop reading comprehension in at least one foreign language given at the College.

## Graduate Studies

The Political Science Department offers a master of arts degree program in political science. Some courses may be creditable toward the CUNY doctoral degree. For information, students should consult the department's deputy chairperson for graduate studies.

## Courses

1000-level courses are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in this department.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## Introductory courses

## POLS 1001 Introduction to American Government

## 3 hours; 3 credits

Fundamental concepts, political principles, processes, and institutions of American government. Topics may include: constitutional foundations, civil liberties, the mass media, public opinion, special interest groups, political parties, elections, the presidency, Congress, and the courts.

## POLS 1002 Introduction to Politics

## 3 hours; 3 credits

Introduction to political science and contemporary issues. The concepts and uses of power, the nature and role of the state, the development and politics of identity, political economy, political change, the global financial order. Application to specific countries and problems.

## POLS 1003 Missiles, Money and Mayhem: Introduction to International Relations

4 hours; 4 credits
Introduction to theories in International Relations. Historical development of the modern international system, the functioning of international organizations, the role of international law, international financial institutions, the gap between rich and poor countries, and global cooperation. Covers issues like war, poverty, health, human rights, and the environment.

## POLS 1004 The Political Imagination: Introduction to Political Theory

## 4 hours; 4 credits

Introduction to most important questions of political theory, including the meaning of justice, obedience and opposition to authority, the relationship between law and violence, justification of war, sovereignty and political exclusion. Classic texts organized around a particular theme. Close reading and intensive reading.

## POLS 1005 Guns, Money and Politics in the US

4 hours; 4 credits
Introduction to the study of political science concepts through the study of the interplay of politics and power in the US. Examines the effect on people's daily lives of the government's ability to determine who gets what, when and how and methods of creating change both within and outside of political systems. Use of primary documents, court cases, opinion pieces, and scholarship are built into the course. Topics may include the role of social class, race, gender and sexuality in the construction of social and political inequality, and in the formation of grassroots political struggles in efforts to change public policy.

## POLS 1006 Democracy, Dictatorship and Development: Politics Around the World

4 hours; 4 credits
Introduction to theories and concepts in global and comparative politics. Comparison among countries and world regions regarding democracy, economic ideologies, state-society relations, and political and economic development. Critical and comparative analysis of common issues such as violence, gender, poverty, human rights, and justice.

## POLS 1007 Wicked Problems: Introduction to Public Policy

4 hours; 4 credits
Fundamental concepts, principles, and politics of public policymaking on critical issues and so-called "wicked problems," for which there are no definitive, right answers. Topics include the policymaking process, why some groups' interests tend to be advantaged over others', patterns in the main trade-offs made by policymakers, and the dynamic relationships between elected officials, the media, political institutions, and the public at large. Special attention to the role of cultural ideas in interpreting popular but fiercely contested concepts like "liberty" and "efficiency" in policy debates, what implementing these concepts should look like in real life, and whether and how social and economic policies can improve the lives of major segments of society. Focus on critical policy analysis, including critical race and feminist approaches to public policy. Policy issues that might be explored in depth include
immigration reform, environmental policy and climate change, health care, gun control, and others.

## POLS 1230 People, Power, and Politics

3 hours; 3 credits
Introduction to social science concepts through the study of power, authority, and social organization in U.S. society. Emphasis on the interaction of government and civil society. Readings focus on primary documents concerning the role of social class, race, and gender in the construction of social and political inequality. (Not open to students who have completed Core Curriculum 1230 or Core Studies 3.) Satisfies Pathways Flexible Core US Experience in Its Diversity requirement.

## American and urban politics

## POLS 3101 United States Congress and the Legislative

## Process

3 hours; 3 credits
Structure and functions of the American Congress and other legislative bodies and their roles in the formulation and execution of public policy. Their internal organization, bases of power, sources of conflict, processes of operation, and patterns of decision making.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3102 The American Presidency

3 hours; 3 credits
Nature and functions of the modern American presidency. Such problems as the selection process and the various roles of the president in the formulation and execution of public policy.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3103 American Political Parties

3 hours; 3 credits
Structures, function, organization, and leadership of American political parties and electoral behavior.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3104 Interest Groups and Money in United States Politics

3 hours; 3 credits
Organization and operation of public and private interest groups and their relation to government and political parties. Analysis of urban, national, and transnational groups.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3105 Campaigns and Elections

4 hours; 4 credits
Overview of the American electoral system and voting behavior of
the citizens. Strategic decisions of candidates, political parties, interest groups, and voters in presidential, congressional, and state/local elections. Discussion on government responsiveness, representation, and election reform.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3106 Political Opinion and Behavior

3 hours; 3 credits
Public opinion and political participation. Political socialization, attitude formation and change, political ideology, and voting behavior. Role of the mass media.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3120 Law and the Political Process

3 hours; 3 credits
Role of legal concepts in the American political system. Judicial behavior and administration.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3121 Constitutional Law

3 hours; 3 credits
Relation of current trends and conflicts in the Supreme Court to the clash of fundamental ideas and values in American society. Cases involving economic issues and policies. Such general subjects as judicial review, jurisdiction and procedure of the court, and judicial recruitment and the nature of the judicial process.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3122 Civil Rights and Civil Liberties

3 hours; 3 credits
Relation of current trends and conflicts in the Supreme Court to the clash of fundamental ideas and values in American society. Cases involving civil liberties including such issues as freedom of speech, press, religion, and criminal justice and race relations.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3123 The Politics of Criminal Justice

3 hours; 3 credits
Policies, procedures, and institutions in criminal law administration. Operations of the criminal justice system and the political role of the system. Problem of the existence and continued growth of criminal behavior in all segments of American society; relation between a political system and the conduct of its citizens.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3124 The American Jury System

4 hours; 4 credits
Introduction to the American Jury System. Explores the institution of the jury from its inception during the colonial period to its development over U.S. history as a more inclusive democratic body. Assesses the problems and promises of having laypersons participate directly in the criminal justice system.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3125 Constitutional Interpretation

## 4 hours; 4 credits

Explores the content, aims and variants of the Constitution, and its role in the political system. Considers which actors are best positioned to interpret the Constitution. Explores originalism, textualism, prudentialism, structuralism, doctrinalism. Discusses the limitations and possibilities of each. Considers the role that educated citizens play in constitutional interpretation in order to ensure the vitality of a strong democracy.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3126 The Politics of Incarceration

4 hours; 4 credits
Analysis of politics and political economy of incarceration. What is considered crime, who is incarcerated, and how the system of incarceration operates. Changes in socio-political and economic context of incarceration. Larger historical, economic, and political dimensions of public policy and analysis of media on crime and incarceration.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3130 Moot Court

## 3 hours; 3 credits

Fundamentals of litigation practice and procedure. Theories and procedures of law, rules of evidence, trial advocacy techniques, legal analysis, and rules of civil procedure. Introduction to the legal and ethical responsibility of attorneys to clients, the community, and themselves, and the mandates of the American Bar Association (ABA). Designed to prepare students to participate in an intercollegiate Moot Court Competition. (Not open to students who have completed Political Science 3501 [60.1]: Fall 2006 or Spring 2008.)

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3140 Urban Government and Politics

## 3 hours; 3 credits

Structure, activities, and problems of contemporary urban government. Changing nature of federal, state, regional, and local relationships. Nature of decision-making process in an urban political environment. New York metropolitan area.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3141 Urban Life and Politics

3 hours; 3 credits
Introduction to the major approaches to the field of political science and to the controversies that surround this subject. Principal patterns of cultural, social, economic, and political life in urban settings. Interplay and impact of forces, events, behaviors, and practices that have shaped life in urban areas in the past and continue to do so in the present.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3142 Power in the United States

3 hours; 3 credits
Structure of power of American society and its relation to political ideas, processes, and events at home and abroad. Power in the framework of fundamental technological transformations and worldwide revolutionary tendencies. Viability of the American political system; how it changes.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3143 Empowering Communities: Civil Society and Direct Democracy

3 hours; 3 credits
Nature and distribution of power in American communities. Power and political change. Civic engagement and democracy. Discussion of community power literature.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3144 Politics of New York: Global City

3 hours; 3 credits
Current politics of globalization and its influence on the politics and economy of New York City. Examination of globalization on the political, legal, and regulatory decision-making processes of New York City.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3145 Community Power: Direct Democracy and Civil Society

4 hours; 4 credits
Introduction to theories of democracy and policy-making. Investigations of the connections among debates regarding the roles of everyday citizens in governance and policy-making. Analysis of who participates in different aspects of political participation, what alternative forms of participation might look like, and whether reforms or policy changes occur in response. Examination of case studies in governmental institutions aimed to increase civic engagement and political participation in city government, education and health governance, and other policy fields. Examination of other forms of resistance and political participation when institutional forms of political participation are scarce.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any

Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3150 Racial and Ethnic Politics in the United States

3 hours; 3 credits
Comparative analysis of the politics of racial and ethnic groups in American urban areas. Problems of assimilation and alienation. Direct action and protest movements. Political experience of African-Americans and other ethnic groups.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3151 The Civil Rights and Black Power Movements

3 hours; 3 credits
Examination of the major themes and debates in the Civil Rights and Black Power movements in the United States from 1950 to 1975. Highlight the discourses among and about African Americans as they relate to the creation of political and social movements in the quest for racial and economic justice. This course is the same as Africana Studies 3125.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3152 Women and Politics in the United States

3 hours; 3 credits
Women and politics in the context of the United States of America. Gaining the right to vote; the Equal Rights Amendment; women as political leaders; racial and ethnic diversity of U.S. women; the "gender gap." Policy issues including the feminization of poverty and social welfare. This course is the same as Women's and Gender Studies 3351.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3153 The Politics of Masculinities

3 hours; 3 credits
Concepts and theories of the political, social, and cultural construction of masculinity/masculinities and femininity/femininities. The investigation of the intersection of gender, sexuality, sexual orientation, race/ethnicity, and class as forms of power and identification in the lives of American men. Exploration of the variations in men's experiences across racial/ethnic, class, and sexual lines. This course is the same as Women's and Gender Studies 3353.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3154 Politics of the U.S. Labor Movement

3 hours; 3 credits
Examines the root causes of organized labor's decline and the consequences of this decline on working and living conditions, and prospects for labor's revitalization. Analyzes the political economy of labor, labor's influence at the workplace in the representation of workers, labor leadership and democracy, and labor's political influence in politics. Explores community-labor coalition-building efforts with other actors.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3155 Queer Politics in Modern America

3 hours; 3 credits
Concepts and theories of the political, social, and cultural construction of sexuality. Investigation of the intersection of gender, sexuality, sexual orientation, race/ethnicity, and class as forms of power and identification in America. Diverse social movements that have been built around issues of sexualities in the 20th and 21st century. This course is the same as Women's and Gender Studies 3330.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3156 Brooklyn and Its Religions

3 hours; 3 credits
Current politics of Brooklyn, theories of political power, sites of religious practice and religious history in the borough. Structure and character of relationships between political actors, institutions and religious actors, institutions, communities. This course is the same as Religion 3055.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3157 Women in the Black Freedom Struggle

## 4 hours; 4 credits

Analysis of the role of women in the black freedom struggle. Focus on women activists, theorists, and women-led organizing efforts that helped to define and orient the black freedom struggle. Examine interlocking issues of gender, sexuality, class, and race in postwar America and the development of the modern civil rights movement. This course is the same as Women's and Gender Studies 3350.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3158 Race, Law and the State

3 hours; 3 credits
Analysis of the politics of race and the law-including the role of the law in slavery and Reconstruction, the post-Reconstruction development of the American penal system, the history of Native American conquest and land rights, immigration and the changing definitions of citizenship, the liberation struggles of the 1960s and the reaction of law enforcement, mass incarceration and post-9/11 racial politics. Focus on developing students' critical reading and analytical writing skills and on engaging with the issues of the day and their historical contexts in substantive, thorough form. This course is the same as AMST 3158.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3160 Politics and the Media

3 hours; 3 credits

Influence of the media on politics. Topics include the organization of the media, the news function, investigative journalism, campaign advertisements, ethical doctrines, First Amendment issues, and political and editorial policy.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3650 Seminar in New York City Government, Politics, and Social Movements

3 hours; 3 credits
Critical examination of major issues in New York City government, politics, non-governmental organizations, and social movements.
Power, politics, protest, and decision-making in New York City.
Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## International affairs

## POLS 3201 Crisis and Cooperation in International Politics

3 hours; 3 credits
Identification and analysis of such major theories, approaches, and organizing concepts as power, sovereignty, and national interests. Patterns of action and interaction in the international system. Interstate conflict and management.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3202 International Politics of Developing Countries

3 hours; 3 credits
The Third World in international politics. Relations between the states of Africa and those of Asia and Latin America.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3203 Political Economy of International Relations

## 3 hours; 3 credits

Interaction of economic and political factors in determining international behavior. Impact of economic and political development on the international structure of power. Foreign aid, trade, and investment as instruments of national power. Problems of resources in international politics. Economic and political integration in the international system. The multinational corporation as an international actor.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3221 United States in World Politics

3 hours; 3 credits
Changing role of the United States in world politics. Objectives of national strategy. Effect of technology and social revolution on political, military, and economic components of foreign policy.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or
equivalent, or permission of department.

## POLS 3223 Asian Security

4 hours; 4 credits.
Emerging traditional and non-traditional security issues in Asia. Critically evaluate international relations theories in explaining security issues. Regionalism, territorial conflicts and human security. Other factors such as rising national identity, nationalism, and historical memory. Asian historical-cultural contexts that shape the contour of Asian security dynamics.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3240 International Law

3 hours; 3 credits
Structure, problems, and perspectives of the existing international legal system. Attitudes of Western, communist, and developing countries. Such problems as legal and illegal uses of force, intervention in internal conflict, and nationalization of foreign property. Future of international legal order .

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3241 International and Regional Organizations

3 hours; 3 credits
Policies, authorities, and problems of international and regional organizations. The United Nations, regional alliances, and trade blocs. Examination of their interactions with contemporary political movements, forces, and interests. Analysis of their relationship with economic change, globalization, and the nation-state.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3242 Globalization and International Political Movements

3 hours; 3 credits
Cross-national political and social movements. The changing roles of ideology, religion, culture, ethnicity, and identity in the contemporary world.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3243 Human Rights and World Politics

3 hours; 3 credits
Study of human rights problems and the international community's approaches to such problems. Examination of the history of human rights, the functioning of human rights organizations and agencies, the relationship between human rights and political systems, and the patterns of rights violations against different ethnic, racial, religious, gender, and other groups.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

POLS 3244 World on the Move: The Politics of Migration

4 hours; 4 credits
Presents the prominent themes, theoretical explanations, epochal and modern historical accounts of the political economy of migration on an international, regional, national, ethnic, and subnational basis. Class will examine thematic and political-economic interpretations and theories of migration in the contemporary era.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3245 Model United Nations

4 hours; 4 credits
Simulation of the structures, processes, and issues of the member states of the United Nations. Learn international relations and diplomacy through role-playing United Nations delegates. Explore conflict resolutions to complex issues in "real life" environment through the arts of negotiations and diplomacy. Participate as delegation in Model UN Conference. Develop public speaking, writing, research and problem-solving skills.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## Comparative politics

## POLS 3301 Politics of Developing Nations

3 hours; 3 credits
Theories of political development and modernization. Comparison of selected political systems in developing countries. Traditional structures, new social forces and elites, political institutions, and performance. African and Asian states.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3302 Comparative Political Systems: Europe

3 hours; 3 credits
Comparative study of political institutions, processes, and behavior in selected European political systems.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3303 The Soviet and Post-Soviet Political System

## 3 hours; 3 credits

Historical and comparative study of political institutions and processes in the former USSR and its successor states. Marxist roots of Russian revolution. Causes and consequences of revolutionary degeneration and decline. Nature and contradictions of post-Soviet society.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3304 Latin American Political Systems

3 hours; 3 credits
Political processes and government structures. Diverse capabilities for adaptive decision making and performance in Latin American political systems. (Not open to students who have completed

Political Science 49.1)
Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3305 Caribbean Political Systems

3 hours; 3 credits
Comparative approach to the government and politics of the contemporary Caribbean. Major states in the Caribbean: Cuba, Haiti, Dominican Republic, the Commonwealth Caribbean; and selected members of other territories. The political economy of these societies and the growth of mass movements. Foreign policies of various Caribbean states. This course is the same as Africana Studies 3145.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3306 Political Systems of Africa

3 hours; 3 credits
Political developments in the African states. Patterns before and after independence. Development of nationalism. Political integration, institution building, one-party systems, role of the military, and protest movements. Problems of regional and African unity. This course is the same as Africana Studies 3112. (Not open to students who have completed Africana Studies [2.4] or AfroAmerican Studies 3324 [41].)

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3307 Politics of the Middle East

3 hours; 3 credits
Comparative analysis of modernization and integration in the Middle East region. Conflict between traditional and radical elements. Issues of stability, social justice, development, and nationalism. Countries studied include the Arab states, Israel, Iran, and Turkey.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3308 Political Systems of East Asia

3 hours; 3 credits
Political institutions and processes in China, Japan, and Korea. Social structure, ideology, political leadership, and differing patterns of development.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3309 Russian Politics in Comparison

4 hours, 4 credits
Russian politics understood through the lens of the political science subfield of comparative politics. Introduction to core concepts and theories about revolution, democratization, economic reform, and regime dynamics. Discussion of contemporary policy issues, such as nationalism, terrorism, poverty, and human rights.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3322 Political Economy of Development

4 hours; 4 credits
Introduction to classical political economists. Postwar theories of economic development, modernization theory, development economics, dependency theory, and neoliberalism. Industrialization of newly industrializing countries, debt and financial crises. New forms of global production.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3323 The Politics of Global Labor Movements

4 hours; 4 credits
Historical and contemporary analysis of international labor movements. Establishment of class compromises between labor and capital in the early 20th century. Global spread of neoliberalism and assault on US and global labor unions. New forms of worker organization in comparative perspective.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3340 Protest and Revolution

3 hours; 3 credits
Comparative study of protest and revolution in industrialized and Third World countries. Political, economic, and social conditions that stimulate protest and revolution. Ideological and organizational characteristics of revolutionary movements.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3341 Global Gender Politics

3 hours; 3 credits
Study of gender politics and policy around the globe. Examination of women's citizenship and impact of gender on public policy and of public policy on gender in a range of societies. Exploration of the gendered foundations and impacts of the international processes of globalization, militarization, and democratization. Exposure to several types of political analysis such as political ethnography and feminist comparative policy. (This course is the same as Women's and Gender Studies 3357.)

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3342 Communist Political Systems

3 hours; 3 credits
Comparative study of the political process in such selected communist countries as China and Cuba, and former communist countries of the Soviet Union and Eastern Europe. General characteristics of communist systems in comparison with noncommunist systems.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or
equivalent, or permission of department.

## POLS 3343 Politics of Genocide \& Ethnic Cleansing

4 hours; 4 credits
Study of the politics of genocide and ethnic cleansing as the most extreme forms of human rights violations. Comparative examination, through in-depth case studies, of causes, international responses, and aftermaths. Exploration of genocide prevention initiatives.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3344 Genocide and Transitional Justice: The Case of Cambodia

4 hours; 4 credits
Three-Week Course (115 hours): Three Weeks (one week of history/concepts and two weeks of hands-on field research) in Cambodia

Prerequisite: Introduction to the Cambodian genocide. Analysis of the pros and cons of the United Nations-backed Hybrid Tribunal in light of transitional justice efforts in Cambodia. Introduction to interview-based qualitative research design and practical interview techniques. A three-week trip to Cambodia to conduct interviews with survivors, human rights activists, and government officials in Cambodia. Learn field research skills including archival research and interviews, teamwork etc. in a foreign country. This course is open to all Brooklyn College or CUNY graduate and undergraduate students in any major.

## POLS 3345 Comparative Social Policy

3 Hours; 3 Credits
Key areas of social policy, such as welfare, healthcare, and education, from a comparative perspective. Spans continents and specific geographical regions. Focus on tensions in social policymaking.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3346 Politics of Happiness

4 hours; 4 credits
Overview of happiness studies in social sciences. Conceptual definition and measurement of happiness, life satisfaction, and subjective well-being. Individual-level determinants of happiness, including income, personality, political orientation, religiosity, and interpersonal networks. Country-level determinants of happiness, including economic inequality, labor union density, and good governance. Discussion of the relationship between happiness and policies.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3347 Global Cities

4 hours, 4 credits
Key areas of global cities, such as rural-urban migration, labor, housing and land use, health, and transportation, from a comparative perspective. Spans continents and specific geographical regions. Focus on tensions in urban politics in national
and international policy-making contexts. This course is the same as Sociology 3347.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or Sociology 1101, or English 1010 or equivalent, or permission of department.

## Political theory and methodology

## POLS 3401 Ancient and Medieval Political Thought

## 3 hours; 3 credits

Introduction to Western political thought. Major political theorists from Plato to Machiavelli. The nature of political community, the relationship between divine and political regimes, the beginnings of the shift toward secularism in governing, and the use of ancient Greek works of politics in nineteenth- and twentieth-century U.S. debates about justice.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3402 Modern Political Thought

## 3 hours; 3 credits

Methods and problems of political theory. Works of Hobbes, Locke, Rousseau, Marx, Mill, Nietzsche, and other political theorists of the modern era in the West, beginning with the Reformation in the sixteenth century and ending at the close of the nineteenth century. Freedom, justice, power, authority, and the social contract examined in relation to classical liberal, democratic, utilitarian, and Marxist schools of political thought.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3403 Contemporary Political Thought

## 3 hours; 3 credits

Examination of such ideologies as socialism, communism, fascism, and nationalism. Concepts of freedom, justice, power, domination, resistance, and equality. Other contemporary political theories include: feminist, antiracist, postcolonial, pluralist, democratic, and poststructuralist political theory.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3404 American Political Theory

## 3 hours; 3 credits

Recurring themes and perspectives that characterize the tradition of American political thinking. Issues for discussion and reading selections vary from term to term.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3410 Radical Political Thought

3 hours; 3 credits
Radical political thought, classical and contemporary. Critique of such dominant radical themes as anarchism, the role of violence, the authority of the state, privilege, and libertarianism. Readings from such theorists as Bakunin, Rousseau, Marx, Veblen, Mao, and

Marcuse.
Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3411 Gender and Political Theory

3 hours; 3 credits
Analysis of political concepts of identity, power, citizenship, race, nation, and class in relation to gender and sexuality. Examination of the way ideologies of gender are deployed within the political theory tradition. Sameness/difference debate, identifying the forms of gender-based domination and resistance, and antiracist approaches to feminism. This course is the same as Women's and Gender Studies 3356.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3412 African Women and Feminism

3 hours; 3 credits
Women's power, activism, and inequality on the basis of gender in the African continent. Explorations of gender-based inequality and the way African women exercise formal power. African women scholars' and activists' theoretical and practical analyses of feminism and the consequences of such analyses on gender relations in the continent. Theoretical readings and case studies. Course may have a national, regional, or continental focus. This course is the same as Africana Studies 3365 and Women's and Gender Studies 3447.

Prerequisite: Core Studies 3 or Core Curriculum 1230 or Core Studies 9, or any Political Science course in the 1000-level range, or Africana Studies 1001, or Women's and Gender Studies 10.7 or 1001, or English 1010 or equivalent, or permission of department.

## POLS 3413 Islam and Modernity

3 hours; 3 credits
Role of discourse and power in the constitution of identity and politics. Binary relationship between power/knowledge, local/universal, inclusion/exclusion, religion/secular, rational/irrational, Islam/modernity. Political and social theories that deal with modernity, postmodernity, language, gender, race, class, and ethnicity in the formation of identities and practices. This course is the same as Religion 3004.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or Religion 3003 or Religion 3005, or English 1010 or equivalent, or permission of department.

## POLS 3414 Politics and Religion

4 hours; 4 credits
Critical examination of major issues in politics and religion including the relationship between religion and/or church and state, theories of modernity and secularization, law, morality, social justice, various conceptions of the public and the private. The role of religion in domestic and world politics. Study of methodological approaches to relationship of politics and religion, empirical and normative.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3415 Biopolitics

## 3 hours; 3 credits

The state's role in fostering the safety and welfare of its population. Technologies of power for governing the life, health, and death of populations. Exploration of theories of biopolitics and governmentality and their application to particular institutions and discourses such as public health, immigration, surveillance, risk assessment, and security. Exposure to different forms of critical analysis

Prerequisite or corequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or Health and Nutrition Sciences 2140, or English 1010 or equivalent, or permission of department.

## POLS 3416 The Politics of Queer Theory

4 hours; 4 credits.
Introduction to the concepts and themes associated with the development of the field of Queer Theory. Investigation of the connections among debates regarding the concepts of identity and power in Queer Theory and in the fields of Political Theory, Women's Studies, and Lesbian and Gay Studies. Examination of essentialist and constructionist understandings of social identity. Exploration of the relationship between sex, gender and sexuality as forms of identification and power and other forms of identification and power such as race and class. This course is the same as Women's and Gender Studies 3359.

Prerequisites: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or Women's and Gender Studies 1001, or English 1010 or equivalent, or permission of department.

## POLS 3420 Theory and Methodology in Political Science

3 hours; 3 credits
Various approaches to the study of politics considered from a critical perspective. Relationship between theory and method. Various methodological approaches and epistemological issues. Recommended only for majors.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3421 Survey Research

3 hours; 3 credits
Fundamentals of survey methods. Consideration of research design, measurement problems, sampling, questionnaire construction, interviewing, and data collection.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3422 Statistics in Political Science

3 hours; 3 credits
Descriptive statistics. Introduction to probability theory and inferential statistics. Problems of sampling. Application of statistics to political science. (Not open to students who are enrolled in or have completed any of the following: Business 3400 [30.2],
Economics 3400 [30.2], Sociology 2113 [19.1], 2114 [20], 20.1, Psychology 3400 [40.1], 2600 [50], Mathematics 3501 [51.1].)

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any

Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3423 Mapping Politics: GIS Methods in Political

 Science3 hour lecture and 2 hour laboratory; 4 credits
Introduction to Geographic Information Systems and its application to political science research. Identifying spatial political phenomena such as polarization, policy diffusion, and democratization. Laboratory sessions on creating and editing maps and analyzing spatial data.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3440 Politics through Literature

3 hours; 3 credits
Contribution of literary sources to the study of politics. Political concepts and problems include political obligation, freedom, authority, revolutionary violence, and technology. Application of political criteria rather than aesthetic criteria to works by such authors as Melville, Faulkner, Orwell, Camus, Morrison, Allende, Naipaul, and Marshall.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3441 Problems in Modern Democracy

## 3 hours; 3 credits

Intensive examination of problems in the theory and practice of twentieth-century democracy, such as: the problems confronted by mass movements; democratic regimes and societies attempting democratization; and the effects of statist, bureaucratic, and authoritarian social formations on democratic practices.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3442 Politics and Sexuality

3 hours; 3 credits
Examination of the theory and practice of lesbian, gay, bisexual, and transgender politics. Political analysis of the legal regulation of sexuality and gender, the emergence of modern civil rights movements of sexual minorities, and the discourses of liberation, assimilation, and destabilization deployed in those movements. (This course is the same as Women's and Gender Studies 3354.)

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3443 Politics of Fear

3 hours; 3 credits
Examines the role of fear in politics with a focus on the relationships between fear and the state, civil society, the workplace, and other private spheres. Readings from political theory (e.g., Hobbes, Arendt, Foucault), literature (e.g., Brecht, Solzhenitsyn, Kafka), and history. Focus on case studies from the U. S., Latin America, the former Soviet Union, and Nazi Germany.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any

Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3444 The Art of Political Writing

4 hours; 4 credits
Tools to engage with the world and perhaps even try to change it. Writing for the public - for audiences outside of academic discipline of political science. Explore tools to intervene in public discussions of social justice. Translate subject expertise in political science to the public, through op eds, review essays or blogs.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3445 Counterrevolution

3 hours; 3 credits
Origins and nature of counterrevolutionary thinking and politics.
Focuses on counterrevolutionary hostility to progressive politics, whether liberal, democratic, or revolutionary. Examines the role of counterrevolutionary arguments in contemporary American politics.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.

## POLS 3446 Transgender Theories and Politics

4 hours; 4 credits
Study of transgender identities, sets of practices, social movements, and interventions in gender studies and queer theory. Theoretical overview of key early texts in gender theory.
Subsequent readings on social and legal constructions of sex in the United States and internationally and on social and political movements for transgender rights and gender self-determination. Examination of trans both as a particular kind of claim for gender recognition and as a move away from norms organized around the gender binary. This course is the same as Women's and Gender Studies 3352 and Sociology 3446.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or Women's and Gender Studies 1001 or Sociology 1101 or permission of the Chairperson, or English 1010 or equivalent, or permission of department.

## Writing intensive courses

## POLS 3012W Analytic Approaches to Political Problems

4 hours; 4 credits
Critical examination of major political issues. Crosses the boundaries of the discipline's major subfields (American, International, Comparative, Political Theory, Public Policy) by analyzing issues from at least two different subfields. Subjects from term to term. Writing intensive.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or permission of department.

## POLS 3014W Research Strategies in Public Policy

3 hours lecture, 2 hours laboratory; 4 credits Introduces basic concepts and principles of research methodology connected to specific public policies. Research strategies will vary
from term to term, including both qualitative and quantitative methods. Weekly laboratory practice on specific research methods. Writing intensive.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or permission of department.

## POLS 3190W Proseminar on American Politics

4 hours; 4 credits
Critical examination of major issues in American Politics. Focus on developing students' writing skills. Subjects vary from term to term. Writing-intensive course.

Prerequisite: English 1012 and one of the following: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or permission of department.

## POLS 3191W The Politics of Race and Nation

4 hours; 4 credits
Analysis of the politics of race and the struggles of people of color in the United States-including slavery and Reconstruction, the history of Native American conquest and removal, immigration and the changing meanings of whiteness, US imperialism, the liberation struggles of the 1960s, mass incarceration and post-9/11 racial politics. Focus on developing students' critical reading and analytical writing skills and on engaging with the issues of the day and their historical contexts in substantive, thorough form. Reading and writing-intensive course. This course is the same as American Studies 3107W.

Prerequisite: English 1012 and one of the following: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or permission of department.

## POLS 3290W Proseminar on International Relations

4 hours; 4 credits
Critical examination of major issues in International Relations.
Focus on developing students' writing skills. Subjects vary from term to term. Writing-intensive course.

Prerequisite: English 1012 and one of the following: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or permission of department.

## POLS 3390W Proseminar on Comparative Politics

4 hours; 4 credits
Critical examination of major issues in comparative politics. Focus on developing students' writing skills. Subjects vary from term to term. Writing-intensive course.

Prerequisite: English 1012 and one of the following: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or permission of department.

## POLS 3391W The Politics of Global Production: Call Centers, Computer Tablets, and Clothing

## 4 hours; 4 credits

Critical examination of major issues in global production and outsourcing. Study of Fordist, post-Fordist, Japanese and other postwar models of production. Examination of globalization and global value chains. Coverage of new forms of outsourcing in services, such as call centers, medical tourism. Focus on developing students' writing skills. Writing-intensive course.

Prerequisite: English 1012 and one of the following: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or permission of department.

## POLS 3392W Comparative Health Policy

4 hours; 4 credits
Analysis of the politics of major health policy developments both in the US and internationally. Examination of the ways political analysis can improve health policy research, its implementation and related economic and social policies. Writing-intensive course.

Prerequisite: English 1012 and one of the following: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or permission of department.

## POLS 3393W Writing on African Women and Feminism

4 hours; 4 credits
Critical examination of major issues on African women and feminism. Commonalities of experiences through the exercise of patriarchy and injustices privileging and oppressing some people based on their gender. Critiques of feminism that have emerged from African women scholars, as a hierarchical structure that privileged Western thought and experiences. Consequences of debate to gender relations on the African continent. Focus on developing students' writing skills. Writing-intensive course. This course is the same as Women's and Gender Studies 3349W and Africana Studies 3364.

Prerequisites: English *1012 [2] Core Studies 3 or Core Curriculum 1230, POLS 1230 or any Political Science course in the 1000-level range or Women's and Gender Studies 1001 or Africana Studies 1001.

## POLS 3490W Proseminar on Political Theory

4 hours; 4 credits
Critical examination of major issues in political theory. Focus on developing students' writing skills. Subjects from term to term. Writing-intensive course.

Prerequisite: English 1012 and one of the following: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or permission of department.

## POLS 3491W Proseminar on Biopolitics

4 hours; 4 credits
Study of the theory and practice of biopolitics; examination of technologies of power and the development of mechanisms for governing the life, health, and death of populations; exploration of their operation in particular institutions and discourses such as public health, immigration, surveillance apparatuses, and human security studies, reproduction and reproductive technologies, biocitizenship, homelessness, and incarceration. Writing-intensive course.

Prerequisite: English 1012 and one of the following: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or permission of department.

## POLS 4000W Capstone Senior Seminar

3 hours and independent work and conference§; 4 credits Capstone seminar for majors in their senior year. Subjects will vary from term to term. The capstone seminar builds on the research analysis and research methods skills developed in prerequisite
courses. Each student will write a research paper that incorporates library and empirical or field research. Writing intensive.

Prerequisite: Any Political Science course in the 1000-level range, and one of the 3000 -level writing-intensive seminars or 3014 W or permission of department.

## Special topics

## POLS 3501 Special Topics

3 hours; 3 credits
Topics vary from term to term and reflect special interests of students and faculty. Course description may be obtained in the department office before registration.

Prerequisite: Core Studies 3 or Core Curriculum 1230 or Political Science 1001 or 1002 or 1003 or 1004 or 1005 or 1006, or English 1010 or equivalent, or permission of department

## Internship courses

## POLS 3601 New York State Legislature Internship I

3 hours lectures and conferences; 3 credits
Theoretical approaches to public policy development through operation of the state government in a working-learning experience in the state legislature. Course conducted in Albany, New York. Intensive orientation by government officials under direction of program faculty. Forums, readings, and papers on current issues. (Not open to students who have completed Political Science 20.1, 20.2, or 20.3.)

Prerequisite: Any Political Science course in the 1000-level range, or permission of department.
Corequisite: Political Science 3602.

## POLS 3602 New York State Legislature Internship II

30 hours fieldwork; 12 credits
In-depth experience in the dynamics of actual public policy implementation in state government through direct involvement in legislative process. Course conducted in Albany, New York, and requires a working-learning contract between the student and the legislative sponsor. Weekly 30-hour internship in legislative office working with staff. Practice and development of interpersonal skills and career goals. On-site evaluation, written assignments, and reports. (Not open to students who have completed Political Science 20.1, 20.2, or 20.3.)

Prerequisite: Any Political Science course in the 1000-level range, or permission of department.

## POLS 3605 Washington, D.C. Legislative Internship

35 hours fieldwork; 6 credits
In-depth experience working in a legislative office at the federal level or in, rare cases, public policy in a federal agency or in public policy in select non-governmental organizations. Two-month summer residential internship conducted in Washington, D.C. Requires a working-learning contract between the student and the internship sponsor. Weekly 35-hour internship in selected office working with staff. Practice and development of interpersonal skills and career goals. On-site evaluation, daily journal writing, work log, policy research paper.

Prerequisite: Permission of the department chair.

## POLS 3610 Urban Fieldwork I

At least 9 hours fieldwork plus conference and independent work§; 3 credits
Students spend at least nine hours a week in an approved urbanrelated field assignment. Required paper.

Prerequisite: junior or senior standing or permission of the chairperson.

## POLS 3611 Urban Fieldwork II

At least 9 hours fieldwork plus conference and independent work§; 3 credits
Students spend at least nine hours a week in an approved urbanrelated field assignment. Required paper.

Prerequisite: junior or senior standing or permission of the chairperson; and Political Science 3610 [75.5].

## POLS 3651 Internship in New York City Government,

 Politics, and Social Movements1 hour seminar plus 90 hours fieldwork; 3 credits
Supervised internships in government agencies, legislative offices, or organizations in the private and public sector. Students will be responsible for required readings, a diary of field experiences and observations, and a term paper. One hour in the classroom per week, and a minimum of 90 and a maximum of 120 hours of field placement during the semester. Students are encouraged to meet with the department's internship coordinator one semester prior to registration to discuss and arrange placement.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or English 1010 or equivalent, or permission of department.
Corequisite: Political Science 3650, Seminar in NYC Government, Politics, and Social Movements.

## Honors courses

## POLS 5001 Independent Research I

Minimum of 9 hours of conference and independent work§; 3 credits
Independent research supervised by a faculty member. Approved topic. Fieldwork and library study. Research paper. Not intended primarily for department honors.

Prerequisite: completion of an approved program of advanced Political Science Department courses and permission of the instructor and the chairperson.

## POLS 5002 Independent Research II

Minimum of 9 hours of conference and independent work§; 3 credits
Independent research supervised by a faculty member. Approved topic. Fieldwork and library study. Research paper. Not intended primarily for department honors.

Prerequisite: completion of an approved program of advanced Political Science Department courses and permission of the instructor and the chairperson.

## Tutorial courses

2 hours; 2 credits
Course content determined jointly by tutor and student.

## POLS 5004 Tutorial I, II

2 hours; 2 credits
Course content determined jointly by tutor and student.

The following inactive course(s) will only be offered if there is sufficient demand:
POLS 3163 Politics and the Environment
POLS 3164 Public Administration in the United States
POLS 3222 Force and International Relations
POLS 3320 Government and Politics in Israel

## Psychology

Department office: 5401 James Hall
Phone: 718.951.5601
Full-time Faculty
Professors: Abramov, Brauner, Delamater, Ghirlanda, Hainline, Hardin, Hass, Kozbelt, Kuhlman, Osman, Rabin, Snadowsky, Walder
Associate Professors: Carmichael, Chanowitz, Chua, Crump, Drake, Gao, Grasso, Kacinik, Kurylo, Niwa, Reigada, Robles, Weston
Assistant Professors: Esber, Gantman, Krishnan, Kuchirko, Miles, Shane
Lecturers: Chalmers, Volz

The Department of Psychology is one of the largest departments of Brooklyn College. We encourage our students to understand psychology as a science, to promote human welfare and to serve society at large. The department offers a bachelor of science and a bachelor of arts degree, a minor in psychology, an interdisciplinary minor in cognitive science, an interdisciplinary minor in neuroscience, and a concentration for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades 1-6).

The department adheres to the guidelines of the American Psychological Association. Our students learn the major concepts, theories, findings, and historical trends in psychology as well as basic research methods, including research design, data analysis, and interpretation. Students learn to apply psychological principles to personal, social, and organizational issues, with an appreciation of sociocultural and economic diversity. Psychology students acquire the ability to weigh evidence, tolerate ambiguity, act ethically, and communicate effectively.

Fieldwork courses and internships help prepare students for employment and graduate work in the field. The department encourages students who are planning graduate studies to take honors courses, which afford them the opportunity to work closely with professors who are active in experimental and applied research. We maintain many excellent laboratories.

Graduates of the program work throughout the fields of clinical and research-oriented psychology and education. Our students frequently choose to continue their training in order to pursue professional careers. The Brooklyn College Department of Psychology ranks among the top programs nationwide for graduates earning doctorates in psychology. Students who wish to pursue graduate studies may apply to the master's and doctoral degree programs offered by this department and the CUNY Graduate Center.

## B.A. degree program in psychology HEGIS code 2001; SED program code 02096

Department requirements (a minimum of 32.5 credits)
The department Chair, with the approval of the chair of the department's undergraduate curriculum committee, may allow substitutions for one or more of these requirements consistent with the educational goals of the program.
All of the following: $A$ ) and $B$ ) and C)
A) Psychology 1000, 3400, and 3450W.
B) Three of the following courses, one from each set:
I. Psychology 2100, 2200 or 2210
II. Psychology 2300 or 2810
III. Psychology 2530 or 2600
C) Four additional advanced electives in psychology. No more than one of the following courses may be used to satisfy this requirement: Psychology 5001, 5002, 5003, 5004, 5011, 5012, 5013, 5014. Advanced courses are any courses numbered 3000 and above.

Department recommendations
Prospective psychology majors should consult a department counselor as early as possible. Majors and prospective majors should consult department counselors before each registration to plan individual programs. Psychology majors are strongly advised to complete the Psychology 3450W requirement as early as possible, preferably by completion of the junior year. For courses requiring permission of the chairperson as a prerequisite, permission should be obtained before registration.

Additional requirements for a B.A. degree
Of the advanced courses required for the B.A. degree in Psychology, a minimum of 15 credits must be completed in the Psychology Department at Brooklyn College with a grade of C - or higher in each course.

## B.S. degree program in psychology HEGIS code 2001; SED program code 02098

Department requirements (a minimum of 32.5 credits)
The department Chair, with the approval of the chair of the department's undergraduate curriculum committee, may allow substitutions for one or more of these requirements consistent with the educational goals of the program.
All of the following: $A$ ) and $B$ ) and C)
A) Psychology 1000, 3400, and 3450W.
B) Three of the following courses, one from each set:
I. Psychology 2100, 2200 or 2210
II. Psychology 2300 or 2810
III. Psychology 2530 or 2600
C) Four additional advanced electives in psychology. No more than one of the following courses may be used to satisfy this requirement:

Psychology 5001, 5002, 5003, 5004, 5011, 5012, 5013, 5014. Advanced courses are any courses numbered 3000 and above.

## Additional requirements for a B.S. degree

Candidates for a B.S. degree with a major in psychology must complete at least 60 credits in science and mathematics; a minimum of 24 of these 60 credits must be completed in advanced courses in the Psychology Department. These 24 credits must be completed at Brooklyn College with a grade of C- or higher in each course. Specific course requirements for a B.S. degree are described above.
The following courses may be applied toward the 60 credits in science and mathematics:
A) All courses in the departments of Biology, Chemistry, Computer and Information Science, Earth and Environmental Sciences, Mathematics, Physics and Psychology.
B) Courses marked with a \# symbol in the Department of Health and Nutrition Sciences.
C) ---Anthropology 3199, 3230, 3240, 3250, 3260, 3440, and 4665.
----[Core Studies 5, 5.1, 5.2, 7.1, 7.2, 8.1, and 8.2].
----Biology 1010, Chemistry 1007, Physics 1005, Earth and Environmental Sciences 1010.
---[Core Curriculum 3301 through 3399]
----Economics 3400, 3410, 4410, and 4422.
---Philosophy 3203, 3204, and 3601.
---Kinesiology 3271, 3275, 4229, and 4251.
---Macaulay Honors College 2001
---Sociology 2701.
Department recommendations
Prospective psychology majors should consult a department counselor as early as possible. Majors and prospective majors should consult department counselors before each registration to plan individual programs.
Psychology majors are strongly advised to complete the Psychology 3450W requirement as early as possible, preferably by completion of the junior year. For courses requiring permission of the chairperson as a prerequisite, permission should be obtained before registration.

## Departmental Minor(s)

## Minor in Cognitive Science

An interdisciplinary and interdepartmental minor, offered by the Department of Computer and Information Science, the Department of Philosophy, and the Department of Psychology.

## Program requirements: (19-20 credits)

All of the following:
Philosophy 3422, Computer and Information Science 1115, Psychology 1000, Psychology 2530 or 3530.
One from each of the following groups, a) and b):
a) Philosophy $3123,3401,3410,3420$, or 3601.
b) Computer and Information Science 1410 or 3410, or Philosophy 3423, or Psychology 3580.

## Minor in Psychology

Department Requirements
At least 12 credits of advanced electives in psychology with a grade of $C$ - or higher in each course. A minimum of nine of these credits must be completed at Brooklyn College. Psychology minors are urged to consult with departmental counselors to plan an appropriate sequence of courses.

## Interdepartmental Minor(s)

## Minor in Neuroscience

Program Requirements (18-21 credits):
Interdisciplinary minor, offered by the departments of Psychology and Biology, requiring 18-21 credits including 12 advanced credits, each completed with a grade of C - or higher. At least nine of the advanced credits must be completed at Brooklyn College.

All courses listed in Group A may be used to satisfy the requirements of both the minor in Neuroscience and the major in Psychology. Only one course from Group B may be used to satisfy the requirements of both the minor in Neuroscience and the major in Psychology. Psychology 3600 and one of the courses from Group B may be used to satisfy the requirements of both the minor in Neuroscience and the minor in Psychology. It is also highly recommended to take Biology 1001 and Biology 1002.

Students who do not major in psychology are strongly encouraged to also take Psychology 3400 or Mathematics 4501.
Both $A$ and $B$ below are required:
A. All of the following:

Psychology 2600 Mind, Brain, and Behavior;
Psychology 2610/Biology 2020 Neurobiology;
Psychology 3600 Behavioral Neuroscience
B. Three of the following:

Psychology 3510 Learning;
Psychology 3610/Biology 3020 Behavioral Neuroendocrinology;
Psychology 3660 Drugs and Behavior;
Psychology 3670 Comparative Psychology;
Psychology 3680 Human Neuropsychology;
Psychology 3695 Advanced Special Topics in Behavioral Neuroscience
Note that the prerequisite for Psychology 2600 is one of the following: Psychology 1000 or Health and Nutrition Sciences 2300 or Kinesiology 3271. Therefore, students who otherwise would not take any of these courses will have to complete 21 credits for the minor. Both Biology 2020 and Biology 3020 can count toward both the minor in neuroscience and major in biology.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Psychology

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in psychology must complete at least 30 credits in the Psychology Department, including all required courses for the concentration, with a grade of C- or higher in each course. Students who elect a concentration in psychology should consult a psychology department counselor as early as possible. Early Childhood Education majors are strongly advised to include Psychology 3400 (Statistical Methods in Psychological Research) as one of the advanced electives.

Concentration requirements ( 30 credits)

## $A, B, C$ and $D$ are required:

## A. All of the following:

Psychology 1000 Introductory Psychology
Psychology 2210 Introductory Child Psychology
Psychology 3220 Cognitive Development

## B. Two of the following:

Psychology 2100 Social Psychology
Psychology 2600 Mind, Brain and Behavior
Psychology 2810 Abnormal Psychology I
C. Two of the following:

Psychology 3230 Social and Personality Development of Children
Psychology 3240 Psychological and Developmental Disorders of Childhood
Psychology 3270 Psychology of the Family
D. At least three additional advanced electives in psychology:

Courses numbered 3000 and above, which may include a third course from C above

## Graduate Studies

The Psychology Department offers several master of arts degree programs. For information, students should consult the department's deputy chairperson for graduate studies. A Graduate Bulletin is available online at the Brooklyn College Web site.

## Courses

Only courses numbered 3000 and above count as advanced courses for major or minor requirements in this department.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

Students may register for up to (but no more than) six credits in honors courses in one term and may not receive credit for more than four honors courses (5000-level) in total.

## General Psychology

## PSYC 1000 Introductory Psychology

3 hours; 3 credits
An introduction to the major facts, principles, methods, and theories of psychology. Topics include the history of psychology, sensory and perceptual processes, learning and cognition, motivation and emotion, psychological development, clinical and abnormal psychology, and biological, social, and personality determinants of behavior. (Not open to students who have taken both Psychology 1 and 2.)

## PSYC 2040 The American Urban Experience: Psychological Perspectives

3 hours; 3 credits
The influence of gender, ethnicity, race, and social class on manifestations of behavior, cognition, and emotional expression such as language, learning styles, intelligence, personal and group identities, conflicts, and peacemaking in the national urban experience. Social policy implications of the way that psychological research is performed and psychological theories are structured.

Prerequisite: two of the following courses: Core Curriculum 1220 [2.2], 1230 [2.3], 3201 [20.01]- 3209 [20.09], History 3005.

## PSYC 2090 Special Topics

## 3 hours; 3 credits each term

Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take this course for credit twice but may not repeat topics. Students and faculty may suggest topics to the chairperson.

## PSYC 2091 Fieldwork in Psychology

1 hour seminar, 6 hours fieldwork; 3 credits
Field-based experience in a specified broad area of psychology, complementing theory and research presented in classroom and laboratory-based courses. An initial involvement in some of the broad psychological issues in the specified area and the ways in which a wide variety of workers address these. Readings, journal keeping, and a written project summary required of students.
(Students may receive credit for both Psychology 2091 [9.1] and 2092 [9.2], but only for projects in different broad areas.)

Prerequisite: Psychology 1 or 1000 [1.1] or 2, and permission of the instructor.

## PSYC 3090 Advanced Special Topics in Psychology

## 3 hours; 3 credits

Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take this course for credit twice but may not repeat topics

Prerequisite: Psychology 1000 [1.1] and permission of the chairperson

## Social psychology

## PSYC 2100 Social Psychology

## 3 hours; 3 credits

Basic concepts and research findings in social psychology. Areas covered include social perception, attitude organization and change, interpersonal processes, group structure and processes, intergroup relations, socialization. (Not open to students who have completed Psychology 31.)

Prerequisite: Psychology 1000 [1.1] or 2.

## PSYC 3110 Psychology of Prejudice

3 hours; 3 credits
Prejudice and discrimination from a social psychological perspective. Topics include normality of prejudgment, phenomena of group differences, psychological and sociocultural theories of prejudice and discrimination, effects of discrimination, analyses of current manifestations of prejudice, selected strategies for change.

Prerequisite: Psychology 2100 [10] or 31.

## PSYC 3120 Cultural Psychology

3 hours; 3 credits
An exploration of theory and research in the contemporary cultural variations of thought, language, and other social behavior, addressing the question of how culture is "involved" in these processes. An examination of research in perception, cognition, motivation, and development and communication; and a review of interpersonal, group, and organizational "differences" across cultures. Historical and theoretical alternatives for making sense of these variations will be considered, leading to the consideration of
a "universal" human nature. (This course is the same as
Communication 3100.)
Prerequisite: Psychology 2100 or 2210 or 2200 ; or Communication 2000

## PSYC 3140 Small Groups

3 hours; 3 credits
Detailed survey of small-group interaction. Methods of study, leadership, problem solving, other aspects of group dynamics.

Prerequisite: Psychology 2100 [10] or 31.

## PSYC 3160 Psychology for a Better Society

3 hours; 3 credits
How behavioral research in social psychology can shape policy formulation and implementation. Central themes include a detailed analysis of human judgment and decision-making, and how a variety of motives and situational forces can affect people's choices and behavior. Combined, these topics have important implications for policy design that affects individuals as well as the functioning of the organizations that determine those policies.

Prerequisite: PSYC 1000 and 2100

## PSYC 3171 Introduction to Industrial and Organizational Psychology

3 hours; 3 credits
Major areas of industrial psychology. Topics include personnel selection and placement; work motivation, attitudes, and morale; organizational structure and change; conflict resolution; communication and decision behavior; consumer behavior. (Not open to students who are enrolled in or have completed Psychology 12.1 or 3174 [12.2] except with permission of the chairperson.)

Prerequisite: Psychology 2100 [10] or 31.

## PSYC 3172 Strategic Human Resource Management

3 hours; 3 credits
Managerial labor policies. Factors affecting productive efficiency and morale of workers. Methods and policies of apprenticeship, recruitment, dismissal, criteria of employee selection, wage payment, and work standards. Problems of monotony and work schedules. Welfare policies. This course is the same as Business 3240. (Not open to students who have completed Economics [40.3].)

Prerequisite: Economics 2100 [10.1] or Psychology 2100 [10].

## PSYC 3174 Organizational Diagnosis and Intervention

## 3 hours; 3 credits

An evaluation of systematic methods of organizational diagnosis and intervention based on the scientist-practitioner approach. Organizations as complex and dynamic social systems that require multi-level analysis of systems and processes: organizational, worksystems and technology, work-groups, and individual levels. The challenges of designing effective interventions as well as that of the assessing the effectiveness of those interventions.

Prerequisite: Psychology 2100.

## PSYC 3180 Health Psychology

3 hours; 3 credits

Contributions of psychology to the promotion and maintenance of health; prevention and treatment of illness; causes and correlates of health, illness, and related dysfunctions. Evaluations of research about psychological contributions to health. (This course is the same as Health and Nutrition Sciences 2111.)

Prerequisite: Psychology 1000 or Health and Nutrition Sciences 1100 and at least one of the following: Psychology 2100, 2300, or 2600.

## PSYC 4100 Seminar in Social Psychology

2 hours and independent work§; 3 credits Readings and evaluation of current research in selected areas of psychology. (Not open to students who have completed Psychology 79.1.)

Prerequisite: Psychology 2100 [10] and permission of the chairperson.

## Developmental psychology

## PSYC 2200 Lifespan Development

3 hours; 3 credits
Study of the person throughout the lifespan. Emphasis on the physical, cognitive and social development of the individual.

Prerequisite: Psychology 1000

## PSYC 2210 Introductory Child Psychology

3 hours; 3 credits
Principal features of the psychological development of children. Lectures, discussions, class period observations. (Not open to students who are enrolled in or have completed Psychology 25 or Education 4210 [27.1].)

Prerequisite: Psychology 1000 [1.1] or 2.

## PSYC 2290 Special Topics in Developmental Processes

## 3 hours; 3 credits

Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take Psychology 2290 [20.1] for credit twice, but may not repeat topics.

Prerequisite: Psychology 2210 [20] or 25.

## PSYC 3220 Cognitive Development

3 hours; 3 credits
Theories and experimental evidence relating to development of cognitive processes in children. Language acquisition, perceptual development, symbolic thinking, memory, classification skills, interplay between social and cognitive processes. Independent project.

Prerequisite: Psychology 2200 or 2210 or 25.

## PSYC 3230 Social and Personality Development of Children

3 hours; 3 credits
Origins and processes in the development of social behavior and personality in the child.

Prerequisite: Psychology 2200 or 2210 [20] or 25.
PSYC 3240 Psychological and Developmental Disorders of Childhood

3 hours; 3 credits
Introduction to the identification, origin, and treatment of psychological and developmental problems and disturbances of early childhood. Topics include developmental crises and neurological and emotional disorders. Focus on family interactions and understanding disability in cultural context.

Prerequisite: Psychology 1000 [1.1] and either Psychology 2200 or 2210 [20] or 2810 [30] or CBSE 2002 [34]; or permission of the chairperson.

## PSYC 3250 Psychology of Adolescence

3 hours; 3 credits
Principal features of the psychological development of adolescents. (Not open to students who have completed Education 27.2.)

Prerequisite: Psychology 2200 or 2210 [20] or 25

## PSYC 3260 Psychology of Aging

3 hours; 3 credits
Principal psychological and behavioral changes in the aging process.

Prerequisite: Psychology 2200 or 2210 [20] or 25.

## PSYC 3270 Psychology of the Family

3 hours; 3 credits
The family as a psychosocial system; the family life-cycle; functional and dysfunctional family interactions and their consequences. Critical review of models of family therapy. Review of empirical evidence and research techniques appropriate to the study of the family.

Prerequisite: Psychology 2810 and one of the following:
Psychology 2200, 2210, or Health and Nutrition Sciences 2170.

## PSYC 4210 Field Experience in Child Psychology

1 hour lecture, 6 hours fieldwork; 3 credits
Fieldwork and observation of children in a variety of group settings.
Prerequisite: Psychology 2200 or 2210 and permission of the chairperson.

## PSYC 4220 Intensive Fieldwork with a Seminar in Child Psychology

A total of 15 hours recitation, 60 hours supervised fieldwork, and 135 hours unsupervised fieldwork; 6 credits
Intensive training in work with emotionally disturbed children in a professional residential summer camp setting. Students spend one week in training and nine weeks working over eighty hours weekly with emotionally disturbed or learning disabled children ages seven to fourteen. Close professional supervision, frequent small group discussion, and individual consultation. Seminar topics include: causes, manifestations, diagnosis, treatment alternatives, cultural influences, and career counseling. This course requires nine weeks in residence at Ramapo-Anchorage Camp in Rhinebeck, New York.

Prerequisite: Psychology 1000 [1.1], or 2 and three additional credits in psychology and permission of the instructor.

## Personality psychology

PSYC 2300 Introduction to Personality
3 hours; 3 credits

Fundamental approaches, concepts, research findings in the study of personality. Personality assessment; emotions, motivation, cognition, processes of personality change. (Not open to students who have completed Psychology 9.)

Prerequisite: Psychology 1000 [1.1] or 2.

## PSYC 3300 Theories of Personality

3 hours; 3 credits
Discussion and critical evaluation of major theories of personality. Related methods of assessment and research. (Not open to students who have completed Psychology 76.)

Prerequisite: Psychology 9 or 2810 [30] or 2300 [30.2]; and Psychology 3400 [40.1].

## PSYC 3360 Psychology of Gender

3 hours; 3 credits
Survey of theory and research. Gender roles and stereotypes. Development of sex and gender differences. Psychological consequences of socialization. Theories of gender related to human behavior, cognition, and personality. Ways in which gender is reflected in theory, research, and applications. Gender related movements as social psychological phenomena.
(Not open to students who have completed Psychology 3361 or 3362.)

Prerequisite: Psychology 1000.

## PSYC 3370 Hypnosis and Related Phenomena

3 hours; 3 credits
The nature and mechanism of hypnosis and associated phenomena. Altered states of consciousness and related occurrences in daily life. Critical study in context of modern scientific psychology of behavioral, cognitive, and emotive experiences produced by hypnotic procedures. This is not a training course in the practice of hypnosis.

Prerequisite: Psychology 1 or 1000 [1.1] or 2.

## Statistics and research methods

## PSYC 2001 Laboratory Experience

Minimum of 9 hours conference and independent work; 3 credits Faculty-supervised independent research that includes data collection and analysis and/or theoretical work. Weekly conference. Final report must be submitted to the department.

Prerequisite: Psychology 1000 and permission of the chairperson and sponsorship of a full-time faculty research mentor. Course application is required and can be obtained in the department office before registration.

## PSYC 2002 Laboratory Experience 2

Minimum of 9 hours conference and independent work; 3 credits Faculty-supervised independent research that includes data collection and analysis and/or theoretical work. Weekly conference. Final report must be submitted to the department.

Prerequisite: Psychology 1000 and permission of the chairperson and sponsorship of a full-time faculty research mentor. Course application is required and can be obtained in the department office before registration.

## PSYC 2003 Laboratory Experience 3

Minimum of 9 hours conference and independent work; 3 credits Faculty-supervised independent research that includes data collection and analysis and/or theoretical work. Weekly conference. Final report must be submitted to the department.

Prerequisite: Psychology 1000 and permission of the chairperson and sponsorship of a full-time faculty research mentor. Course application is required and can be obtained in the department office before registration.

## PSYC 2004 Laboratory Experience 4

Minimum of 9 hours conference and independent work; 3 credits Faculty-supervised independent research that includes data collection and analysis and/or theoretical work. Weekly conference. Final report must be submitted to the department.

Prerequisite: Psychology 1000 and permission of the chairperson and sponsorship of a full-time faculty research mentor. Course application is required and can be obtained in the department office before registration.

## PSYC 3400 Statistical Methods in Psychological Research

3 hours lecture, 2 hours laboratory; 4 credits
Basic descriptive and inferential statistics including the elements of experimental designs in psychological research. STEM variant course - Satisfies Pathways Required Core Math and Quantitative Reasoning requirement.

Prerequisite: Psychology 1000.

## PSYC 3450W Experimental Psychology

3 hours lecture; 3 hours laboratory; 4.5 credits
Basic principles of experimental psychology and experimental methodology. A variety of specific content areas in psychology, including those within social psychology, learning, perception, and cognitive psychology. Laboratory replication of classic experiments from these content areas. Writing-intensive course.

Prerequisite: Psychology 3400; English 1012.

## PSYC 3470 Data Analytics and Data Visualization in the Social and Behavioral Sciences

3 hours; 3 credits
How the "data revolution" has transformed the way we understand and interact with the world around us. Fundamental concepts and practical techniques and skills needed for data analytics and data visualization. Availability of large datasets and their use across a variety of settings, including social networks, libraries, governments, non-profits, etc. The emergence of practices with regard to data analysis and visual communication in the social and behavioral sciences. This course is the same as Sociology 3507.

Prerequisite: Psychology 1000 or SOCY 1101; and PSYC 3400 or SOCY 2112

## PSYC 4400 Advanced Psychological Statistics

3 hours; 3 credits
A survey of advanced statistical techniques common in psychological research. Includes a review of descriptive and univariate inferential statistics, followed by multivariate statistics including regression-and ANOVA-based techniques, effect sizes and meta-analysis, and an introduction to Bayesian statistics.

Prerequisite: Psychology 3400 or permission of the Chairperson

## Cognition, learning, perception and emotion

## PSYC 2530 Introduction to Cognitive Psychology

3 hours; 3 credits
This course will provide an introductory overview of basic concepts in cognitive psychology such as memory, attention, perception, problem solving, decision-making, language and imagery. Experimental findings and proposed models will be discussed for each topic.

Prerequisite: Psychology 1000

## PSYC 3510 Learning

3 hours; 3 credits
Basic principles of animal and human learning as developed through the experimental method. Topics selected from: classical conditioning and instrumental learning; punishment and reward; avoidance and reward omission; extinction; generalization and discrimination; motivation of behavior; verbal learning and transfer; general theories of learning; short and long-term memory; and motivation. (Not open to students who have completed Psychology 72.1.)

Prerequisite: Psychology 1000 [1.1]

## PSYC 3520 Perception

3 hours; 3 credits
Emphasizes seeing and hearing, how these senses provide us with, and limit our information about, the world, and how sensory messages are integrated into perceptions of real objects and events. Topics include sensory psychophysics, space-perception, movement, illusions, influence of emotional and motivational states, age-related changes, and effects of past experience and perceptual expectations. (Not open to students who have completed Psychology 73.1.)

Prerequisite: Psychology 1000 [1.1] and 2600 [50] or 3600 [65.1].

## PSYC 3530 Advanced Cognitive Psychology

## 3 hours; 3 credits

Advanced approach to areas in cognitive psychology such as memory, problem solving, decision making, language, imagery, and other cognitive processes; with a greater emphasis on theoretical models, research studies, and primary sources. Issues to be covered may include artificial intelligence (AI), automatic vs. controlled processes, and practical or applied aspects of attention, memory, decision making, language, and creativity.

Prerequisite: Psychology 1000; Psychology 2530 or Psychology 2610/Biology 2020.

## PSYC 3540 Psychology of Language

## 3 hours; 3 credits

Multidisciplinary approach to the study of language. Contributions of linguists, anthropologists, clinicians, philosophers that have helped reshape how psychologists deal with language.

Prerequisite: Psychology 1000 and one of the following:
Psychology 2530 or 2600, or Linguistics 2001, or Communication Arts, Sciences, and Disorders 2231.

3 hours; 3 credits
How the acquisition of language appears to influence thought. The role language plays in early cognitive achievements according to different developmental theories. Examination of research using nonverbal dependent measures with infants as well as with adults in comparison to findings using verbal measures. Cross-linguistic research including studies in Sign Language. Discussion of current issues such as: Is language a seamless extension of conceptual thought across all ages in development? Does language influence thought more strongly at some ages than others? Does language qualitatively change how we conceptualize the world?

Prerequisite: Psychology 1000 and 2530; Junior or Senior year standing.

## PSYC 3550 Psychology of Emotion

## 3 hours; 3 credits

Survey of how emotions arise from the workings of the brain, body and mind. Reviews evolutionary, social/cognitive, physiological and cultural perspectives as well as disorders of emotion.

Prerequisite: Psychology 1000 and Psychology 3400.

## PSYC 3580 Philosophy and Artificial Intelligence

3 hours; 3 credits
Contemporary issues in philosophy and psychology, such as the mind-machine analogy, the artificial intelligence model of the human mind, intentionality, representation, consciousness, concept formation, free will, behaviorism, mechanism. Discussion and evaluation of contemporary work in the field. This course is the same as Computer and Information Science 1410 and as Philosophy 3423.
(Not open to students who have completed Computer and Information Science 32.1.)

Prerequisite: Core Curriculum 1311 or 1312 or Mathematics 1311 or a course in Computer and Information Science, and Core Curriculum 1210 or a course in philosophy; or permission of the chairperson of the offering department.

## PSYC 3585 Parapsychology: A Critical Examination

3 hours; 3 credits
Critical overview of parapsychology including ESP, clairvoyance, telekinesis, and other claims of the paranormal. Emphasis is on the scientific status of such claims and the manner in which they fit or fail to fit within existing scientific psychology.

Prerequisite: Psychology 1 or 1000 [1.1]; and 3400 [40.1].

## PSYC 3590 Psychology of the Arts

3 hours; 3 credits
A survey of psychological research on topics relevant to aesthetics, creativity, and the arts. Emphasizes methodological issues and psychological theories in the visual arts, music, literature, and related artistic domains.

Prerequisite: Psychology 3400 or permission of the Chairperson

## PSYC 3595 Advanced Special Topics in Cognitive Psychology

3 hours, 3 credits
An in-depth survey of specific topics in the area of cognitive psychology, such as memory, attention, perception, problem solving, and decision-making. Each semester will focus on a single
topic, in which the content and research approaches will be explored. May be taken a maximum of four times.

Prerequisite: Psychology 1000 and 2530

## Biopsychology and neuroscience

## PSYC 2600 Mind, Brain, and Behavior

3 hours; 3 credits
An introductory level course that examines properties of the nervous system that underlie psychological processes. A review will be made of neural anatomy and physiology and the impact of neural chemistry and hormones. Topics include neural systems that mediate sensory and motor systems, learning, memory, emotions, and disorders.

Prerequisite: Psychology 1 or 1000 [1.1] or Biology 31 or 4019 [34] or Health and Nutrition Sciences 2300 [22.71] or Kinesiology 3271 or [Physical Education 3271].

## PSYC 2610 Neurobiology

3 hours; 3 credits
Introduction to the structure and function of the nervous system at molecular, cellular, systems, and behavioral levels emphasizing animal models. Electrical and chemical signaling of nerve cells, neuroanatomy, neurochemistry, motor and sensory systems, neural plasticity, and current methodologies in neuroscience research. This course is the same as Biology 2020

Prerequisites or corequisites: Biology 1001 and 1002; or Psychology 1000 and one of the following: Psychology 2600 [50], 3600 [65.1] or Biology 1001; or permission from the instructor

## PSYC 3600 Behavioral Neuroscience

3 hours; 3 credits
Neural and hormonal mechanisms underlying behavior. Sensory processes, motivation, emotion, sexual behavior, sleep, learning, and memory.

Prerequisite: Psychology 1000; Psychology 2600.

## PSYC 3610 Behavioral Neuroendocrinology

## 3 hours, 3 credits

Introduction to the effects of hormones on brain and behavior. Includes a review of methodologies in behavioral endocrinology, sexual differentiation of the brain and behavior, and the role of hormones in social behavior, cognition, learning and memory, stress and mental health disorders across lifespan development. This course is the same as Biology 3020.

Prerequisites: Psychology 1000, or Biology 1001 and 1002; and Psychology 2600 or Psychology 2610/ Biology 2020.

## PSYC 3660 Drugs and Behavior

3 hours; 3 credits
Effects of drug use, abuse, and addiction on behavior. Major psychotropic drugs (e.g., stimulants, depressants, hallucinogens, narcotics and antipsychotics) and their effects on animal and human neurophysiology and behavior.

Prerequisite: Psychology 2600 [50] or 3600 [65.1].

## PSYC 3670 Comparative Psychology

3 hours; 3 credits

Evolutionary study of animal and human behaviors. Emphasizes psychobiological determinants of behaviors in naturalistic settings. Topics include evolution of behavior, sociobiology, mating systems, aggression, territoriality and population control. (Not open to students who have completed Psychology 41.)

Prerequisite: Psychology 1 or 1000 [1.1].

## PSYC 3680 Human Neuropsychology

## 3 hours; 3 credits

Examines psychological deficits that result from brain damage, including head injury, stroke, and degenerative disease; includes assessment techniques and recovery mechanisms. Overview and experimental approaches to studying neuroanatomy and localization of function.

Prerequisite: Psychology 2600 or Biology 3081 or 4019 or Health and Nutrition Sciences 2300 or Kinesiology 3271.

## PSYC 3695 Advanced Special Topics in Behavioral Neuroscience

3 hours; 3 credits
Focus on one of the major areas of comparative psychology or behavioral neuroscience. Topics vary from term to term. Course description may be
obtained in the department office before registration. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: Psychology 1000 and 2600.

## History, systems, and advanced general psychology

## PSYC 3700 History of Psychology

3 hours; 3 credits
Historical development of contemporary psychology including origin of systematic approaches, structuralism, functionalism; behaviorism, Gestalt psychology, psychoanalysis; philosophy of science as applied to psychological theory. (Not open to students who have completed Psychology 63.)

Prerequisite: Psychology 1 and 2, or 1000 [1.1]; and 9 credits in advanced psychology courses.

## Psychopathology and clinical applications

## PSYC 2710 Introduction to Forensic Psychology

3 hours; 3 credits
A general survey of forensic psychology. Topics include fundamental legal principles, such as expert witness testimony, and specific content areas, such as competency, child custody, workplace discrimination, legal definitions of insanity, New York State court system, civil commitment, violence risk assessment, psychological issues of being in prison, and treatment recommendations.

Prerequisite: PSYC 1000 or permission of chairperson

## PSYC 2810 Abnormal Psychology I

## 3 hours; 3 credits

Major forms of behavior pathology. Their sociobiological origins and development and their relationship to personality. (Not open to students who have completed Psychology 28.)

Prerequisite: Psychology 1000 [1.1] or 2.

## PSYC 3810 Abnormal Psychology II

## 3 hours; 3 credits

Intensive study of topics in behavior pathology. Contemporary theory and research. Such areas as models of mental illness, the role of the family in psychopathology, current approaches to etiology and treatment.

Prerequisite: Psychology 28 or 2810 [30].

## PSYC 3820 Fundamentals of Psychotherapy

## 3 hours; 3 credits

Critical examination of various psychotherapeutic approaches and study of the basic psychological processes involved. A critique of theory and method including individual, group, and family therapy. Role of insight in behavior change. Objectives of treatment. Rationale of such specific psychotherapeutic techniques as use of interpretation, role of insight in behavior change, role playing.

Prerequisite: Psychology 28 or 2810 [30].

## PSYC 3825 Cognitive Behavioral Therapy

3 hours; 3 credits
A critical review of the theoretical and conceptual underpinnings of Cognitive Behavioral Therapy (CBT). Topics include the learning and cognitive foundations of, and current scientific research supporting, the use of CBT with specific patient populations, the practical application of CBT (such as relaxation, exposure techniques, cognitive approaches, emotional regulation) and ethical considerations.

Prerequisite: Psychology 1000 and 2810.

## PSYC 3830 The Counseling Process: Theory and Technique

## 3 hours; 3 credits

Investigation of the dynamics of the cooperative relationship between counselor and client; review of the literature on the counseling process; study and demonstration of the techniques of counseling; examination of critical issues in counseling.

Prerequisite: Psychology 2810 [30].

## PSYC 3840 Psychoanalysis: Theory and Research

## 3 hours; 3 credits

Critical examination of the theoretical and empirical foundations of Freud's psychoanalysis. The unconscious, sex and aggression, psychological structure, the mechanisms of defense, "twilight phenomena" (dreams, fantasy, psychological errors, art, wit, symptoms), psychohistory therapy.

Prerequisite: Psychology 9 or 2810 [30] or 2300 [30.2].

## PSYC 3850 Tests and Measurements

3 hours; 3 credits
Introduction to principles and methods underlying construction and evaluation of psychological tests. In-class exposure to selected tests.

Prerequisite: Psychology 2810 and Psychology 3400.

## PSYC 4800 Field Experience in Psychopathology

2 hours lecture, 6 hours supervised fieldwork; 4 credits Application of behavior pathology theory in a clinic or hospital.

Prerequisite: Psychology 2810; and Psychology 3810 or 3820; and permission of the chairperson. Course application is required and can be obtained in the department office before registration.

## Honors courses

## PSYC 5001 Independent Research I

Minimum of 9 hours conference and independent work§; 3 credits Faculty-supervised independent research that includes data collection and analysis and/or theoretical work. Weekly conference. Final report must be submitted to the department.

Prerequisite: All of the following: Psychology 3400; six additional credits in advanced Psychology Department courses; Psychology 3450 W , which may be included among the six credits or may be taken as a corequisite; permission of the chairperson and sponsorship of a full-time faculty research mentor. Course application is required and can be obtained in the department office before registration.
Prerequisite or corequisite: Psychology 3450W.

## PSYC 5002 Independent Research II

Minimum of 9 hours conference and independent work§; 3 credits Faculty-supervised independent research that includes data collection and analysis and/or theoretical work. Weekly conference. Final report must be submitted to the department.

Prerequisite: All of the following: Psychology 3400; six additional credits in advanced Psychology Department courses; Psychology 3450 W , which may be included among the six credits or may be taken as a corequisite; permission of the chairperson and sponsorship of a full-time faculty research mentor. Course application is required and can be obtained in the department office before registration.

Prerequisite or corequisite: Psychology 3450W.

## PSYC 5003 Independent Research III

Minimum of 9 hours conference and independent work§; 3 credits Faculty-supervised independent research that includes data collection and analysis and/or theoretical work. Weekly conference. Final report must be submitted to the department.

Prerequisite: All of the following: Psychology 3400; six additional credits in advanced Psychology Department courses; Psychology 3450 W , which may be included among the six credits or may be taken as a corequisite; permission of the chairperson and sponsorship of a full-time faculty research mentor. Course application is required and can be obtained in the department office before registration.

Prerequisite or corequisite: Psychology 3450W.

## PSYC 5004 Independent Research IV

Minimum of 9 hours conference and independent work§; 3 credits
Faculty-supervised independent research that includes data collection and analysis and/or theoretical work. Weekly conference. Final report must be submitted to the department.

Prerequisite: All of the following: Psychology 3400; six additional credits in advanced Psychology Department courses; Psychology 3450 W , which may be included among the six credits or may be taken as a corequisite; permission of the chairperson and sponsorship of a full-time faculty research mentor. Course
application is required and can be obtained in the department office before registration.

Prerequisite or corequisite: Psychology 3450W.

## PSYC 5011 Fieldwork I

Minimum of 9 hours conference and independent work§; 3 credits Independent fieldwork with library research in an area of psychology, approved and supervised by a member of the faculty of the Department of Psychology. Weekly conference. Final report must be submitted to the department.

Prerequisite: A minimum of nine credits in advanced Psychology Department courses including 3400 [40.1]; and permission of the chairperson

## PSYC 5012 Fieldwork II

Minimum of 9 hours conference and independent work§; 3 credits Independent fieldwork with library research in an area of psychology, approved and supervised by a member of the faculty of the Department of Psychology. Weekly conference. Final report must be submitted to the department.

Prerequisite: A minimum of nine credits in advanced Psychology Department courses including 3400 [40.1]; and permission of the chairperson

## PSYC 5013 Fieldwork III

Minimum of 9 hours conference and independent work§; 3 credits Independent fieldwork with library research in an area of psychology, approved and supervised by a member of the faculty of the Department of Psychology. Weekly conference. Final report must be submitted to the department.

Prerequisite: A minimum of nine credits in advanced Psychology Department courses including 3400 [40.1]; and permission of the chairperson

## PSYC 5014 Fieldwork IV

Minimum of 9 hours conference and independent work§; 3 credits Independent fieldwork with library research in an area of psychology, approved and supervised by a member of the faculty of the Department of Psychology. Weekly conference. Final report must be submitted to the department.

Prerequisite: A minimum of nine credits in advanced Psychology Department courses including 3400 [40.1]; and permission of the chairperson

## The following inactive course(s) will only be offered if there is sufficient demand:

## PSYC 3111 Interpersonal Perception

PSYC 3173 Psychological Issues in Organizational Theory
PSYC 3181 Human Factors and Technology
PSYC 3305 Psychology of Individual Differences
PSYC 4140 Practicum in Group Processes
PSYC 4191 Field Experience in the Social Psychology fo the Courtroom
PSYC 4390 Special Topics in Personality and Psychopathology

## Puerto Rican and Latino Studies

Department office: 1205 Boylan Hall
Phone: 718.951.5561

## Full-time Faculty

Professor: Aja
Associate Professor: Perez y Gonzalez
Assistant Professor: Santamaria

The Department of Puerto Rican and Latino Studies, formerly the Department of Puerto Rican Studies, was established in 1970. Engendered by the civil rights movements and student activism, it is an academic unit committed to excellence in teaching and scholarship focusing on Latinxs*, Puerto Ricans, the Caribbean, and Latin America. The Department promotes transformative education encompassing active citizenship and leadership, providing students with the interdisciplinary knowledge and critical skills to live in a rapidly changing and globally interdependent 21st century.
*x denotes gender neutrality

The department offers a bachelor of arts degree in Puerto Rican and Latino studies (PRLS) with several options: Puerto Rican and Latino studies; Puerto Rican and Latino studies - Education tracks (double major for early childhood education teacher; childhood education teacher; or childhood bilingual education teacher); or PRLS and Business as well as a minor in PRLS and a minor in Latin American studies. It participates in the interdepartmental minor in Global Studies. In addition, the department offers a double major for the bachelor of arts in adolescence education: social studies teacher. It also offers a concentration for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades 1-6); and childhood bilingual education teacher (grades 1-6). PRLS offers courses with the following college departments and programs: Africana studies; American studies; anthropology; archival studies (library); Caribbean studies; children and youth studies; business management; comparative literature (English); history, interdisciplinary studies (communications); studies in religion; sociology; television, radio \& emerging media; women's and gender studies as well as the Conservatory of Music. Furthermore, several PRLS courses can be used to satisfy Pathways general education requirements.

Internships are available to students who wish to explore career options. Via the Brooklyn College Maria E. Sanchez Center for Latino Studies, the CUNY Center for Puerto Rican Studies, the CUNY Dominican Studies Institute, and the CUNY Jaime Lucero Mexican Studies Institute at Lehman College, students are encouraged to engage in research. Our graduates pursue varied careers in government, public and private schools and universities, and the public, private, and nonprofit sectors. Many of our students pursue advanced degrees to further their career goals.

## B.A. degree program in Puerto Rican and Latino studies HEGIS code 0308; SED program code 01976

Department requirements
Language Requirement for the Major
Students are required to complete one course in Spanish at Level 3 (the third semester of study at the college level) or to demonstrate an equivalent proficiency by examination, except as modified as follows:

1. Students who have successfully completed three years of Spanish in high school and have passed the Spanish Regents Level 3 are exempted from the language requirement.
2. The Spanish language requirement presupposes two years of secondary school language study in Spanish. Students who offer only one year of study in Spanish (or none at all) are required to take one or two semesters of college study (Levels 1 and/or 2) before they can take Level 3.
3. Students whose native language is Spanish may be exempted from this requirement by passing the Spanish competency examination administered by the Department of Modern Languages and Literatures.
4. Neither blanket nor equivalent credits will be given for introductory courses in Spanish from which a student has been exempted by examination, whether given by the Department of Modern Languages and Literatures or an approved outside institution. Students who have completed part of the Spanish language requirement in high school are strongly advised to continue further language study in the first year.

One of the following: a), b), c) or d).
a) Puerto Rican and Latino Studies ( $36-38$ credits)

All of the following: Puerto Rican and Latino Studies 1001, 3340 (7 credits)
One of the following: Puerto Rican and Latino Studies 4615, 4635, 5710 (3-4 credits)
Two courses chosen from each of the groups 1) and 2) (one of the writing intensive courses Puerto Rican and Latino Studies 3315W or 3320W MUST be selected):

1) Literature, Culture and the Arts: Puerto Rican and Latino Studies 2105, 2250, 3105, 3115, 3125, 3315W, 3330, 3335, 4450, 4640. (6-7 credits)
2) History, Policy and Society: Puerto Rican and Latino Studies 2005, 2300, 2320, 2505, 3048, 3203, 3205, 3210, 3215, 3220, 3225, 3310,

3320W, 3325, 4505, 4510, 4515, 4605, 4610, 4645. (6-10 credits)
Additional advanced PRLS courses to meet a minimum of 36 credits (approximately 12-13 credits). PRLS 5715 and 5720 are also options.
b) PRLS \& Bilingual Education (36-37 credits)

All courses for this option must be completed with a "C" or better.
All of the following: Puerto Rican and Latino Studies 1001, 3340 (7 credits)
One of the following: Puerto Rican and Latino Studies 4615, 4635, 5710 ( $3-4$ credits)
One of the following: Puerto Rican and Latino Studies 3315W or PRLS 3320W (4 credits)
All of the following Puerto Rican and Latino Studies 2005, 4410, 4415, 4420, 4425, 4430 (22 credits)
Students must meet with a department adviser to declare their intention to complete this sequence.
c) PRLS \& Early Childhood Education/Childhood Education (36-38 credits)

All courses for this option must be completed with a "C" or better.
All of the following: Puerto Rican and Latino Studies 1001, 3340 (7 credits)
One of the following: Puerto Rican and Latino Studies 4615, 4635, 5710 (3-4 credits)
Two courses chosen from each of the groups 1) and 2) (one of the writing intensive courses Puerto Rican and Latino Studies 3315W or 3320W MUST be selected):

1) Literature, Culture and the Arts: Puerto Rican and Latino Studies 2105, 2250, 3105, 3115, 3125, 3315W, 3330, 3335, 4450, 4640. (6-7
credits)
2) History, Policy and Society: Puerto Rican and Latino Studies 2005, 2300, 2320, 2505, 3048, 3203, 3205, 3210, 3215, 3220, 3225, 3310,

3320W, 3325, 4505, 4510, 4515, 4605, 4610, 4645. (6-10 credits)
All of the following: Puerto Rican and Latino Studies 2005, 3325, 4410 (10 credits)
Additional advanced PRLS courses to meet a minimum of 36 credits (approximately 2-3 credits).
Students must meet with a department adviser to declare their intention to complete this sequence.
d) Puerto Rican/Latino Studies and Business (41-42 credits)

All of the following: Puerto Rican and Latino Studies 1001, 3215, 3220, 3320W, 3340, 4505, 4515, 4610; Business 3170 (29 credits)
One of the following: Caribbean Studies 1001; Puerto Rican and Latino Studies 2300, 3205, 3210 (same as Anthropology and Archaeology 3520), Puerto Rican and Latino Studies 3335, 4510, 4615 (if applicable), Puerto Rican and Latino Studies 4635, 4645, 5710, 5715 (3-4 credits)

Three of the following: Business 3100, 3130, 3140, 3200 (9 credits)

With permission of the departmental curriculum committee, appropriate PRLS course
substitutions are allowed in the major under special circumstances.
Department honors
To qualify for honors in Puerto Rican and Latino studies, a student must complete Puerto Rican and Latino Studies 3340 and 5710 with a grade of A - or higher and must have an academic index of 3.70 or higher in the major.

Department recommendations
All Puerto Rican and Latino studies majors should consult the chairperson or designated departmental advisers in planning the sequence of required courses.

## B.A. degree program in adolescence education: social studies teacher HEGIS code 2201.01; SED program code 26754

Adolescence education (grades 7-12) programs are writing intensive.

Students who wish to pursue a bachelor of arts degree in Secondary Education for social studies teacher must complete a major in one of the following: Africana studies, American studies, anthropology, economics, history, political science, Puerto Rican and Latino studies, or sociology.

Study must include within the major, or in addition to courses in the major, study in economics, government, and at least 21 credits in the history and geography of the United States and the world, including Secondary Education 3584. Students preparing to become social studies teachers must fulfill the economics and government requirements by taking at least one course (3 credits) from among: History 3345, 3410, 3420, 3424, 3430, $3441,3442,3450,3457$, or a course in Political Science numbered between 3101 and 3160; and at least one course (3 credits) from among: History 3332, 3470, 3472, 3512 or Economics 2002, 2100, 2200, 3102, 3152, or 3202.

The following pedagogical courses in the Department of Secondary Education: Secondary Education 2001, 2002, 3401, 3402, 4408, 3456, 4482 (total of 28 credits):

Secondary Education 2001, 2002, 3401, 3402. This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.

Secondary Education 3456 may be started after completing Secondary Education 2001 and 2002.
Student teaching: Secondary Education 4401, 4408, and 4482.
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department. Degree programs in adolescence education and include a major in an appropriate department of the college and in the case of social studies may also include an approved selection of interdepartmental courses.

Completion of an adolescence education program as part of a major in English, one of the appropriate social sciences, mathematics, or one of the sciences qualifies students for New York State initial certification in adolescence education for grades 7 through 12.

Students qualifying for the initial certification in adolescence education may obtain an extension to teach English, social studies, mathematics, a modern language, or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

Students must complete 26 credits in the Department of Secondary Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

Students must have a B- in both Secondary Education 2001 and 2002, New York City Department of Education Fingerprint clearance, and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

To take Secondary Education 4401, 4404 and 4482, students must earn a B- or higher in Secondary Education 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of the program.

Students must earn a B- or higher in Secondary Education 4401, 4404 and 4482 and a GPA of 2.75 or higher in their major.

## Departmental Minor(s)

## Minor in Latin American Studies

Department Requirements
An interdisciplinary and social science-based minor in Latin American studies, offered by the Department of Puerto Rican and Latino Studies in collaboration with faculty from other social science departments, requiring 15-16 advanced credits, each completed with a grade of $C$ or higher.

Puerto Rican and Latino Studies 3210 or Anthropology 3520.
Two of the following:
Puerto Rican and Latino Studies 3048, 3205, 3225, 3330, and 4615 (with the approval of the Puerto Rican and Latino Studies chairperson when the topic is relevant to this minor) or 5715.

Two of the following: History 3510, 3512; Political Science 3304; Puerto Rican and Latino Studies 3115, 3310, 4505.

Courses presented for this minor may not be counted toward the major in any of the participating departments.
At least nine credits must be completed at Brooklyn College. Students should confer with a departmental adviser to plan an appropriate sequence of courses.

## Minor in Puerto Rican and Latino Studies

A program of 17-19 credits in Puerto Rican and Latino studies; Puerto Rican and Latino Studies 1001, 3340, 5710, and 6-8 elective credits, each completed with a grade of $C$ or higher. Students should confer with a departmental adviser to plan an appropriate sequence of courses.

With permission of the departmental curriculum committee, appropriate PRLS course substitutions are allowed in the minor under special circumstances.

## Interdepartmental Minor(s)

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C- or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Puerto Rican and Latino Studies

The requirements for the teacher education programs indicated above are described in the Early Childhood and Art Education and the Childhood, Bilingual, and Special Education sections of this Bulletin. Students who major in either of these programs and who elect a concentration in Puerto Rican and Latino studies must complete 31-34 credits in the Puerto Rican and Latino Studies Department with a grade of C or higher in each course. Students must meet with a department adviser to declare their intention to complete this sequence.

Concentration requirements:
All of the following courses: Puerto Rican and Latino Studies 1001, 2005, 3325, and 4410. Six of the following courses: Puerto Rican and Latino Studies 2300, 2320, 3105, 3120, 3125, 3205 through 3320W, 3330, 4450, 4510, 4615, 4635, 4640, 4645.

With permission of the departmental curriculum committee, appropriate PRLS course substitutions are allowed in the concentration under special circumstances.

## Puerto Rican and Latino Studies - Bilingual

The requirements for the childhood education teacher (grades 1-6) with an extension of the certificate for bilingual (Spanish-English) education program is described in the section of the Undergraduate Bulletin relating to the Department of Childhood, Bilingual and Special Education. Students who major in this program must complete 31-34 credits in the Puerto Rican and Latino Studies Department with a grade of C or higher in each course. Students must meet with a department adviser to declare their intention to complete this sequence.

## Concentration requirements:

Puerto Rican and Latino Studies 2005, 4410, 4415, 4420, 4425, 4430.
Three of the following courses: Puerto Rican and Latino Studies 1001, 2300, 2320, 3105, 3120, 3125, 3205, 3210, 3215, 3220, 3315W (same as Africana Studies 3240 and Comparative Literature 3623), 3320W, 3325, 4450, 4510, 4615, 4635, 4640, 4645.

With permission of the departmental curriculum committee, appropriate PRLS course substitutions are allowed in the concentrations under special circumstances.

## Courses in Puerto Rican and Latino studies and elementary education

The School of Education and the Puerto Rican and Latino Studies Department offer courses for majors in the areas of early childhood education, childhood education, and bilingual education. Students interested in teaching Spanish-speaking children may qualify for certification in bilingual education in Spanish by completing the sequence of courses approved and advised by counselors in the School of Education and the Puerto Rican and Latino Studies Department.

## Graduate Studies

The Puerto Rican and Latino Studies Department offers graduate courses for students in other fields. For information, students should consult the department chairperson.

## Courses

*Courses marked with an asterisk $\left({ }^{*}\right)$ are not counted toward the requirements in advanced courses for majors and minors in this department.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## Introduction

## PRLS *1001 Introduction to Puerto Rican and Latin@

## Studies

3 hours; 3 credits
Survey and theoretical foundations in Puerto Rican and Latin@
Studies. Case study on Puerto Rico. Pertinent themes in Puerto Rican and Latin@ history, culture, literature, contemporary society, and politics. Impact of the United States' economic policies on

Puerto Rico and the causes of Puerto Rican and Latin@ migration to New York City and urban centers. Satisfies Pathways Flexible Core US Experience in Its Diversity requirement.

## History, Policy, and Society

PRLS 2005 The Puerto Rican, Latin@, and Caribbean Child in New York City
3 hours; 3 credits

Puerto Rican, Latin@, and Caribbean children in New York City. Historical examination of bilingual policies and programming. Development of identity; knowledge and appreciation of heritage. Culturally relevant pedagogy. Multicultural education. Examination and evaluation of instructional materials and school policies.

Prerequisite: English 1010 or permission of the chairperson.

## PRLS 2300 Urban Caribbean Diaspora

3 hours, 3 credits
Introduction to urban issues facing transnational communities; political, economic and sociological analyses of Caribbean Diaspora, with a focus on African descendants, in urban environments; problem-based and place-based approaches; data analysis, group projects. This course is the same as Sociology 2300 and Caribbean Studies 2300.

Prerequisite: Sociology 1101 or Puerto Rican and Latino Studies 1001 or Caribbean Studies 1001

## PRLS 2320 Afro-Latin@: Black, Latin@, or Both?

3 hours, 3 credits
Who are Blacks? Who are Latin@s? Who are Afro-Latin@s? The Afro-Latin@ experience. New ways of understanding culture, identity, race, and ethnicity. Examination of critical essays, literature, film, music, gender, class, interviews, and media representations of Afro-Latin@s. Concepts including diaspora, transnationalism, blackness, whiteness, and Latinidad.

Prerequisite: Puerto Rican and Latino Studies 1001 or English 1001.

## PRLS 2505 Latin@s in the Criminal Justice Complex

3 hours; 3 credits
Latin@s within the penal systems; mass incarceration and reform, racial profiling, juvenile justice, drug criminalization. Legal representation. Immigration policy, human and civil rights struggles and organized movements. Political activism and repression, including Puerto Rican nationalists, "gang" formation, globalization and labor formation after 1970's shift in global capital, school-toprison pipeline, urban displacement.

Prerequisite: Puerto Rican and Latino Studies 1001 or English 1010.

## PRLS 3048 Jews of Latin America

## 3 hours: 3 credits

Explores Latin American Jewish history from colonial rule to the twentieth century. Migration, agricultural colonies, political activism, and literature. Comparison of European, North African, and Middle Eastern Jewish communities. Measures the roles of race, religion, and ethnicity in Latin American societies through Jewish developments. This is the same course as Judaic Studies 3048.

Prerequisite: Puerto Rican and Latino Studies 1001 or English 1010.

## PRLS 3130 Climate Justice and the Caribbean

## 3 hours, 3 credits

Introduction to the physical and environmental characteristics of the Caribbean and the issues challenging these settings and concepts. Survey of theories of climate justice emerging from these concerns. Focus on the relationship of Caribbean history and
development to the regional issues, policies and practices that impact the environment. Study of contemporary environmental justice initiatives. This course is the same as CAST 3130, AFST 3350, and ANTH 3145.

Prerequisite: Sophomore, Junior or Senior Standing

## PRLS 3203 Latino/a Diasporas in the United States

3 hours; 3 credits
Formation of Latino/a diasporas in the United States. Legacy of indigenous societies, colonization. African diasporas in Latin America. Racial formation. Latin American societies. Demographic patterns, (im)migration, settlement and community development. Issues of citizenship, racism, and discrimination. Transnationalism and transnational identities. (Not open to students who have completed Core Curriculum 3203.) 2017-2018: Satisfies Pathways College Option requirement. 2018-2019 Satisfies Pathways Flexible Core U.S. Experience in Its Diversity requirement and College Option requirement. Starting Fall 2019 Satisfies Pathways Flexible Core U.S. Experience in Its Diversity requirement.

Prerequisite: English 1010 or permission of the department.

## PRLS 3205 Women in Puerto Rican and Latin American

 Societies3 hours; 3 credits
Gender roles in different historical periods. Analysis of race, class, ethnicity, and traditional roles prescribed by society and religion. Creative and ethnographic works about women who challenged traditions, social and legal constraints. Current research, issues, and cultural affirmations of contemporary women in education, government, politics, the labor force, and the migration experience. Latinas in the U.S.

Prerequisite: Puerto Rican and Latino Studies *1001 or Core Studies 3 or 9 or Core Curriculum 1230 or Core Curriculum 3203.

## PRLS 3210 Latin America

3 hours; 3 credits
Pre- and post-Conquest peoples and cultures of Central and South America, and the Caribbean; impact of European colonization; Asian \& African influence, post-independence political and economic development; contemporary racial and identity politics; religion and social movements; urbanization and international migration. This course is the same as Anthropology 3520.

Prerequisite: Core Studies 3 or 9 or Core Curriculum 1230 or Core Curriculum 3203 or permission of the chairperson.

## PRLS 3215 Mexican Migration and the Chican@/x Experience

3 hours; 3 credits
U.S. Southwest annexation. Historical antecedents including Spanish colonialism, Mexico's independence, and War with Mexico. Migration, entrepreneurship, labor exploitation, segregation, and deportation. U.S./Mexican drug wars. Communities in 21st century. Chicano movement and identity formation, civil rights, politics and culture. Demographic expansion throughout U.S. Intra-group race, gender, class dynamics.

Prerequisite: Puerto Rican and Latino Studies1001 or Puerto Rican and Latino Studies 3203.

PRLS 3220 Exiles and Immigrants: U.S. Cuban Communities 3 hours; 3 credits

Historical antecedents. Spanish-Cuban-American War and the Treaty of Paris, 1898. Early political, cultural, and economic influences. Flourishing of prerevolutionary Tampa, Key West, and New York communities. Afro-Cuban/African American relations. Major migratory phases following the Cuban Revolution, 1959. Contemporary U.S. communities and their relation to revolutionary Cuba. Political leadership, entrepreneurship and ethnic enclave formation. Race, class, gender, and identity. Intra- and inter-group relations. New U.S./Cuba diplomatic relations

Prerequisite: Puerto Rican and Latino Studies *1001 or Core Studies 3 or 9 or Core Curriculum 1230 or Core Curriculum 3203.

## PRLS 3225 Social and Environmental Movements in Latin

## America

3 hours; 3 credits
The changing nature of social and environmental movements in Latin America from the nineteenth century to the present. Revolution, nationalism, citizenship, religion, unions, feminism, torture, poverty, indigenous land rights, environmentalism, and sustainability.

Prerequisite: Puerto Rican and Latino Studies 3210 or Anthropology 3520, or Core Studies 9, or Core Curriculum 1230 or POLS 1230 or Core Curriculum 3203 or permission of the chairperson.

## PRLS 3310 History of Puerto Rico

## 3 hours; 3 credits

Indigenous peoples. European colonization. African impact. Struggles for autonomy and independence under Spain and U.S. Critical perspectives on national identity formation, race, gender, labor, and land distribution. Cédula de Gracias. Lares Rebellion of 1868. Politics and repression. National consciousness. U.S. occupation and colonial issues. Industrialization, urbanization, and dilemmas of political status. Contemporary issues of socioeconomic development and migratory crisis. Dynamics of (im) migration.

Prerequisite: English 1010 or permission of the chairperson.

## PRLS 3320W Latinxs Remaking the United States

4 hours; 4 credits
Settlement patterns and history of Latinx (im)migrants, organizational life, economic and cultural integration. Comparative ethnic relations and struggles for community representation and persistence. The remaking of USA society. Writing-intensive course.

Prerequisite: English 1012.

## PRLS 3325 Institutions of Urban Life and the Latino/a

## Experience

3 hours; 3 credits
Multidisciplinary perspective on the evolution of Hispanics/Latinos as an urbanized segment of the United States population. Crosscultural understanding of the diversity among Spanish-speaking people within the urban context. The role of urban institutions in the conflicts between assimilation and cultural preservation, the dynamics of migration, immigration, settlement, and institutionalized participation in the social processes of United States urban life.

Prerequisite: Puerto Rican and Latino Studies *1001 or Core Studies 3 or 9 or Core Curriculum 1230 or Core Curriculum 3203
or permission of the chairperson.

## PRLS 4505 Models of Economic Development for Puerto Rico and the Caribbean

3 hours; 3 credits
Colonial basis for the development of capitalism in Puerto Rico since the twentieth century. Key factors stimulating growth and dependency after 1948. Puerto Rican model of economic development. Transnational migration and diffusion of Puerto Ricans and other Caribbean peoples to New York City and other areas. Integration of the economies of Puerto Rico, the Caribbean, and the United States. Policy implications for issues such as globalism, energy resources, and the environment.

## PRLS 4510 Emerging Realities and Alternatives for Puerto Ricans and Other Latino/as in the United States

3 hours; 3 credits
Demographic and political trends of Latinos in the United States and the impact on Puerto Ricans. Education, labor organizations, public services, economic development, political power, and future challenges to Latino/as. Alternatives for Puerto Ricans in a Caribbean context and the impact of a change in political status of the island upon Puerto Ricans in the United States.

Prerequisite: completion of at least six credits in Puerto Rican and Latino Studies courses or departmental permission.

## PRLS 4515 Ethnic Marketing and Multicultural Business

3 hours; 3 credits
Ethnic marketing in the United States from an interdisciplinary perspective. Strategic value of diversity, segmentation, ethnic market research, utilizing the ethnic media, and marketing to various ethnic groups including African- Americans, Latino/as, Asian-Americans, and others. Contribution of ethnic entrepreneurs and ethnic businesses to the economy. Interdisciplinary readings, current general and trade press material, cases, and relevant census data will be used. (This course is the same as Business 3150.)

Prerequisite: Puerto Rican and Latino Studies 3205 or 3210 or 4505.

## PRLS 4605 Community Organization and Service to the Puerto Rican/Latino/a Community

3 hours lecture, 6 supervised field hours, and independent work§; 6 credits
Basic community organization theory and development of practical skills, including proposal writing, for service to the Puerto Rican/Latino/a community. Readings, lectures, and examination of case records. Motivation for self-help programs. Contact with internal operations of Puerto Rican/Latino/a organizations and appraisal of their varied approaches and techniques. Supervised fieldwork with organizations that serve the Puerto Rican/Latino/a communities.

Prerequisite: Puerto Rican and Latino Studies *1001 or 3320W or permission of the chairperson.

## PRLS 4610 Internship

3 hours; 3 credits
Under the mentorship of a faculty member, business or community service experience in an organization that serves Latino/a populations. Sites must be approved by the chairperson. Students must work a minimum of 150 hours and complete a term paper
describing their experiences and what they learned.
Prerequisite: Puerto Rican and Latino Studies *1001 and an additional Puerto Rican and Latino Studies course or departmental permission.

## PRLS 4645 Puerto Ricans and Dominicans: Comparative Perspectives and Contemporary Issues

3 hours; 3 credits
Comparisons of the sociohistorical context of Puerto Ricans and Dominicans from their countries of origin to the United States. Migratory experiences of both groups. Contemporary issues including current demographic data, politics, health, family relations and roles, intermarriage, and identity.

Prerequisite: at least six credits in Puerto Rican and Latino Studies courses or permission of the chairperson.

## Literature, Culture, and the Arts

## PRLS 2105 New York Latin@ Culture and the Arts

## 3 hours; 3 credits

Development of contemporary Puerto Rican/Latin@ arts, performance, theater, drama and expressive cultures with special emphasis on New York City. Creative communities and cultural institutions. Students will attend performances. Starting Fall 2019 qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

Prerequisite: None

## PRLS 2250 Digital Life Stories: Chicana/Latina Testimonio

3 hours; 3 credits
Latina feminist tradition of testimonios, autobiographical narratives, short-stories, poems, and oral histories to reveal the complexity of Chicana/Latina identity. The connection between life experience and new knowledge creation. Theorize Latinidades at the intersection of racism, sexism and heterosexism. Rethink feminism, women, gender and sexuality studies, Latin@, American and cultural studies. Students will create their own digital life stories. This course is the same as Women's and Gender Studies 3152 and American Studies 3310.

Prerequisite: Puerto Rican and Latino Studies 1001 or English 1010 or equivalent.

## PRLS 3105 Puerto Rican and Latin@ Cultural Formations

3 hours; 3 credits
Cultural antecedents and developmental process of present Puerto Rican and Latin@ cultures. Taín@ and indigenous, European, and African origins. Folklore and cultural persistence. Critical perspectives on cultural formations related to colonialism, economics, race, gender, and transnational identities. Starting Spring 2018 Satisfies Pathways Flexible Core World Cultures and Global Issues requirement. Starting Fall 2019 also qualifies as an Inter-Cultural Competency (ICC) course for Pathways College Option purposes.

## PRLS 3115 Latinx Religious Roots and Routes

3 hours; 3 credits
Indigenous, European, African, and Asian roots of Latinx religions.
Curanderismo. Christianity: Catholicism, Protestantism,
Evangelicalism, Pentecostalism. Epiritismo. Afro-Caribbean
histories and Afro-descendant traditions: Santería (Yoruba), Vodún, Abakuá. Islam. Judaism. Liberation Theology. Latinx Theologies.
Mujerista Theology. Nones. Gender roles. Popular and cultural religiosities. Latinx diasporic communities.

Prerequisite: English 1010 or permission of the chairperson.

## PRLS 3125 Music of Puerto Rico and Peoples of the

 Americas3 hours; 3 credits
Survey of folk, popular, classical forms of the music of Puerto Rico and the Americas. Influence of Taíno, Spanish, European and AfroCaribbean cultures on these forms. Contemporary dynamics. Roots of Latin@ diasporic music. Classes supplemented with performances and audio-visual recordings.

Prerequisite: English 1010 or permission of the chairperson.

## PRLS 3315W Caribbean Literature

4 hours; 4 credits
Black culture and writings in the Caribbean. Reflections on alienation and independence. Literary liberation movements, Negrism, Indigenism, and Negritude as the first step towards emancipation from a European cultural vision. Writers from the English-, French-, and Spanish-speaking countries will be examined. All readings will be in English. This course is the same as Africana Studies 3240 and Comparative Literature 3623. Writing-intensive course.

Prerequisite: English 1010 [1]

## PRLS 3330 From Dictatorship to Diaspora: The Dominican Republic

3 hours, 3 credits
The role of race, gender, dictatorship, U.S. influence, and transnationalism in shaping the Dominican Republic. Spanish and French colonialism, slavery, racism. Relations with Haiti. Independence, plantation economy. U.S. interventions. Post/Neocolonialism. Trujillo dictatorship and aftermath, globalization, labor dynamics, and transnationalism. Racialization. Political and economic U.S. Dominican experience. Legal treatment of Haitian/Dominicans.

Prerequisite: English 1010 or permission of the chairperson.

## PRLS 3335 Latino/as in the Media

3 hours; 3 credits
The images of Latinos in the media. Similarities and differences in the alternative and commercial media. The role of Latinos as image makers. Issues such as immigration, identity, language, gender, and the clash of values between Latino/a and mainstream North American culture as explored in films, television programs, print media, and advertising.

Prerequisite: Puerto Rican and Latino Studies *1001 or permission of the chairperson

## PRLS 4450 Survey of Puerto Rican Literature

3 hours; 3 credits
Reading and discussion of literature by renowned Puerto Rican authors writing in Spanish and English.

Prerequisite: Permission of the chairperson.

## PRLS 4640 Puerto Rican, Chican@, Latin@ Literature

## 3 hours; 3 credits

Study of Puerto Rican, Chican@, and Latin@ texts such as chronicles, essays, diaries, autobiographies, testimonials, novels, short stories, drama, and poetry. Focus on themes, genre and/or movement. Literary theory and critical analysis

Prerequisite: Puerto Rican and Latino/a Studies *1001 or departmental permission.

## Bilingual (Spanish-English) studies

## PRLS 3302 Teaching Emergent Bilinguals Across Diverse Monolingual Contexts

3 hours; 3 credits
Introduction to early and late development of language for teachers who work with emergent bilinguals in monolingual settings. Emphasis on specific populations of emergent bilinguals including newcomers, emergent bilinguals with special needs, students with interrupted education, among others. Focus on language diversity in urban areas (i.e. multiple languages in one setting). The role of educators in monolingual settings in supporting emergent bilinguals' learning language and literacy across content. Translanguaging pedagogy in monolingual settings. Emphasis on engagement with diverse, multilingual families and communities. (This course is the same as CBSE 3302.)

## PRLS 4410 Bilingualism in the 21st Century

3 hours lecture, 2 hours fieldwork; 4 credits
Study of emergent bilinguals and Latin@ bilingualism. Review of bilingual programs and materials. Translanguaging, social and cognitive theories, bilingual education and language policy in the United States. Fieldwork.

## PRLS 4415 Spanish Language Arts for the Bilingual Child

3 hours lecture, 2 hours fieldwork; 4 credits
Literacy development in Spanish for Latin@s, emergent bilinguals, and those with special needs using children's literature. Techniques for developing listening, speaking, reading and writing. Balanced literacy terms in Spanish. Review of Puerto Rican and other regional language variations; strategies for community and parental involvement. Formative and summative assessments. Course conducted in Spanish.

Prerequisite: fluency and proficiency in Spanish demonstrated to the chairperson of the Puerto Rican and Latino Studies Department before registration.

## PRLS 4420 English as a New Language for Emergent

 Bilingual Children3 hours lecture, 2 hours fieldwork; 4 credits Development of English as a new language for emergent bilinguals and Latin@s
in bilingual programs. Techniques for English oral language and literacy across content areas; first- and second-language acquisition and translanguaging theory application. Legal rights. Adapting teaching strategies and materials. Formative and summative assessments. Fieldwork.

Prerequisite: English 1010 or permission of the chairperson.

## PRLS 4425 Biliteracy and Bicultural Perspectives in the

 Content Areas3 hours lecture, 2 hours fieldwork; 4 credits
Exploration of bilingual and bicultural instructional materials and methods appropriate to teaching the subject areas in bilingual classrooms. Creating bilingual and bicultural learning environments. History and culture of Puerto Rican, Latin@, and Latin American/Caribbean groups. Formative and summative assessments. Fieldwork.

Prerequisite: English 1010 or permission of the chairperson.

## PRLS 4430 Spanish for Prospective Bilingual Teachers and other Professionals

3 hours; 3 credits
Development and expansion of listening, reading, speaking and writing academic Spanish. Literature reading, comprehension and analysis. Written communication to parents in target language. Includes preparation for New York State bilingual (Spanish-English) certification and portfolio assessment. Course conducted in Spanish. Qualifies as a LOTE (Language Other Than English) course for Pathways College Option purposes.

Prerequisite: Fulfillment of PRLS Spanish language requirement for the major or PRLS 4415 or a PRLS Spanish language screening for departmental permission.

## Research and Honors

## PRLS 3340 Critical Research Methods in Puerto Rican and Latinx Studies

4 hours; 4 credits
Examine critical research issues in Puerto Rican and Latinx studies. Introduce students to a variety of ways of thinking about knowledge and to specific ways of knowing and making arguments in Puerto Rican and Latinx studies using key humanistic, social science, and interdisciplinary methodologies.

## PRLS 5710 Research Seminar in Puerto Rican/Latinx

## Studies

4 hours; 4 credits
Applied research and methodology. Application of advanced course work to address pertinent issues. Research project. Students may take this course at most twice, but may not repeat topics.

Prerequisite: successful completion of PRLS 3340 and an additional six credits in Puerto Rican and Latinx Studies courses.

## PRLS 5715 Independent Study I

Minimum of 9 hours conference and independent work§; 3 credits Independent study supervised by a faculty member. Approved topic. Periodic conferences. Report.

Prerequisite: completion of an approved program of advanced Puerto Rican and Latino studies courses and departmental permission.

## PRLS 5720 Independent Study II

Minimum of 9 hours conference and independent work§; 3 credits Independent study supervised by a faculty member. Approved topic. Periodic conferences. Report.

Puerto Rican and Latino/a studies courses and departmental permission

## Special Topics

## PRLS 4614 Special Topics

3 hours; 3 credits

Prerequisite: PRLS 1001, PRLS 2105, PRLS 3105 or special permission from the chairperson or designee.

## PRLS 4615 Special Topics

4 hours; 4 credits
Topics vary from term to term. Course description may be obtained in the department office before registration. Topics may focus on problems, social and cultural institutions, processes, and organizations of Puerto Ricans in Puerto Rico and the United States; and/or Latinxs in their heritage countries and/or diasporic communities. Students may take this course at most twice, but may not repeat topics.

Prerequisite: completion of at least six credits of advanced Puerto Rican and Latino Studies courses and permission of the chairperson.

## Study Abroad

## PRLS 4630 Summer Seminar

3 hours lecture, 6 hours supervised fieldwork and independent study§; 6 credits
In cooperation with a university or other institution in Puerto Rico, the United States, the Caribbean, Latin America, Africa, or Europe, the department offers opportunities for study abroad. Field trips to places of cultural and historical significance. Lectures by scholars from Brooklyn College and the host country. Independent and/or group research. (Students may take the course for credit twice, with the permission of the chairperson, but may not repeat countries. Consult department for locale of a specific offering. Travel and accommodation fees required.)

Prerequisite: permission in consultation with the chairperson.

## PRLS 4635 Study-Travel Seminar

2 hours lecture, 3 hours supervised fieldwork and independent study§; 3 credits
In cooperation with a university or other institution in Africa, the Caribbean, Europe, Latin America, Puerto Rico, or the United States, the department offers opportunities for study and travel beyond New York with a focus on the Latino/a and Latin American experience. Field trips to places of cultural and historical significance. Lectures by scholars from Brooklyn College and the host site. Independent and/or group research. (Students may take the course for credit twice, with the permission of the chairperson, but may not repeat locations. Consult department for locale of a specific offering. Travel and accommodation fees required.)

Prerequisite: departmental permission in consultation with the instructor required.

## Religion, Program of Studies in

Department office: 1123b Boylan Hall
Phone: 718.951.5000 x2810
Studies in Religion is an interdisciplinary program that brings together faculty, courses, and students from around Brooklyn College who are interested in the study of religious ideas, behaviors, values, rituals, texts, institutions, and communities. The program is taught and advised by faculty from departments around the School of Humanities and Social Sciences, including Africana Studies, American Studies, Art, Anthropology/Archeology, Classics, English, History, Judaic Studies, Modern Languages and Literatures, Philosophy, Political Science, Puerto Rican and Latino Studies, and Sociology. It features classes on major world religions such as Islam or Hinduism, and also classes on age-old religious movements that are less widely studied, such as Zoroastrianism or Syriac Christianity. But the Studies in Religion program is not just for those interested in the theology or rituals of a particular faith; it is chiefly for those interested in how religions have contributed to and complicated the politics, cultures, ethics, literatures, histories, questions, and societies of the world of the past and that of today. As an interdisciplinary program, it features classes and faculty who teach topics in religion in a variety of different ways, including historical, ethnographic, philosophical, textual, ethical, journalistic, psychological, artistic, and sociological approaches. The wide, comparative, and interdisciplinary perspective of the Studies in Religion program is one that will allow you to understand religious histories, conflicts, and perspectives; that will help you to develop your skills as a reader, writer, researcher, and thinker; and that will inspire you to deepen your understanding of what it has meant (and still means) to be human.

## B.A. degree program for studies in religion (dual major) HEGIS code 1510; SED program code 82421

Department requirements ( 21 credits plus a major in another department)
Students must complete 21 credits chosen from the required courses listed below, in addition to completing a dual-major.
A dual major may apply up to six credits from his or her primary major toward fulfilling the requirements of the Program of Studies in Religion.
Students must complete parts:

1. Two of three introductory courses (6 credits): Studies in Religion 3003 (this course is the same as CLAS 3246), Studies in Religion 3005, Classics 3237 (this course is the same as History 3310.)
2. One of the following courses in methodological approaches to religion (3 credits), plus any prerequisite of the course: Anthropology 3185, Philosophy 3730, Sociology 2700. Note that many of these methodological courses have prerequisites in their respective departments that are required and often satisfied by Pathways/College Option classes in that department. Students may also e-permit the Approaches to Religion course or any of the Theoretical Studies courses in Hunter College's Department of Religion.
3. Students must take THREE courses from at least TWO different academic disciplines/departments. The courses are ordered into categories by department below for the student's ease in discerning which courses come from which departments/disciplines. Note that many of the below courses have prerequisites in their respective departments that are required and often satisfied by Pathways/College Option classes in that department.

Africana Studies: Africana Studies 3210, Africana Studies 3101 (this course is the same as History 3560).
Anthropology: Anthropology 2408
Art: Art 1035, Art 3014, Art 3018, Art 3022, Art 3024; Art 3026, Art 3030, Art 3038, Art 3046, Art 3124, Art 3151
Chinese: Chinese 3710
Classics: Classics 3200 (this course is the same as Studies in Religion 3030), Classics 3238 (this course is the same as Women's and Gender Studies 3710 and Studies in Religion 3042), Classics 3244 (this course is the same as Studies in Religion 3035 and History 3025), Studies in Religion 3041 (this course is the same as Classics 3241.)

English/Comparative Literature: Comparative Literature 3621, English 3183,
History: Studies in Religion 3006 (this course is the same as History 3317), History 3044, Studies in Religion 3035 (this course is the same as History 3025 and Classics 3244), American Studies 3106 (this course is the same as History 3416), History 3033, History 3101, History 3212, History 3315 (this course is the same as Studies in Religion 3050), History 3100, History 3532 (this course is the same as Studies in Religion
3040), History 3352 (this course is the same as Studies in Religion 3020), HIST 3030; HIST 3350; HIST 3550; HIST 3554.

Judaic Studies: Judaic Studies 3017, Judaic Studies 3031 Judaic Studies 3014, Judaic Studies 3020 (same as WGST 3222), Judaic Studies 3021 (this course is the same as Studies in Religion 3011), Judaic Studies 3037, Judaic Studies 4017, Judaic Studies 3015, Judaic Studies 3036 (this course is the same as History 3102), Judaic Studies 4018, Judaic Studies 4020, Judaic Studies 2545, Judaic Studies 4034 (this course is the same as History 3103), Judaic Studies 4024, Judaic Studies 4054, Judaic Studies 3012, Judaic Studies 3013, Judaic Studies 3038, Judaic Studies 3023, Judaic Studies 3405 (this course is the same as History 3552), Judaic Studies 3465, Judaic Studies 4195, Judaic Studies 4435, Judaic Studies 3021 (this course is the same as Studies in Religion 3011.)

Modern Languages: FREN 3730, SPAN 3730, RUSS 3730
Philosophy: Philosophy 3113, Philosophy 3721, Philosophy 3722,
Political Science: Political Science 3413 (same as RELG 3004), Political Science 3156 (same as RELG 3055), Political Science 3414
Puerto Rican and Latino Studies: Puerto Rican and Latino Studies 3115
4. One seminar in Studies in Religion: Studies in Religion 4001, History 4001, Philosophy 4105, or Classics 4012.

Courses other than those listed, above including Studies in Religion 3060, 3070, 5002, 5003, may be credited toward requirements 1, 2, 3 and 4 with permission of the program director. Students must take at least 21 credits in residence at Brooklyn College. Substitutions for any one of the above requirements can only be made in consultation with the program director.

## Departmental Minor(s)

## Minor in Religion

## Department Requirements

Fifteen credits from courses listed in the program's offerings, each completed with a grade of C or higher, including either Religion 3003 (this course is the same as CLAS 3246) or 3005 or Classics 3237 (this course is the same as History 3310) or an equivalent course agreed upon by the program director. Twelve of these credits must be completed at Brooklyn College. Students should meet with a program director to plan a sequence of courses suited to their individual interests or career plans.

## Interdepartmental Minor(s)

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C- or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307;
Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Courses

§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## RELG 3003 Questions of Text and Truth: Introduction to Judaism, Christianity, and Islam

3 hours; 3 credits
A consideration of Judaism, Christianity, and Islam in terms of their origins, major beliefs, practices, and history. Introduction to the concepts of myth, symbol, ritual, and doctrine. Relationship of these religions to cultural changes, literary and artistic developments, community life, and individual identity. Course is same as CLAS 3246. Starting fall 2019 satisfies Pathways Flexible Core Individual and Society requirement.

## RELG 3004 Islam and Modernity

## 3 hours; 3 credits

Role of discourse and power in the constitution of identity and politics. Binary relationship between power/knowledge, local/universal, inclusion/exclusion, religion/secular, rational/irrational, Islam/modernity. Political and social theories that deal with modernity, post modernity, language, gender, race, class, and ethnicity in the formation of identities and practices. This course is the same as Political Science 3413.

Prerequisite: Political Science *1001[1.51] or Political Science *1002 [1.7] or Core Curriculum 1230 [2.3] or Religion 3003 [1.1] or Religion 3005 [1.2].

## RELG 3005 Religions of India, China and Japan

3 hours; 3 credits
Development of Hinduism, Buddhism, Confucianism, and Daoism, with emphasis on origins, teachings, and role in culture. Unique features of Eastern spirituality through comparison with the Abrahamic traditions and secular societies. Consideration of the practice of these religious traditions within contemporary United States. This course is the same as HIST 3373.

## RELG 3006 The Shaping of the Islamic World: From Origins to Modernity

## 3 hours; 3 credits

A survey of the major historical developments and religious themes within the Islamic tradition from its origins to the present day. Topics include the Qur'an and its interpretation, Islamic law, theology, Sufism, and the Caliphate. The course raises broader theoretical questions including the nature of reason and revelation, science and religion, and politics and religion. This course is the same as History 3317.

## RELG 3007 Ancient Mediterranean Religions

## 3 hours, 3 credits

Religious developments and conflicts. Intersections of ancient Judaisms, Christianities, state religions, mystery cults and other belief systems in the Ancient Mediterranean. This course is the same as History 3310 and CLAS 3237.

## RELG 3010 Job and the Problem of Evil

3 hours; 3 credits
Intensive study of the Book of Job as the primary religious work
dealing with suffering and evil. Opinions as to "why bad things happen to good people" will be considered in both ancient and modern works. (Not open to students who completed Studies in Religion 3060 [20] in either fall, 1987, or spring, 1989, or Judaic Studies 4751 [75.1] in spring, 1989.) This course is the same as Judaic Studies 4022.

Prerequisite: Studies in Religion 3003 [1.1] or permission of the program director.

## RELG 3011 Tower of Babel: Syriac Christianity in Its Babylonian and Rabbinic Contexts

3 hours, 3 credits
Survey of Syriac Literature of the first seven centuries CE and of the basic history and concepts of Syriac Christianity. Texts will be read in translation. Same as JUST 3021.

## RELG 3020 Islamic Perspectives on Reason, Science and, Culture

3 hours; 3 credits
Islamic classical and contemporary thinkers on a broad range of topics, including the compatibility of religion and science, reason and revelation, and Islam and women's and minority rights, among others. Same as HIST 3352.

## RELG 3022 Searching for God: Ancient Greeks, Jews, and Christians

hours; 3 credits
History of theology in the Mediterranean basin from ancient through medieval periods. Same as CLAS 3022, PHIL 3729, and JUST 3022.

## RELG 3030 Heroes, Gods, Monsters: Classical Mythologies

3 hours; 3 credits
Classical myths and modern theories of mythology. Readings in English translation from the ancient sources. (Not open to students who have completed Classics 6.) This course is the same as CLAS 3200 Satisfies Pathways Flexible Core Individual and Society requirement.

Prerequisite: Studies in Religion 3003 [1.1] or 3005 [1.2], or permission of the program director.

## RELG 3035 Death and Afterlife in the Ancient World

3 hours; 3 credits
The world of antiquity seen through a cultural history of ideas and practices relating to death and the afterlife in the ancient world. Mortuary practices and beliefs promulgated by populations in Egypt, Mesopotamia, Ancient Israel, Greece, Rome, Syria, North Africa and Asia Minor from the second millennium B.C.E. through the sixth century C.E. Covers: (1) the ancient context out of which notions about the afterlife emerged (2) cross-cultural developments, which resulted in ideas about death and the afterlife more familiar from Judaism and Christianity. Direct engagement with primary source materials through visits to local cemeteries, museums, and through individual research. This course is the same as Classics 3244 and History 3025.

## RELG 3040 Mysticism, Magic, and Ritual in Ancient China

3 hours, 3 credits
The history of Daoism, the indigenous religion of China, from ancient times to the fifth century C.E. The roots of Daoism in ancient Chinese shamanism. Early mystical practices such as meditation, spirit journeying, macrobiotic diet, sexual yoga. The classical philosophy of Laozi and Zhuangzi. The political Daoism of the late Warring States and Han. The Daoist rebellions of 184 C.E. Magic and ritual practices of the Daoist church. Medieval Chinese alchemy. This course is the same as History 3532.

Prerequisite: Core Curriculum 1220 [2.2], or History 3005, or permission of the chairperson.

## RELG 3041 Magic in the Ancient World

3 hours; 3 credits
Survey of magic rituals and practitioners in ancient Greece, Rome and contemporary ancient cultures including ancient Egypt, Babylon, and Judea. Study of the social context behind ancient magic, as well as the surviving literary, papyrological, and epigraphic evidence for magic rituals. This course is the same as Classics 3241.

Prerequisite: English 1010 or permission of the chairperson.

## RELG 3042 Gender and the Body in Ancient Religions

3 hours, 3 credits
Study of social, historical, cultic, and literary contexts of gender roles, the body, and sexuality in ancient Greco-Roman religions, ancient Judaisms, and early Christianities. Application of modern theory to ancient evidence. This course is the same as Women's and Gender Studies 3710 and CLAS 3238.

Prerequisite: English 1010 or permission of the chairperson

## RELG 3050 The History of Christianity

3 hours; 3 credits
A cultural history of Christianity from the first century to the present. Using scripture, theology, literature, art, archaeology, and music as sources, we will investigate the place of Christian culture in the history of world civilization. This course is the same as History 3315.

Prerequisite: Studies in Religion 3003 [1.1] or Core Studies 4, or permission of the director of the Program of Studies in Religion and/or the chairperson of the Department of History.

## RELG 3055 Brooklyn and Its Religions

## 3 hours; 3 credits

Current politics of Brooklyn, theories of political power, sites of religious practice and religious history in the borough. Structure and character of relationships between political actors, institutions and religious actors, institutions, communities. This course is the same as Political Science 3156.

Prerequisite: Political Science *1001 [1.51] or Political Science *1002 [1.7] or Core Curriculum 1230 [2.3] or Religion 3003 [1.1] or Religion 3005 [1.2].

## RELG 3060 Special Topics in Religion

3 hours; 3 credits
Topics vary from term to term. Course descriptions may be
obtained from the program director before registration. Students may take this course for credit twice but may not repeat topics.

Prerequisite or corequisite: Studies in Religion 3003 [1.1] or 3005 [1.2] or permission of a program director.

## RELG 3070 Minicourse in Special Topics in Religion

1 hour; 1 credit
Lecture, discussions and media presentations of topics concerning religion. Including the various presentations and final examination, course meets for 15 irregularly scheduled hours, usually at times when no other classes are being offered on campus. Students may take this course for credit three times, but may not repeat topics.

Prerequisite: Specific prerequisites may be added depending on the subject matter and the level of the class.

## RELG 4001 Seminar in Studies in Religion

3 hours; 3 credits
Advanced study of a major theme, problem, or thinker in the field of religion. Topic is selected by the instructor. Course description may be obtained from the program director.

## RELG 5002 Independent Studies I

Minimum of 9 hours conference and independent work§; 3 credits Independent study supervised by a faculty member. Approved reading. Periodic conferences. Final examination or term paper.

Prerequisite: completion of a program approved by the program director in the Studies in Religion Program or related departments; and approval of the instructor.

## RELG 5003 Independent Studies II

Minimum of 9 hours conference and independent work§; 3 credits Independent study supervised by a faculty member. Approved reading. Periodic conferences. Final examination or term paper.

Prerequisite: completion of a program approved by the program director in the Studies in Religion Program or related departments; and approval of the instructor.

# School Psychology, Counseling \& Leadership 

Department office: 1107 James Hall
Phone: 718.951.5876
Full-time Faculty
Professors: Bloomfield, McCabe, Rubinson, Scharron-del Rio
Associate Professor: Dragowski
Assistant Professors: Baquet, Cheng, Elizalde-Utnick

## Courses

## SPCL 3000 LGBTQ Youth in Educational Contexts

3 hours (2 lecture, 1 conference); 3 credits
Critical and comprehensive study of the social, cultural, and community factors that contribute to the psychological, sociocultural, educational, and holistic well-being, mental health, and resiliency in LGBTQ youth, from birth to emerging adulthood. Examination of the role of counseling, psychology, and educational fields in promoting resiliency and well-being of LGBTQ youth within educational and community contexts. Consideration of special challenges, risk and protective factors, and coping resources relevant to this population in education and community contexts. Satisfies Pathways Flexible Core US Experience in Its Diversity requirement.

## SPCL 3500 Career Paths for Working with Children and

 Youth3 hours; 3 credits
This course integrates academic and experiential learning to assist students in identifying career options. The course orients advanced undergraduate students to applied professions serving children in education, mental/physical health, advocacy, policy, recreation, informal learning and other community contexts. Focus on disciplines that promote child and adolescent development, wellbeing, and civic engagement, and that are located in and out of school settings.

Prerequisite: Course to be taught by either School Psychology, Counseling and Leadership or Children and Youth Studies Program faculty.

## SPCL 3700 Future Careers with Children and Young People:

 Professional Orientation and Exploration3 hours; 3 credits
Introduction to career possibilities relating to major topic areas in children's studies. Exploration of current professional markets, including their historic and future developments. Emphasis on increasing student interest in diverse fields and preparing personal plans of study, tailored to individual career interests. This course is the same as Children and Youth Studies 3700.

Prerequisite: Children and Youth Studies 2100 or permission of the program director. Approval of Program Coordinator is required.

## Secondary Education

Department office: 2608 James Hall
Phone: 718.951.5325
Full-time Faculty
Professors: Alexakos, Florence, Miele, Shanley
Associate Professors: Meagher, Murrow, Parmar, Zeng, Zolkower
Lecturer: Blitzer

## B.S. degree program in adolescence education: physical education teacher (all grades) HEGIS code 0835; SED program code 26746

Undergraduate Physical Education Teacher Education candidates are required to take courses in the following areas: skills \& practice teaching physical activities and fitness, teaching methods, foundations of education, and anatomy \& physiology classes that emphasize health and human movement. In the senior year, students complete comprehensive field experiences and in the final semester, must complete student teaching with experiences across grade levels. Community partnerships with local schools and other organizations support our students developing the knowledge and proficiencies needed to work with New York City's diverse student populations.

Graduates of our program make up a large percentage of New York City's P-12 physical education teachers.
Students must have a minimum overall grade point average of 2.5 to declare a major in Physical Education Teacher. Students must maintain a minimum overall grade point average of 2.75 to remain a major in the program. Physical Education Teacher majors must have a grade point average of 3.0 or greater in required Department of Secondary Education coursework to graduate.

Adolescence education (grades 7-12) and special subject programs are writing intensive.
This program qualifies students to apply for New York State initial certification in physical education for all grades (P-12).

Program Requirements (68-70 credits)
Kinesiology 3001, 3290, 3295, 4200W.
Secondary Education 2001 or Childhood, Bilingual and Special Education 2001.
Secondary Education 2002 or Childhood, Bilingual and Special Education 2002.
Secondary Education 3010, 3020, 3030, 3040, 3050, 3060, 3080, 3105, 3110, 3402, 4004, 4410, 4412.
Kinesiology 3000, 3001, 3010, 3020, 3030, 3040, 3050, 3060, 3080, 3001, 3105, 3295, 3402, 4004, 4410 and 4412 taken prior to Fall 2020 may be accepted as fulfilling the equivalent SEED courses.
Secondary Education 3401
Secondary Education 3456

Admission requirements and academic standing for Teacher Education
Students must have a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to take:
Secondary Education 2001 or Childhood, Bilingual and Special Education 2001.
Secondary Education 2002 or Childhood, Bilingual and Special Education 2002.
Secondary Education 3401.
Secondary Education 3456.
Secondary Education 3402.
Secondary Education 4414 and 4415.

## Bachelor's degree programs for adolescence education (grades 7-12): biology, chemistry, earth science, English, mathematics, modern languages (French, Italian, Spanish), physics, and social studies (Africana studies, American studies, anthropology, economics, history, political science, Puerto Rican and Latino studies, sociology), and special subjects (all grades): music <br> See the corresponding academic department section for information regarding specific HEGIS and SED codes

All programs are writing-intensive. These programs reflect changes in teacher certification requirements recently implemented by the New York State Education Department.

Students qualifying for the initial certification in adolescence education may obtain an extension to teach English, social studies, mathematics, a modern language or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

## Program requirements

Students, except music education majors, must complete 26 credits in Secondary Education as specified below.
16 credits in general education courses:
Secondary Education 2001: Historical, Philosophical, and Cultural Foundations of Education,
Secondary Education 2002: Children and Youth in Urban Schools: Developmental, Psychological and Sociological Perspectives,
Secondary Education 3401: Language and Literacy in Urban School Contexts,
Secondary Education 3402: Teaching Adolescents in the Content Areas,
Secondary Education 3456: Inclusive Education and Teaching Students with Special Needs,
and
the appropriate seminar course in student teaching:
Secondary Education 4401: Seminar on Methods of Teaching English, Student Teaching I;
or
Secondary Education 4402: Seminar on Methods of Teaching Social Studies, Student Teaching I;
or
Secondary Education 4403: Seminar on Methods of Teaching Mathematics, Student Teaching I;
or
Secondary Education 4405: Seminar on Methods of Teaching Modern Languages, Student Teaching I;
or
Secondary Education 4480: Methods of Instruction in Adolescence Science Teaching, and Secondary Education 4481 Science Student Teaching Seminar I, and Secondary Education 4482 Adolescence Science Teaching Practicum I,
and
the appropriate advanced seminar course in student teaching:
Secondary Education 4407: Advanced Seminar on Methods of Teaching English, Student Teaching II; or
Secondary Education 4408: Advanced Seminar on Methods of Teaching Social Studies, Student Teaching II; or
Secondary Education 4409: Advanced Seminar on Methods of Teaching Mathematics, Student Teaching II; or
Secondary Education 4483: Science Student Teaching Seminar II and Secondary Education 4484 Adolescence Science Teaching Practicum II; or
Secondary Education 4411 Advanced Seminar on Methods of Teaching Modern Languages, Student Teaching II.

## Additional information

Secondary Education 2001, 2002, 3401, 3402. (13 credits). This four-term sequence may be started in the lower-sophomore term, or uppersophomore term.

Secondary Education 3456 (3 credits) may be started after completing Secondary Education 2001 and 2002.
Students must also complete a major in the appropriate department. Consult the appropriate departmental section in the Undergraduate Bulletin for the major requirements. Students pursuing Initial Certification in music must complete the Bachelor of Music in Music Education in order to meet the state requirements. In addition to the required Bachelor of Music in Music Education curriculum, music education majors must complete the following courses, including student teaching: Secondary Education 2001, 2002 and 3456 and Secondary Education 4413.

In the case of social studies, in addition to the above 26 credits in Secondary Education, students must complete a major in one of the following: Africana studies, American studies, anthropology, economics, history, political science, Puerto Rican and Latino studies, or sociology. Study must include within the major, or in addition to courses in the major, study in economics, government, and at least 21 credits in the history and geography of the United States and the world. Students preparing to become social studies teachers must fulfill the economics and government requirements by taking at least one course ( 3 credits) from among: History 3410, 3420, 3441, 3442, 3450, 3457, or a course in Political Science numbered between 3101 and 3160; and at least one course ( 3 credits) from among: History 3332, 3470, 3472, 3475 or Economics 2002, 2100, $2200,3102,3152$, or 3202.

In the case of a major in one of the science education programs (biology, chemistry, physics, or earth science teacher), see the corresponding
academic department section for information on student teaching courses and requirements.
Admission requirements and academic standing
Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

Students must have a B- in both Secondary Education 2001 and 2002 and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

To take Secondary Education 4413 students must have a GPA of 2.75 or higher and permission of the head of the program.
To take Secondary Education 4401-4406, students must have a GPA of 2.75 or higher, a B- or better in both Secondary Education 3401 and 3402 , and/or permission of the head of the program.

To take Secondary Education 4407-4412, students must earn a B- or higher in Secondary Education 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of the program.

To take Secondary Education 4480, students must have an overall GPA of 2.75 or higher and the permission of the Secondary Education science education program head, department chair, or deputy;

To take either Secondary Education 4481, 4482, 4483, and/or 4484, students must earn a B+ or higher in Secondary Education 4480, have a GPA of 2.75 or higher in their major, and have the permission of the Secondary Education science education program head, department chair, or deputy.

## Departmental Minor(s)

## Minor in Secondary Education

15 credits in Secondary Education
Students must complete all of the courses in the Department of Secondary Education as specified below.
a) Secondary Education 2001, 2002, 3401 and 3456.
b) Electives:

Secondary Education 1001, 3402, or 4480, or another class with approval of Department

## Courses

College-verified fingerprint clearance required for School of Education courses. Refer to the School of Education website, Fingerprint Verification instructions at http://www.brooklyn.cuny.edu/web/academics/schools/education/certification/fingerprints.php.

## SEED 1001 Critical Issues in US Education

## 3 hours; 3 credits

All levels of public education in the United States today have become the focus for often competing political, economic, social and cultural visions of how and why we should educate the nation's youth. This course offers students the opportunity to become knowledgeable about critical issues in American education and the controversies surrounding them, while considering the historical, political, sociological and economic dimensions of each. Among the issues the course will address are a) the purpose of public education in a democracy; b) the private/public split in education, with a focus on home schooling, charters, parochial, and private K20 schools; c) who determines the school curriculum; d) mayoral control, the value of high-stakes testing, and outcomes based approaches to education; e) the way public K-20 public schools are funded; f) technology's impact on education with a focus on online education; g) the role of unions and tenure in schools and in the teaching profession; h) the challenge to public schools of poverty, diversity, and equity and i) sexuality, gender and sex education. Starting Spring 2018 Satisfies Pathways Flexible Core US Experience in Its Diversity requirement.

## SEED 1050 Evidence and Argument in the Natural Sciences

## 3 credits, 3 hours

Reading and writing arguments from scientific evidence, and presenting such arguments orally and through various media. Examination of scientific writing for the general public arguing for paradigm shifts in the sciences from Galileo to the present. Topics in the physical, life and Earth sciences will be examined. Strategies for researching, reading and writing content in the sciences. This course is the same as General Science 1050.

## SEED 1401 Mindfulness for Everyday Living and Transformation (M.E.L.T.)

3 hours; 3 credits
Invitation to explore the theory and practice of mindfulness with an emphasis on supporting student academic success and well being in everyday life. Explicit relevance to the intentions of awareness, connection, insight, and purpose. Review of mindfulness applications in education including social-emotional learning and the arts. Examination of multi-logical approaches to physical and mental wellness. Application of an equity lens toward transforming
ways of being that can support radical self-acceptance and care; with attunement to relationships, and environmental sustainability for collective well being. In order to fully benefit from the experiential nature of this course, students will be expected to engage in embodied practices both inside and out of the classroom.

## SEED 2001 Historical, Philosophical, and Cultural Foundations of Education

4 hours recitation, 20 hours field experience; 3 credits Study of teaching and learning with an emphasis on the urban context, through philosophical, historical, and cultural perspectives. Relation of significant educational movements, philosophies, and teaching practices for all students, including students with special needs and English language learners, from birth through adolescence. Opportunities through class discussion, portfolio preparation, and field experiences (20 hours) for reflection on and analysis of interactions between school and community, teachers' roles, and issues of diversity, social justice and local, state and national education policies and mandates. (Open only to students who have completed at least 30 credits in liberal arts and sciences with a grade point average of 2.70 or higher.) Starting Spring 2018 Satisfies Pathways Flexible Core Individual and Society requirement. This course is the same as CBSE 2001.

Prerequisite: English 1010.

## SEED 2002 Children and Youth in Urban Education: Developmental, Psychological and Sociological Perspectives

4 hours recitation, 20 hours field experience; 3 credits Relationships between developmental psychology and sociological processes of children and youth and their educational experiences in schools, families and communities. Role of culture, ethnicity, race, gender, sexuality, and social class in the context of biological, sociological and psychological processes. In depth analysis of established educational and developmental theorists with application to curriculum and instruction. Emphasis on children and adolescents in urban, multicultural schools, including students with special needs and English language learners, from birth through adolescence. Introduction to contemporary frameworks in line with current state and national requirements. Linkage of field experience to relevant and critical theories; observations and interviews of children; continuation of portfolio development; reflection upon field experiences of 20 hours. This course is the same as CBSE 2002.

Prerequisite: English 1010.

## SEED 3010 Movement Skills, Rhythms and Dance in Physical Education

3 hours; 3 credits
Students develop knowledge and skill in designing and implementing basic movement skills and rhythmical/dance activities offered in P-12 physical education curricula. Emphasis is placed on the ability to breakdown, analyze and instruct the associated movement skills. A minimum grade of C is required for this course. (Not open to students who have completed KINS 3010.)

Pre-requisite: Declared PE major, 2.5 cumulative GPA.

## SEED 3020 Applied Concepts of Fitness \& Health

3 hours; 3 credits
This course emphasizes concepts related to the development of
motor skills and health-related fitness. Knowledge and directed practical experiences will enable the student to assess and further develop abilities in basic movement skills, sport skills, motor fitness and physical fitness components as related to body management, fitness and sport. Students develop knowledge and skills in lifetime fitness activities such as aerobics, jogging, walking, weight training, muscle toning, and general conditioning. Emphasis is placed on developing an understanding of the health and fitness benefits provided through participation in these activities. Additional emphasis will focus on producing competent performers, as well as developing the ability to analyze, teach and utilize assessments of the associated skills in both health and skill related fitness. (Not open to students have completed KINS 3020.)

Prerequisites: Declared Physical Education Teacher major and minimum GPA of 2.5 or permission of the department.

## SEED 3030 Performance/Analysis 3: Team Sports

3 hours; 3 credits
Students develop knowledge and skills in various team sports (e.g., soccer, volleyball, baseball, softball, flag football, basketball) offered in P-12 school curriculums. Emphasis is placed on developing performance skills, as well as developing the ability to analyze and teach the associated movement skills. A minimum grade of $C$ in this course is required. (Not open to students have completed KINS 3030.)

Prerequisites: Declared Physical Education Teacher major and minimum GPA of 2.5 or permission of the department.

## SEED 3040 Dual and Lifetime Sports and Physical Activity

3 hours; 3 credits
This course emphasizes concepts related to the development of knowledge and skills in lifetime individual and dual sports and physical activities (e.g., tennis, badminton, golf, bowling, archery, racquetball) offered in P-12 physical education curricula. Emphasis is placed on producing competent performers, and developing the ability to plan for, instruct and assess the associated basic movement and sport skills. A minimum grade of $C$ in this course is required. (Not open to students have completed KINS 3040.)

Pre-requisite: Declared PE major, 2.5 cumulative GPA.

## SEED 3050 Adapted Physical Education

3 hours; 3 credits
This course will outline the philosophy and objectives addressed in providing individualized physical education instruction for all students. Topics include screening and assessment of (P-12) students, developmentally appropriate planning and instruction in sports, games and activities. Discussion of the historical and philosophical bases for adapted physical education and the impact of federal and state legislation will be discussed. An overview of disabilities/disorders/conditions/syndromes that are frequently seen in the public schools will be presented. This course includes an assortment of practical applications of modifications for physical activity, games and sport. (Not open to students who have completed KINS 3050.). A minimum grade of C is required.

Pre-requisite: Declared PE major, 2.5 cumulative GPA.

## SEED 3060 Measurement and Assessment in Physical Education

3 hours; 3 credits
This course presents elementary statistical techniques applied to tests and measurements in physical education and sport settings
(P-12). Historical background, evaluation and practical application of tests including those designed to measure health and skill related fitness, motor performance, content knowledge and behavioral outcomes. (Not open to students who have completed KINS 3060). A minimum grade of " C " in this course is required.

Pre-requisite: declared PE major, 2.5 cumulative GPA.

## SEED 3080 Physical Education Field Experience in School Settings

3 hours; 3 credits
This course is designed to enhance student learning in the field by encouraging reflection and providing connection to and application of teaching practice. During weekly seminars, students will participate in discussions about teaching, learning, and other issues relevant to the fieldwork. Students will also engage in writing activities that support the reflective process and will aid in the preparation process for teacher certification. This course should be taken late in the senior year just ahead of student teaching. Students will participate in 40 hours of field experience in varied settings. (Not open to students who have completed KINS 3080.)

Prerequisites: Declared major in physical education teacher education, 2.75 CUM GPA, Secondary Education 2001, 2002, 3010, 3020, 3030, 3050 or 3110, 3401 and 3456.

## SEED 3105 Instructional Skills and Strategies in Physical Education I (P-5)

3 hours; 3 credits
Designed for students in the physical education teacher education program. Introduction to effective classroom management, teaching skills, and instructional models for physical education in grades P-5. Responsibilities of the elementary school physical education teacher including characteristics cultural differences of the elementary school student; current issues affecting elementary school physical education; describe effective management procedures and discipline techniques; use a variety of techniques to assess skill and cognitive abilities; design unit/lesson plans that are educationally sound and developmentally appropriate; demonstrate a knowledge of and ability to use available technologies; identify and use a variety of teaching methods; identify and contrast a variety of model elementary physical education programs; observe, reflect on, and critique teaching behaviors; develop field based assignments. Includes observation and teaching experiences with elementary school children across grades. Students will participate in 20 hours of field experience in varied settings. (Not open to students have completed KINS 3105.)

Prerequisites: major in physical education teacher education, 2.75 cumulative GPA, Secondary Education 2001, 2002. Prerequisite or Corequisite: SEED 3401.

## SEED 3110 Instructional Strategies in Physical Education II (7-12)

3 hours; 3 credits
Designed for students in the physical education teacher education program. Introduction to effective classroom management, teaching skills, and instructional models for physical education in grades 7-12. Responsibilities of the secondary school physical education teacher including characteristics cultural differences of the secondary school student; current issues affecting secondary school physical education; describe effective management procedures and discipline techniques; use a variety of techniques to assess skill and cognitive abilities; design unit/lesson plans that are educationally sound and developmentally appropriate;
demonstrate a knowledge of and ability to use available
technologies; identify and use a variety of teaching methods; identify and contrast a variety of model secondary physical education programs; observe, reflect on, and critique teaching behaviors; develop field based assignments. Students will participate in 20 hours of field experience in varied settings. (Not open to students have completed KINS 3110.)

Prerequisites: major in physical education teacher education, Secondary Education 2001, 2002. Prerequisite or Corequisite: SEED 3401.

## SEED 3116 Recreation, Disability Sport, Physical Activity for Children and Youth with Special Needs

3 hours; 3 credits
Introduction to integrating sport, physical activity and recreation into the educational process for students with special needs including but not limited to inclusive physical education, afterschool and extracurricular sport and recreation, effective planning and classroom management, basic activity analysis related to adaptive techniques and equipment, and instructional models for adapted physical education and health in grades K-12. Field experiences are included in selected K - 12 classrooms. A minimum grade of "C" is required of Education majors for this course. (Not open to students have completed KINS 3116.)

## SEED 3401 Language and Literacy in Urban School Contexts

4 hours recitation, 20 hours field experience; 3 credits Current theories and methods of teaching literacy in grades 7-12 across all content areas. Includes planning and preparation of standards-based lessons, curricular units, and assessments that differentiate instruction in relation to language and literacy development and diversity. Focus on strategies in literacy that aid the teaching of students of diverse academic, linguistic, and cultural backgrounds and those with special needs in reading writing, and analyzing text. Study and analysis of the relationship between identity formation and reading, writing, and speaking. Continuation of portfolio development in support of state and national standards and in preparation for the New York State teacher licensure assessments. Field experience (20 hours) required.

Prerequisite: SEED 2001 and 2002.

## SEED 3402 Teaching Adolescents in the Content Areas

4 hours recitation, 45 hours field experience; 4 credits.
Theories and practices supporting curriculum design in the content area. Study, analysis, and development of content-specific standards-based curriculum units and lesson plans that include diagnostic, formative, and summative assessments. Research-based models and instructional practices for inclusive settings, including students with special needs, gifted and talented students, English Language Learners, and heterogeneous ability groupings. Special emphasis on literacy across all content areas and alignment of planning and instruction with state and national standards. Overview, preparation and planning for New York State teacher certification; support development of portfolio for licensure assessment. Field experience (45 hours) required.

Prerequisites: SEED 2001 and 2002.
Prerequisite or Corequisite: SEED 3401.

## SEED 3454 Methods and Teaching Practice in Middle Schools

4 hour recitation, 100 hours supervised field experience; 6 credits Curricula and methodologies for teaching various subjects in
middle schools. Emphasis on the needs of middle school students, on writing across the curriculum, and on the interdisciplinary aspects of the curriculum. Development of literacy and approaches to the English language learner and special needs learner. Supervised practical teaching and other field experiences in the middle (5 and 6) grades.

Prerequisite: Secondary Education 2001 and 2002 and permission of the chairperson or deputy of the Department of Secondary Education.
Prerequisite or corequisite: Secondary Education 3401 or 3402.

## SEED 3455 Theories and Practice of Composition

## 3 hours; 3 credits

Workshop in understanding the nature of writing and how to teach it. Writing as a process: invention, revision, editing; effective structures; writing about literature; experimenting with genres; writing as a way of learning. Social and linguistic influences on writing. Responding to other people's work. Frequent in-class writing; several short papers taken through drafts; compilation of a portfolio. This course is the same as English 3177.

Prerequisite: English 1010 [1].

## SEED 3456 Inclusive Education and Teaching Students with Special Needs

3 hours recitation, 20 hours of field experience; 3 credits Objectives, variations and clinical practice in collaborative and coteaching methodologies and curriculum development, evaluation, regulatory compliance, and application of early interventions to teaching diverse student populations, with an emphasis on English language learners and students with special needs, including the gifted. Planning content area curriculum and assessments that are differentiated and accessible to students with a wide range of abilities. Continuation of portfolio development. Field experience (20 hours) in special education and/or inclusive classrooms required.
This course is the same as CBSE 3456. Not open to students who have taken CBSE 3456.

Prerequisite: SEED 2001 and 2002.

## SEED 3584 Teaching Concepts of Geography in Middle and High School

3 hours; 3 credits
Concepts of contemporary geography, survey of key current global issues and examination of several of the world's major geographic realms; issues of globalization as well as particular details of critical regions: South America, East Asia, South Asia, Europe, North America, North and Southern Africa.

Prerequisite or Corequisite: SEED 2000

## SEED 4004 Principles and Practices of Coaching and Officiating

3 hours; 3 credits
Provides an overview of the professions of athletic coaching and officiating; Addresses the numerous roles coaches and officials play in the educational environment, ethical behavior of participants, safety, teaching, successful organization and administration of competition, and evaluation of performances. Students develop an educationally sound philosophy of coaching. Emphasis on learning and understanding the principles and guidelines of good coaching; Topics such as organizational patterns, objectives of sport programs, controls, game management, records, conduct of
tournaments, officials, awards, and means of promoting the programs are considered. Study is made of competitive as well as informal recreation programs on all educational levels. Students are introduced to the art and professional requirements of officiating intramural and athletic contests. Course examines the basic elements of sports officiating including interpretations of rules and regulations and provides students with opportunities to fulfill the role of officials in a variety of sports. (Not open to students have completed KINS 4004.)

Prerequisite: Declared major in PE teacher; cum GPA 2.5, SEED 2001, 2002.

## SEED 4401 Seminar on Practice of Teaching, Student Teaching

2 hours; 2 credits
Application of prerequisite coursework in the school setting. Curriculum construction, evaluation, and materials and resources aligned with state and national standards and applied to teaching specific subject areas at grade levels appropriate for state certification requirements; development of self-reflective teaching styles and assessment procedures to address the learning needs of a diverse student population, students with special needs, and English language learners, and of strategies for teaching with technology. Students enroll in safety education workshops in identifying, reporting, and responding to child abuse and violence prevention, and in substance abuse, fire and arson prevention. Support development of portfolio and requirements for state certification.

Prerequisites: Secondary Education 2001, 2002, 3401, 3456 and 3402 and approval of the head of the program in English education. Co-requisites: Secondary Education 4407, or 4408, or 4409, or 4411, or 4481; and 4482.

## SEED 4402 Seminar on Methods of Teaching Social Studies, Student Teaching I.

4 hours recitation plus conference, weekly supervised teaching (total 20 days, 150 hours); 5 credits
Objectives, variations in methodology and curriculum construction, evaluation, and role of materials and resources aligned with the state and national standards applied to teaching specific subject areas at grade levels appropriate for state certification requirements; selection of supervised instructional experiences structured to evolve professional awareness; development of selfreflective teaching styles and assessment procedures to address the learning needs of a diverse student population, students with special needs, and English language learners; continued application of knowledge of language acquisition and literacy development by native English speakers and English language learners, and of strategies for integrating technology into the classroom. Students spend a minimum of three hours each day in the school. Daily supervised student teaching in grades appropriate for state certification requirements. Observing, developing, and studying curriculum in light of teaching experiences and observations. Support the development of portfolio for state certification.

Prerequisite: SEED 3401 and 3402 and approval of the head of the program in Social Studies.

## SEED 4403 Seminar on Methods of Teaching Mathematics, Student Teaching I.

4 hours recitation plus conference, weekly supervised teaching, (total 20 days, 150 hours); 5 credits
Instructional practices and standards-based curriculum design and evaluation, for specific mathematics subject areas at grade levels
appropriate for state certification requirements; selection of supervised instructional experiences structured to evolve professional awareness; development of self-reflective teaching styles and assessment procedures to address the learning needs of a diverse student population, students with special needs, and English language learners; continued application of knowledge of language acquisition and literacy development by native English speakers and English language learners, and of strategies for integrating technology into the classroom. Students spend a minimum of three hours each day in the school. Daily supervised student teaching in grades appropriate for state certification requirements. Observing, developing, and studying curriculum in light of teaching experiences and observations. Support development of portfolio for state certification.

Prerequisite: Secondary Education 3401 and 3402, Mathematics 3101 and 4201 and approval of the head of the program in mathematics education.

## SEED 4404 Seminar on Methods of Teaching Science, Student Teaching I.

3 hours recitation, weekly supervised teaching, (total 20 days, 150 hours); 5 credits
Objectives, variations in methodology and curriculum construction, evaluation, and role of materials and resources aligned with New York State learning standards and applied to teaching specific subject areas at grade levels appropriate for state certification requirements; selection of supervised instructional experiences structured to evolve professional awareness; development of selfreflective teaching styles and assessment procedures to address the learning needs of a diverse student population, students with special needs, and English language learners; continued application of knowledge of language acquisition and literacy development by native English speakers and English language learners, and of strategies for integrating technology into the classroom. Students spend a minimum of two hours each day in the school. Daily supervised student teaching in grades appropriate for state certification requirements. Observing, developing, and studying curriculum in light of teaching experiences and observations.

Prerequisite: Secondary Education 3401 and 3402 and approval of the head of the program in science education.

## SEED 4405 Seminar on Methods of Teaching Modern Languages, Student Teaching I.

4 hours recitation plus conference, weekly supervised teaching, (total 20 days, 150 hours); 5 credits
Objectives, variations in methodology and curriculum construction, evaluation, and role of materials and resources aligned with Common Core Standards and applied to teaching specific subject areas at grade levels appropriate for state certification requirements; selection of supervised instructional experiences structured to evolve professional awareness; development of selfreflective teaching styles and assessment procedures to address the learning needs of a diverse student population, students with special needs, and English language learners; continued application of knowledge of language acquisition and literacy development by native English speakers and English language learners, and of strategies for integrating technology into the classroom. Students spend a minimum of three hours each day in the school. Daily supervised student teaching in grades appropriate for state certification requirements. Observing, developing, and studying curriculum in light of teaching experiences and observations. . Support the development of portfolio for state certification.

Prerequisite: Secondary Education 3401 and 3402 and approval of
the chairperson or deputy of the Department of Secondary Education.

## SEED 4406 Seminar on Methods of Teaching Physical Education, Student Teaching I.

3 hours recitation, weekly supervised teaching, (total 20 days, 150 hours); 5 credits
Objectives, variations in methodology and curriculum construction, evaluation, and role of materials and resources aligned with New York State learning standards and applied to teaching specific subject areas at grade levels appropriate for state certification requirements; selection of supervised instructional experiences structured to evolve professional awareness; development of selfreflective teaching styles and assessment procedures to address the learning needs of a diverse student population, students with special needs, and English language learners; continued application of knowledge of language acquisition and literacy development by native English speakers and English language learners, and of strategies for integrating technology into the classroom. Students spend a minimum of two hours each day in the school. Daily supervised student teaching in grades appropriate for state certification requirements. Observing, developing, and studying curriculum in light of teaching experiences and observations.

Prerequisite: Secondary Education 3401 and 3402 and approval of the chairperson or deputy of the department of Secondary Education and the department of Kinesiology.

## SEED 4407 Advanced Seminar on Methods of Teaching English, Student Teaching

4 hours recitation plus conference; 4 credits
Theories and methods of teaching English at grade levels appropriate for state certification requirements; observing, developing, and studying curriculum in light of teaching experiences and observations. Focus on developing reflective practitioners and researchers; developing individualized instruction for all students developing and evaluating standardsbased English curriculum and classroom and school cultures responsive to the needs of diverse students and students with special needs, particularly in urban settings; developing advanced methods of teaching English language learners and applying knowledge of language acquisition.

Co-requisite Secondary Education 4401 and 4482.

## SEED 4408 Advanced Seminar on Methods of Teaching Social Studies, Student Teaching

4 hours recitation plus conference; 4 credits
Advanced theories and methods of teaching specific subject areas within social studies at grade levels appropriate for state certification requirements; focus on developing reflective practitioners and researchers; developing individualized instruction for all students; using technology for cooperative learning in the classroom and school; developing and evaluating standards-based social studies curriculum and classroom and school cultures responsive to the needs of diverse students and students with special needs, particularly in urban settings; developing advanced methods of teaching English language learners and applying knowledge of language acquisition. Support the development of portfolio and state certification.

Co-requisite Secondary Education 4401 and 4482.

## SEED 4409 Advanced Seminar on Methods of Teaching Mathematics, Student Teaching II

4 hours recitation plus conference, weekly supervised teaching
(total 20 days, 150 hours); 5 credits
Advanced theories and methods of teaching mathematics at grade levels appropriate for state certification requirements; focus on developing reflective practitioners and researchers; developing individualized instruction for all students; using technology for cooperative learning in the classroom and school; developing and evaluating standards-based curriculum and classroom and school cultures responsive to the needs of diverse students and students with special needs, particularly in urban settings; developing advanced methods of teaching English language learners and applying knowledge of language acquisition. Students enroll in safety education workshops in identifying, reporting, and responding to child abuse and violence prevention, and in substance abuse, fire and arson prevention. Students spend the equivalent of twenty days in the schools, during which time they engage in daily supervised student teaching. Support the development of portfolio for state certification.

Prerequisite: Secondary Education 4403 and permission of the head of the program in mathematics education.

## SEED 4410 Advanced Seminar on Methods of Teaching Science, Student Teaching II

3 hours recitation, weekly supervised teaching (total 20 days, 150 hours); 4 credits
Advanced theories and methods of teaching science at grade levels appropriate for state certification requirements; focus on developing reflective practitioners and researchers; developing individualized instruction for all students; using technology for cooperative learning in the classroom and school; developing and evaluating newly adopted science curriculum and classroom and school cultures responsive to the needs of diverse students and students with special needs, particularly in urban settings; developing advanced methods of teaching English language learners and applying knowledge of language acquisition. Students enroll in workshops in identifying, reporting, and responding to child abuse, and in substance abuse, fire and arson prevention, and safety education. Students spend the equivalent of twenty days in the schools, during which time they engage in daily supervised student teaching.

Prerequisite: Secondary Education 4404 and permission of the head of the program in science education.

## SEED 4411 Advanced Seminar on Methods of Teaching a Modern Language, Student Teaching

4 hours recitation plus conference; 4 credits
Advanced theories and methods of teaching specific subject areas within social studies at grade levels appropriate for state certification requirements; focus on developing reflective practitioners and researchers; developing individualized instruction for all students; using technology for cooperative learning in the classroom and school; developing and evaluating standards-based social studies curriculum and classroom and school cultures responsive to the needs of diverse students and students with special needs, particularly in urban settings; developing advanced methods of teaching English language learners and applying knowledge of language acquisition. Support the development of portfolio and state certification.

Co-requisite: Secondary Education 4401 and 4482.

## SEED 4412 Advanced Seminar on Methods of Teaching Physical Education, Student Teaching II

3 hours recitation, weekly supervised teaching (total 20 days, 150 hours); 4 credits

Advanced theories and methods of teaching physical education at grade levels appropriate for state certification requirements; focus on developing reflective practitioners and researchers; developing individualized instruction for all students; using technology for cooperative learning in the classroom and school; developing and evaluating newly adopted physical education curriculum and classroom and school cultures responsive to the needs of diverse students and students with special needs, particularly in urban settings; developing advanced methods of teaching English language learners and applying knowledge of language acquisition. Students enroll in workshops in identifying, reporting, and responding to child abuse, and in substance abuse, fire and arson prevention, and safety education. Students spend the equivalent of twenty days in the schools, during which time they engage in daily supervised student teaching.

Prerequisite: Secondary Education 4406 and permission of the chairperson of the Department of Physiology and the chairperson or deputy of the Department of Secondary Education.

## SEED 4413 Seminar on Teaching Methods of Music Education, Student Teaching I and II

1 hour recitation, weekly supervised teaching (total 40 days, 300 hours); 6 credits
Supervised teaching in music in schools at two grade levels (pre K6; and 7-12). Weekly seminar. Synthesis and application of knowledge and skill in human processes and variations, learning styles and processes, motivation, communication, classroom management, special needs, language acquisition and literacy development, curriculum development, instructional planning and strategies, technology and assessment, and the rights and responsibilities of all involved in the educational process, especially as applied to urban students. Workshops in identifying, reporting, and responding to child abuse, and in substance abuse, fire and arson prevention, and safety education. Students spend the equivalent of forty days in schools during which time they engage in daily supervised student teaching.

Prerequisite: permission of the director of the Conservatory of Music and the chairperson or deputy of the Department of Secondary Education.

## SEED 4414 Senior Seminar - Physical Education Teacher Education

4 hours; 4 credits
Advanced theories and methods of teaching physical education at levels appropriate for state certification requirements ( $\mathrm{K}-12$ ); focus on developing reflective practitioners and leaders of inquiry; developing individualized instruction for all students; using technology for cooperative learning in the classroom and school; developing and evaluating newly adopted physical education curriculum and classroom and school cultures responsive to the needs of diverse students and students with special needs, in urban settings; develop methods for addressing English language learners.

Prerequisite: All coursework completed; minimum GPA of 2.75; Fingerprint Clearance; Corequisite: SEED 4415. (Not open to students have completed KINS 4410.)

## SEED 4415 Comprehensive Student Teaching - Physical Education

14 weeks/full day student teaching; 8 credits Capstone course requiring Physical Education Teacher Education students to participate in a semester long student teaching experience that is equally split (7 weeks each) between elementary
(K-6) and secondary (7-12) school placements. Daily supervised teaching of developmentally appropriate physical education in schools. Weekly seminar. Methods of instruction and lesson planning, curriculum development and assessment, instructional planning, and multiple research-validated instructional strategies for teaching students within the full range of abilities -- and skill in designing and offering differentiated instruction that enhances the learning of all students in physical education. Classroom management, backwards design, and developing school-community relationships; analysis of New York State curriculum, and local and national standards in physical education. Focus on developing reflective teaching practices and assessment procedures and research-based instruction to address the learning needs of a diverse student population, students with special needs, English Language Learners; developing, implementing, and evaluating the physical education curriculum in urban classrooms. Attention given to integrating technology into the teaching and learning process. Develop skills to engage the process of meeting NY State certification requirements including edTPA. Participate in workshops including: School Violence Prevention; Identification of Child Abuse; DASA/School Bullying. (Not open to students have completed KINS 4412.)

Prerequisite: All coursework completed; minimum GPA of 2.75; Fingerprint Clearance
Corequisite: SEED 4414

## SEED 4480 Methods of Instruction in Adolescence Science Teaching

3 hours seminar plus conference; 3 credits
Methods of instruction and lesson planning, curriculum development and assessment, instructional planning, and multiple research-validated instructional strategies for teaching students within the full range of abilities -- and skill in designing and offering differentiated instruction that enhances the learning of all students in the content area(s) of the certificate. Classroom management, backwards design, and developing school-community relationships; analysis of New York State science curriculum, and local and national standards in science. Focus on developing self-reflective teaching styles and assessment procedures and research based instruction to address the learning needs of a diverse student population, students with special needs, English language learners; developing, implementing, and evaluating the science curriculum in urban classrooms. Attention given to particular needs and interests of students and methods of integrating technology into the classroom. Role of materials and resources applied to teaching science at grade levels appropriate for state certification requirements. Observing, studying, and developing curriculum in light of classroom observations. Field experience of a minimum of 25 hours is required.

Prerequisite: Secondary Education 2001, 2002.
Prerequisite or corequisite: Secondary Education 3456, 3401, 3402.

## SEED 4481 Science Student Teaching Seminar I

1.5 hours seminar plus conference; 1.5 credits Seminar for administration, guidance, and instruction for the student teaching field experience in science education. Each class meeting will be used to "debrief" and reflect on student teaching experiences, review of State certification requirements, discuss teaching and learning of science in light of student teaching experiences and observations. Students enroll in appropriate NYS certification exams and required workshops. Curriculum development, instructional planning, and multiple research-
validated instructional strategies for teaching students within the full range of abilities and skill in designing and offering differentiated instruction that enhances the learning of all students in the content area(s) of the certificate. Formal and informal methods of assessing student learning and the means of analyzing one's own teaching practice and skill in using information gathered through assessment and analysis to plan or modify instruction, and skill in using various resources to enhance teaching. Distribution and collection of student teaching evaluations and timesheets. Development of portfolios. Students will be engaged in the completion of appropriate NYS certification, workshops and examination requirements.

Prerequisite: Secondary Education 2001, 2002, 3456, 3401, 3402, 4480.

Corequisite: Secondary Education 4482.

## SEED 4482 Adolescence Education: Student Teaching Practicum

90 hours supervised student teaching; 6 credits
Opportunity to hone teacher candidate practices in alignment with the New York State Teaching Standards. Student teaching hours to be full time, and in alignment with the daily school schedule and annual school calendar. Observing, developing, and studying curriculum in light of teaching experiences and observations. Formal and informal methods of assessing student learning and the means of analyzing one's own teaching practice and skill in using information gathered through assessment and analysis to plan or modify instruction, and skill in using various resources to enhance teaching.

Prerequisite: Secondary Education 2001, 2002, 3456, 3401, 3402. Corequisite: Secondary Education 4401; and 4407, or 4408, or 4409 , or 4411 , or 4481 or 4483 .

## SEED 4483 Science Student Teaching Seminar II

1.5 hours seminar plus conference; 1.5 credits

Advanced seminar for administration, guidance, and instruction for the student teaching field experience in science education. Each class meeting will be used to "debrief" and reflect on student teaching experiences, review of State certification requirements, discuss teaching and learning of science in light of student teaching experiences and observations. Students enroll in appropriate NYS certification exams and required workshops. Curriculum development, instructional planning, and multiple researchvalidated instructional strategies for teaching students within the full range of abilities. Skill in designing and offering differentiated instruction that enhances the learning of all students in the content area(s) of the certificate. Formal and informal methods of assessing student learning and the means of analyzing one's own teaching practice. Skill in using information gathered through assessment and analysis to plan or modify instruction, and skill in using various resources to enhance teaching. Distribution and collection of student teaching evaluations and timesheets. Students will complete all appropriate NYS certification and examination requirements. Completion of e-portfolios.

Prerequisite: Secondary Education 2001, 2002, 3456, 3401, 3402, 4480.

Corequisite: Secondary Education 4484.

## SEED 4484 Adolescence Science Education: Student Teaching Practicum II

150 hours of supervised teaching; 2 credits
Advanced course in student practice teaching. Opportunity for
more extensive and intensive participation in teaching and school activities. Hours to be arranged. Daily supervised student teaching in grades and subject areas appropriate for New York State certification requirements. Observing, developing, and studying curriculum in light of teaching experiences and observations. Formal and informal methods of assessing student learning and the means of analyzing one's own teaching practice and skill in using information gathered through assessment and analysis to plan or modify instruction, and skill in using various resources to enhance teaching. Provide candidates with experiences in a variety of communities and across the range of student developmental levels of the certificate, experiences practicing skills for interacting with parents or caregivers, experiences in high need schools, and experiences with each of the following student populations: socioeconomically disadvantaged students, students who are English language learners, and students with disabilities.

Prerequisite: Secondary Education 2001, 2002, 3456, 3401, 3402, 4480.

Corequisite: Secondary Education 4483.

## SEED 4501 Science Education Research Seminar

4 hours of lecture and minimum of 9 conference and independent work hours; 3 credits
Introduction to concepts of educational research, including design of research, data analysis, and utilization of results of research. Introduction of students to the methods of research in science education and uses of technology to access, process, and analyze data. Development of student familiarity with general procedures and methods used in educational research literature, design and performance of research investigation on an appropriate topic of interest in science education, and integration of research experience into science learning and teaching.

Prerequisite: Instructor's permission.

## SEED 4502 Advanced Methods in Science Education Research Seminar

4 hours of lecture, minimum of 9 conference and independent work hours; 3 credits
Advanced seminar in concepts of educational research, including design of research, data analysis, and utilization of results of research. Designed for students who have already been introduced to the methods of research in science education and uses of technology in accessing, processing, and analyzing data. Student development of familiarity with general procedures and methods used in educational research literature, design and performance of research investigation on an appropriate topic of interest in science education, and integration of research experience into science learning and teaching.

Prerequisite: SEED 4501, Instructor's permission.

## Kinesiology courses

## KINS 1003 Fundamental Skills in Movement Activity (Fencing)

2 hours; 1 credit
Fundamental techniques and skills in individual and dual sports, team sports, gymnastics, aquatic sports, and rhythmic movement activities.
Students may be required to provide equipment or supplies for these courses. (Not open to students who have completed an equivalent course.)

## KINS 1004 Fundamental Skills in Movement Activity (Golf)

2 hours; 1 credit
Fundamental techniques and skills in individual and dual sports, team sports, gymnastics, aquatic sports, and rhythmic movement activities. Students may be required to provide equipment or supplies for these courses. (Not open to students who have completed an equivalent course.)

## KINS 1009 Fundamental Skills in Movement Activity (Tennis)

2 hours; 1 credit
Fundamental techniques and skills in individual and dual sports, team sports, gymnastics, aquatic sports, and rhythmic movement activities. Students may be required to provide equipment or supplies for these courses. (Not open to students who have completed an equivalent course.)

## KINS 1012 Fundamental Skills in Movement Activity (Basketball-Men)

2 hours; 1 credit
Fundamental techniques and skills in individual and dual sports, team sports, gymnastics, aquatic sports, and rhythmic movement activities. Students may be required to provide equipment or supplies for these courses. (Not open to students who have completed an equivalent course.)

## KINS 1014 Fundamental Skills in Movement Activity (Soccer)

2 hours; 1 credit
Fundamental techniques and skills in individual and dual sports, team sports, gymnastics, aquatic sports, and rhythmic movement activities. Students may be required to provide equipment or supplies for these courses. (Not open to students who have completed an equivalent course.)

## KINS 1015 Fundamental Skills in Movement Activity (Softball)

2 hours; 1 credit
Fundamental techniques and skills in individual and dual sports, team sports, gymnastics, aquatic sports, and rhythmic movement activities. Students may be required to provide equipment or supplies for these courses. (Not open to students who have completed an equivalent course.)

## KINS 1018 Fundamental Skills in Movement Activity (Volleyball)

2 hours; 1 credit
Fundamental techniques and skills in individual and dual sports, team sports, gymnastics, aquatic sports, and rhythmic movement activities. Students may be required to provide equipment or supplies for these courses. (Not open to students who have completed an equivalent course.)

## KINS *+1100 Fitness and Conditioning

2 hours; 2 credits
A beginning experience in general physical fitness and conditioning, including aerobic and resistance training activities.

## KINS *+1101 Aerobic Training

2 hours; 2 credits
A beginning experience in physical fitness and conditioning utilizing a progression of aerobic training techniques including walking/jogging/running and machine based activities.

## KINS *+1102 Weight/Resistance Training

2 hours; 2 credits
A beginning experience in physical fitness and conditioning utilizing weights and other forms of resistance training activities.

## KINS *+1105 Self-Defense

2 hours; 2 credits
A beginning experience in basic self-defense activities.

## KINS * +1110 Tennis

2 hours; 2 credits
This course is designed to provide students a beginning experience in tennis (singles and doubles).

## KINS *+1111 Racquetball

2 hours; 2 credits
This course is designed to provide students a beginning experience in racquetball (singles and doubles).

## KINS*+1115 Basketball

2 hours; 2 credits
A beginning experience in basketball.

## KINS * +1116 Soccer

2 hours; 2 credits
A beginning experience in soccer.

## KINS *+1117 Volleyball

2 hours; 2 credits
A beginning experience in volleyball.

## KINS *+1120 Swimming

2 hours; 2 credits
A beginning experience in swimming.

## KINS *+1125 Ballroom Dance

2 hours; 2 credits
A beginning experience in ballroom dance.

## KINS * +1130 Pilates

2 hours; 2 credits
A beginning experience in pilates and how to train for it.

2 hours; 2 credits
A beginning experience in yoga and its history.

## KINS *+2002 Introduction to Modern Dance I

4 hours; 3 credits
Introduction to the basic elements of modern dance technique and how to teach them.

## KINS * +2003 Modern Dance II

4 hours; 3 credits
Intermediate elements of modern dance technique. Continuation of Kinesiology 2002.

## KINS * 2004 Independent Study in Dance

1 hour; 1 credit
Research, observation and critique of dance performance(s) associated with historically significant dance choreographers and/or performers from recorded media archives.

## KINS *+2011 Lifeguarding

1 hour recitation, 2 hours activity; 2 credits
Skills and knowledge necessary to provide a safe aquatic environment at a lakefront or pool; entry-level requirement for beach lifeguarding. Organizational and administrative practices. Students successfully completing this course may be eligible to apply for American Red Cross Lifeguard certification.

Prerequisite: permission of the department chairperson and the ability to swim continuously 300 yards.

## KINS * +2500 Personal Fitness

3 hours; 3 credits
Contemporary health topics and issues. Students examine health risk and protective factors that influence the individual's achievement of optimal health across the life span. This course is designed to help students understand their responsibility for their health. The themes of the course include personal decision-making and physical activity. Self-assessment inventories are used to involve students in any health issues and provide a means for applying health information in personal decision-making. The goal of this course is to explore major personal health topics and to apply them in order to achieve, maintain, and promote high-level health. A minimum grade of " C " in this course is required of Physical Education and Exercise Science majors for the degree.

## KINS 3001 Anatomy and Physiology for Physical Education

3 hours lecture, 2 hours lab; 4 credits
This course provides an examination of the structure and function of the major body systems, with emphasis on the muscular, skeletal, cardiovascular and respiratory systems. It introduces basic concepts in understanding of the chemical, cellular and tissue levels of structural organization, and explores the nervous, endocrine, digestive, urinary and reproductive systems. The course must be taken by majors in Physical Education Teacher Education but is open to other students. It does not serve as a substitute for those needing Anatomy \& Physiology as a pre-requisite for Exercise Science, Physical Therapy, etc. Students should consult with their advisors for clarification.

## KINS 3150 Digital Technology in Kinesiology

2 hours lecture and lab; 1 credit
Detailed examination and practical experience utilizing various digital technologies including Dartfish Connect Motion Analysis Software (www.Dartfish.com, Dartfish USA, Inc). Experience in desktop publishing, data entry and analysis, producing slides, digital photography and video capture/editing. Students registered for this course must also be registered for Physical Education and Exercise Science/Kinesiology 4250. Skills acquired in this class are important for success in Physical Education and Exercise Science/Kinesiology 4250, 4260, 4750, 4760, 4406 or Secondary Education 4406, and Physical Education and Exercise Science/Kinesiology 4412 or Secondary Education 4412.

## KINS 3295 Motor Development and Learning

3 hours; 3 credits
Students gain knowledge of motor development and learning and principles. Topics include the processes of skilled motor performance and motor skill acquisition, human motor development from childhood through older adulthood, the influence of perceptual, cognitive, physiological, and social development on motor development. Emphasis is on the practical application of concepts to the teaching of motor skills. A minimum grade of C is required of Department of Kinesiology majors for this course.

Prerequisite for Exercise Science students: Kinesiology 3281 and 3285, each with a minimum grade of C.

Prerequisite for Physical Education students: Kinesiology 3001 Anatomy and Physiology for Physical Education, with a minimum grade of C .

## KINS 3321 Physical Education for the Emotionally Disturbed and Physically Disabled

3 hours; 3 credits
Physically disabling emotional and physical disorders. Special services and programs to aid disabled people in developing their full potential; role of physical education in this development. Principles and methods of adapted physical education.

Prerequisite: one of the following: Physical Education *1507 [1], Education 48.1, 58.1, 60.1, permission of the chairperson.

## KINS 3324 Field Experience for Therapeutic Recreation and Adapted Physical Activity

3 hours seminar, 6 hours fieldwork; 2 credits
Applied supervised experience in teaching youth with disabilities in an inclusive setting and in more restrictive settings when the needs of the student require additional support. The student's expressed professional preference/objective will be considered in placement as applicable. Seminar-based class meetings with the College instructor and active participation and observation of the implementation of APA and or TR in a setting outside the college community for a total of no less than 80 hours. It is recommended that this course be taken late in the sophomore year or early in the junior year.

Prerequisite: candidacy for a B.S. degree with a major in physical education and a minor in adapted physical education and therapeutic recreation; sophomore/junior standing; Physical Education/Kinesiology 3000.
Co-requisite: KINS 3325 (absolute requirement).

## KINS 3401 Diversity and Inclusion in Physical Education

3 hours recitation, 25 hours field experience; 3 credits Current theory and methods of teaching inclusive physical education to students from diverse backgrounds including but not limited to culture, race, religion, gender and disability. Includes issues of language development and diversity, differences between written and spoken language, teaching students of diverse linguistic and cultural backgrounds and those with special needs, A minimum grade of " B " in this course is required of Physical Education and Exercise Science majors for the degree.

Prerequisite: Secondary Education/Childhood and Special Education 2001 and 2002.

## KINS 3402 Integrative and Multidisciplinary Teaching and Learning in Physical Education

## 3 hours; 3 credits

Theories and practices supporting curriculum design in the content area of physical education. Study, analysis, and development of content-specific standards-based curriculum units that include diagnostic, formative, and summative assessments. Research-based models and instructional practices for inclusive settings, including students with special needs, gifted and talented students, English Language Learners, and heterogeneous ability groupings. Special emphasis on literacy across all content areas and alignment of planning and instruction with State and National standards. Overview, preparation and planning for New York State teacher certification; support development of portfolio for licensure assessment.

Prerequisites: Secondary Education 2001, 2002, Kinesiology 3000.

## KINS 4200W Physiology of Exercise

2 hours lecture; 2 hours laboratory; 3 credits Study of body systems and organs during physical activity with emphasis on metabolic, cardio respiratory, and body composition parameters. Laboratory experiences employing physiological principles during active participation in exercise are also included. This is a writing intensive course. A minimum grade of $C$ is required of Physical Education and Exercise Science majors for this course. Lab fee applies.

Prerequisite for Exercise Science students: Kinesiology 3281 and 3285, each with a minimum grade of C; English *1012.

Pre-requisite for Physical Education students: Kinesiology 3001 Anatomy and Physiology for Physical Education, with a minimum grade of C; English *1012.

## SEEK Program

## Department office: 2208 Boylan Hall <br> Phone: 718.951.5738

The Search for Education, Elevation, and Knowledge (SEEK) Department is the Brooklyn College branch of the legislativelymandated higher education opportunity program at each of the senior colleges of the City University of New York. Established in 1966, the SEEK program provides special academic, financial, and counseling assistance to students entering college for the first time. The program is designed to advance equality in higher educational opportunity at the City University of New York.

SEEK students at Brooklyn College have the same academic requirements for their major and electives as other students. Each selects a major from the wide range offered in the humanities, social sciences, sciences, and the arts. Each enrolls in the required, rigorous general education curriculum that provides a strong foundation.

In preparation for their first semester at the College, every SEEK student participates in a challenging, structured summer program that consists of developmental workshops, Pathways courses, Lunch and Learn sessions, cultural enrichment field trips, tutoring, counseling, and supplemental instruction.

At the start of their first semester, all SEEK freshmen register in the SEEK Freshman Year Program, a learning community that, together, takes pre-Pathways, Pathways, mathematics, or other courses selected from the College's various academic departments. This program, recipient of three prestigious U.S. Department of Education FIPSE grants, smoothes the freshman's transition to Brooklyn College.

As part of the freshman year program, all SEEK students enroll in a special orientation workshop taught by a counseling professional, who becomes the students' counselor for the length of their undergraduate studies. These counselors provide the academic, personal, and career support that facilitates SEEK student success. In addition, throughout their Brooklyn College careers, SEEK students participate in a comprehensive tutoring and supplemental instruction program. They are required to complete Benchmark Portfolios for Success that help them measure their achievements.

The SEEK program encourages high academic standards through its SEEK Scholars Program, SEEK Pre-Scholars Program, SEEK Honors List, and its chapter of Chi Alpha Epsilon, a national honor society for Opportunity Program students. SEEK graduates find employment in the public, private, and nonprofit sectors, and make their careers in education, business, industry, and government.

## Courses

## SEEK 1001 Counseling Workshop

2 hours; no credit
Introduction and orientation to college and school policies and procedures. Special emphasis on developing clear understanding regarding the curriculum requirements. Students are instructed in the use of the library's resources, in development of study techniques, and in selection of a major. Placement must be approved by the SEEK Department.

## SEEK 1002 Career Workshop

2 hours; no credit
Designed to introduce the student to the world of work, educational and career planning, sources of occupational and training information, and techniques of assessing the student's own vocational interests, abilities, and values. Students will study thoroughly at least four occupations relevant to their interests and complete an educational plan that is consistent with college requirements and their standard goals. Placement must be approved by the SEEK Department.

## Sociology

Department office: 3612 James Hall
Phone: 718.951.5314

## Full-time Faculty

Professors: Bank Munoz, Braine, Gould, Lewis, Mose, Porter, Saint Paul, Shortell, Smithsimon, Vitale
Associate Professors: Fox, Manohar, Molina, Pan
Assistant Professors: Granville, Johnson, Shtob

Sociology focuses on the workings of societies, their institutions, organizations and groups. By introducing you to the concepts, theoretical frameworks, and methodological techniques of sociology, we will help you develop a "sociological imagination," leading to a deeper understanding of the relationships between personal experience (your own and others') and the larger social world. In all of your sociology courses you will be asked to examine and question the "world we take for granted." We offer you a special lens to view both contemporary and historical social phenomena. The range of courses in the curriculum will not only expose you to diverse social issues and social structures but also emphasize the dynamics of power and inequality on local, national, and global levels. Our courses emphasize the concepts and practice of social justice, civic and community involvement, and the rights and responsibilities of global citizenship. Our curriculum facilitates understanding of how and why societies develop, are maintained, and change, how the intersections of race, ethnicity, class, age, gender, and sexuality affect personal and social experiences and institutional arrangements, the interactions of social systems with ecosystems, and the dynamic interplay between social forces. Our courses encourage you to make your own discoveries about social experiences and to communicate these discoveries. All include opportunities to develop critical thinking, writing and speaking skills, and visual literacy. In the course of your sociology education, you will learn to produce reflective, logical texts by summarizing arguments concisely, synthesizing different forms of data, evaluating evidence and arguments, writing in a professional style, and presenting research material clearly.

The Department of Sociology offers a bachelor of arts and a master of arts degree in sociology, as well as minors in urban policy, law, criminal justice, and business-related areas. Our curriculum has an urban focus, with depth in the areas of urban studies, race and ethnicity, immigration, work and labor, social policy and urban sustainability. We are committed to quality teaching and providing a full range of support services to our students, the production of policy-relevant social research, and service to the Brooklyn community. Our teaching and research is strongly rooted in Brooklyn's sociologically rich and vibrant environment.

Graduates of our program pursue diverse careers in such fields as public policy, law, education, public service, marketing, and industry. In all of these settings, they bring curiosity about the diverse ways that humans create, transform, and adapt to their surroundings, an understanding of the world, and public intellectualism through attentive, creative, and articulate engagement with community affairs and social issues.

Many of our students go on for advanced degrees to further their career goals. Students who wish to pursue graduate studies may apply to the master's and doctoral degree programs offered by, or in conjunction with, this department.

## B.A. degree program in sociology HEGIS code 2208; SED program code 02111

Department requirements ( 38 credits)
All of the following: Sociology 1101, 2101, 2102, 2111, 2112 and 5201W. Sociology 5201W, a writing intensive course, is a capstone seminar to be taken in the senior year.

Five additional courses from Sociology Department courses numbered 2000 and higher.
Each course must be completed with a grade of C or higher. A grade of B- or higher in Sociology 2101, 2102, 2111, and 2112 is the prerequisite for Sociology 5201W.
To qualify for honors in sociology, students must have:

* an average of 3.50 or higher in sociology,
* 3 credits of honors work in Senior Seminar (SOCY 5201W), and
* the recommendation of the department.


## B.A. degree program in adolescence education: social studies teacher HEGIS code 2201.01; SED program code 26754

Adolescence education (grades 7-12) programs are writing intensive.
Program requirements
Students who wish to pursue a bachelor of arts degree in Secondary Education for social studies teacher must complete a major in one of the following: Africana studies, American studies, anthropology, economics, history, political science, Puerto Rican and Latino studies, or sociology.

Study must include within the major, or in addition to courses in the major, study in economics, government, and at least 21 credits in the history and geography of the United States and the world, including Secondary Education 3584. Students preparing to become social studies teachers must fulfill the economics and government requirements by taking at least one course ( 3 credits) from among: History 3345, 3410, 3420, 3424, $3430,3441,3442,3450,3457$, or a course in Political Science numbered between 3101 and 3160; and at least one course (3 credits) from among: History 3332, 3470, 3472, 3512 or Economics 2002, 2100, 2200, 3102, 3152, or 3202.

The following pedagogical courses in the Department of Secondary Education: Secondary Education 2001, 2002, 3401, 3402, 4408, 3456, 4482 (total of 28 credits):

Secondary Education 2001, 2002, 3401, 3402. This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.

Secondary Education 3456 may be started after completing Secondary Education 2001 and 2002.
Student teaching: Secondary Education 4401, 4408, and 4482.
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department. Degree programs in adolescence education and include a major in an appropriate department of the college and in the case of social studies may also include an approved selection of interdepartmental courses.

Completion of an adolescence education program as part of a major in English, one of the appropriate social sciences, mathematics, or one of the sciences qualifies students for New York State initial certification in adolescence education for grades 7 through 12.

Students qualifying for the initial certification in adolescence education may obtain an extension to teach English, social studies, mathematics, a modern language, or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

Students must complete 26 credits in the Department of Secondary Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

Students must have a B- in both Secondary Education 2001 and 2002, New York City Department of Education Fingerprint clearance, and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

To take Secondary Education 4401, 4404 and 4482, students must earn a B- or higher in Secondary Education 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of the program.

Students must earn a B- or higher in Secondary Education 4401, 4404 and 4482 and a GPA of 2.75 or higher in their major.

## Departmental Minor(s)

## Minor in Business and Society

Department Requirements

## All of the following:

Economics 2100; Business 3200; Business 3100; Sociology 3607.
Two courses from the following:

Sociology 3204, 2201, 2602, 2500, 2600, 2601, 2800.

## Minor in Consumer Behavior

Requirements for an interdisciplinary minor in consumer behavior
All of the following:
Business 3100; Business 3130 or Television, Radio \& Emerging Media 2517; Business 3140; Sociology 3203.
Two courses, one chosen from each of two of the following areas:
Area 1: Sociology 2400, 2602, 2600, 2601.
Area 2: Business 3120/Computer and Information Science 1530, Business 3170.
Area 3: Psychology 2100, 3171.

## Minor in Criminal Justice

Department Requirements
All of the following:
Political Science 3120; Sociology 3504.
Three courses chosen from among the following:
Africana Studies 3330, 3331.
Anthropology 3162.
Philosophy 3320, 3740.
Political Science 3123, 3122, 3240, 3243.
Psychology 3660.
Puerto Rican and Latino Studies 3550.
Sociology 3503, 2500, 2501, 2502.
Each course must be completed with a grade of C or higher.

## Minor in Human Resource Development and Management

Department Requirements
All of the following:
Business 3240 or Psychology 3172; Business 3200 or Sociology 3607 or 2603.
Four courses, two chosen from each of the following areas:
Area 1: Psychology 2100; Sociology 2201, 2605, 2400, 2600, 2601.
Area 2: Business 3100, 3210, 3230, 3140; Psychology 3171.

## Minor in Human Resource Management and Diversity Studies

## Department Requirements

All of the following:
Business 3240 or Psychology 3172; Business 3200 or Sociology 3607 or 2603; Sociology 2600 and 2601.
Two courses, one from each of two of the following three areas:
Area 1: Africana Studies 3324, 3330.
Area 2: Judaic Studies 3017; Women's and Gender Studies 1001, 3340.
Area 3: Puerto Rican and Latino Studies 3105, 3210, 3215, 3220, 4645.

## Minor in Law and Society

Department Requirements
Twelve credits chosen from the courses of two or more departments as specified below. Each course must be completed with a grade of $C$ or higher.
Africana Studies 3330, 3331; Anthropology 3160, 3162; Classics 3234; Political Science 3120, 3121, 3130, 3123, 3122, 3240; Sociology 3503, 3504.

Courses in anthropology presented for this minor may not be counted toward the anthropology major.
Courses in political science presented for this minor may not be counted toward the political science major.
Courses in sociology presented for this minor may not be counted toward the sociology major.

## Minor in Sociology

## Department Requirements

SOCY *1101 Introduction to Sociology and at least 12 credits in advanced sociology, in courses numbered 2000 or higher, with a grade of $C$ or higher in each course. A minimum of nine of these credits must be completed at Brooklyn College. Sociology minors are urged to consult with departmental counselors to plan an appropriate sequence of courses.

## Minor in Urban Policy

Requirements for a minor in urban policy:
Sociology 1101, and:
Five additional courses, two selected from Area 1 and three selected from Area 2:
Area 1: Sociology 3303, 3304, 3504.
Area 2: Sociology 3204, 2200, 2201, 2500, 2502, 3206.
Each course must be completed with a grade of C or higher.

## Interdepartmental Minor(s)

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C- or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Sociology

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs and elect a concentration in sociology must complete 30 credits in the Sociology Department with a grade of C or higher in each course. Students must meet with a Sociology Department adviser to declare their intention to complete this concentration. They should also meet with an adviser in the School of Education regarding the appropriate sequence of teacher education courses.

Concentration requirements:
Sociology 1101, 2101, 2102, 2111 and 15 credits of advanced sociology (courses numbered 2000 or higher).

## Graduate Studies

The Sociology Department offers a master of arts degree program in sociology. Some courses may be creditable toward the CUNY doctoral degree. For information, students should consult the department chairperson.

## Courses

*Courses marked with an asterisk (*) do not count as advanced courses for the completion of the major.
§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor. The student's grade is determined in part by the successful completion of this independent work.

## SOCY *1101 Introduction to Sociology

3 hours; 3 credits
Survey of the concepts, methods, theories, and principles with which sociology interprets social behavior. Emphasis on the structure and problems of contemporary society.

## SOCY *1102 Contemporary American Society

3 hours; 3 credits
The sociology of life in America today, and the social forces or processes which give contemporary American life its unique qualities. Discussion and readings will focus on social realities which affect everyone, such as the experience of working, social class, ethnicity, family life, and male-female relationships.

## SOCY *1200 Sociology of Sport

## 3 hours; 3 credits

Sport in society. Race, ethnicity, class, gender, sexuality, power and inequality, socialization, social conflict, social solidarity in the context of contemporary sports in the US and globally. Analysis of current issues. Critical view of sports in media, education, politics. Collaborative projects. Starting Spring 2018 Satisfies Pathways Flexible Core Individual and Society requirement.

## SOCY *1201 Sociology of Hip Hop

3 hours; 3 credits
Introduction to the social, political, and performative aspects of Hip Hop. Includes social theory, urban sociology, and research into hip hop culture, music, dance, graffiti, race, gender, and sexuality. Starting Fall 2019 Satisfies Pathways Flexible Core US Experience in Its Diversity requirement.

## SOCY 2101 Classical Social Theory

4 hours; 4 credits
Overview of classical theories in sociology. Focus on industrial capitalism in Western Europe. Development of theories related to division of labor and subsequent stratification systems. Analysis of class, power, inequality, urban development, and research methods.

Prerequisite: Sociology *1101 [5] or permission of the chairperson.

## SOCY 2102 Contemporary Social Theory

4 hours; 4 credits
Overview of contemporary sociological theories. Focus on major theorists and schools of sociological theory from mid-20th century to the present. Analysis of research methods and theoretical concepts as related to class, structure and agency, gender, race, globalization, feminism, and post-modernism. Techniques for writing about sociological ideas.

Prerequisite: Sociology *1101[5] and 2101 [18], or permission of the chairperson.

## SOCY 2111 Research Methods I

3 lecture hours, 2 laboratory hours; 4 credits
Basic concepts and principles of qualitative methodology in sociology. Logic of analysis. Principles of research design in qualitative modes. Content coding. Interviewing. Observational data collection. Writing sociological research.

Prerequisite: Sociology *1101 [5], or permission of the chairperson.

## SOCY 2112 Research Methods II

3 hours lecture; 2 hours lab; 4 credits
Basic concepts and principles of quantitative methodology in
sociology. Logic of analysis. Principles of research design in quantitative modes. Survey design. Applied demography. Program evaluation. Introduction to inferential statistics. Data analysis with statistical software.

Prerequisite: Sociology *1101 [5] and 2111 [19], or permission of the chairperson.

## SOCY 2200 Urban Life and Culture

3 hours; 3 credits
Changing images of the city explored through art, film, television, and other media; development of urban spaces for cultural production and consumption; alternative lifestyles of different communities. Research may include ethnography, interview projects, media analysis, and visual documentation.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 2201 Sociology of the Environment

3 hours; 3 credits
Society's relationship to the natural environment. Origins of major environmental stresses and political conflicts associated with them. Role of society's utilization of natural resources in creating crises, how society identifies environmental stresses as social problems and how social responses to environmental problems lead to political conflicts. Outcomes of environmental conflicts; development of integrated, viable solutions to Socio-environmental problems.

Prerequisite: any one of the following: Core Curriculum 1220 [2.2], [2.3], 1230, Core Studies 3, 4, 9, History 3005, Urban Sustainability *1001 [1], Sociology *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 2300 Urban Caribbean Diaspora

3 hours, 3 credits
Introduction to urban issues facing transnational communities; political, economic and sociological analyses of Caribbean Diaspora, with a focus on African descendants, in urban environments; problem-based and place-based approaches; data analysis, group projects. This course is the same as Caribbean Studies 2300 and Puerto Rican and Latino Studies 2300.

Prerequisite: SOCY 1101 or SOCY 1200 or SOCY 1201 or Puerto Rican and Latino Studies 1001 or Caribbean Studies 1001

## SOCY 2400 The Family

3 hours; 3 credits
Examination of the structure and function of the family and its relationship with such other institutions of the society as religion, the economy, and the political system; family as a unit of interaction. Family types will be compared: the traditional family, the dual-career family, and the single-parent household; alternatives to the family will also be discussed. (Not open to students who have completed Sociology 21.)

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 2401 Sociology of Children

3 hours; 3 credits
Sociological analysis of children and childhood. Historical and cross-cultural differences in attitudes toward children.

Socialization processes, the family, peer cultures, education, mass media, children as consumers. Such social problems as social inequality and poverty; divorce, adoption, and foster care; racial discrimination; differential schooling; children at risk.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 2402 Aging in America

3 hours; 3 credits
Aging in industrial and preindustrial societies. Age discrimination and the "new aging." Aging as a stage in the life cycle. The changing American family and the aging parent. Leisure, retirement, and social networks. Constraints and adaptation in the later years. Aging: the challenge to individuals and society. (Not open to students who have completed Sociology 3902 [22.1], Topic:
"Beyond the Youth Culture: Aging in America.")
Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 2500 Social Problems

3 hours; 3 credits
Problems generated by conflicting demands within the social structure of American society. Discussions and readings about social problems related to crime, work, urban life, race, ethnicity, and business organizations. (Not open to students who have completed Sociology 14.)

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 2501 Deviant Behavior

3 hours; 3 credits
Sociological theories of deviant behavior including social causation, labeling, stigmatization. Sexual deviance, suicide, alcoholism, drug abuse, juvenile delinquency, counterculture. (Not open to students who have completed Sociology 33.1 or 39.)

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 2502 Blacks in the American Criminal Justice System

3 hours; 3 credits
Exploration of the relationship between African Americans and the criminal justice system. Sociological theory and methods of collecting and understanding information. Assessment of the political, social, and economic institutions of American society as they frame race, crime, and punishment. Ways that the American criminal justice system has operated to both maintain and ameliorate a racially oppressive society. This course is the same as Africana Studies 3331.

## SOCY 2600 Gender and Society

3 hours; 3 credits
Gender as a system of inequality that shapes social life and the distribution of resources and privilege. Particular attention to gender as a social construct and the real consequences of gender in different social institutions such as the workplace, family, and schools. Discussion of movements for gender equality. This course is the same as Women's and Gender Studies 3420.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or
permission of the chairperson.

## SOCY 2601 Race and Ethnicity

3 hours; 3 credits
Sociological approaches to the study of racial and ethnic relations. Historical and contemporary constructions of identity, assimilation, stratification, and interaction between groups. This course is the same as Africana Studies 3328.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 2602 Social Class

3 hours; 3 credits
Formation of social classes. Leading theories of class. History of American class system. Critical examinations of studies of class. Intersection of class stratification with race and gender in contemporary society.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 2604 Social Change

3 hours; 3 credits
Continuity and change in society. Changing concept of social change. Theories of social change. Factors and determinants of social change. Problems of planning, inducing, controlling social change. (Not open to students who have completed Sociology 73.)

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 2605 Social Interaction

3 hours; 3 credits
Analysis of the interaction perspective in sociological theory. Social rules explaining such sociological concerns as maintenance of identity, ascription of motives and intention; production of mental illness in interaction; production of conversation and language; the idea, orientation, process of social inquiry.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 2700 Sociology of Religion

3 hours; 3 credits
Religion as a social institution. The nature of inter-group conflict. Patterns of belief, ritual, organization, and experience. Religion and urban culture. Religion and politics, family, gender, race, and social class. Religion and social change.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 2701 Sociology of Science and Technology

3 hours; 3 credits
Prerequisite: Cultures of science and engineering. Development of scientific ideas. Social context for scientific work and technological innovation. Institutional influences on scientific research agendas and technological development trajectories. Scientific communications. Resistance and receptivity to science and technology. Science, technology and social change.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 2800 Mass Communications and Mass Media

3 hours; 3 credits
The role of mass media in modern society. The importance of propaganda, public relations, and public opinion; the effects of advertising on everyday life, and the origins of consumer culture; the consequences of violence in TV and film; the reasons for news distortions in print and broadcast journalism. (Not open to students who have completed Sociology 52.)

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3202 Race, Class, and Environmental Justice

3 hours; 3 credits
Processes that create inequality and how they impact the uneven distribution of environmental degradation and protection. Placement of hazardous facilities in minority communities, unequal protection of environmental health, employment structure of hazardous industrial workplaces, socio-ecological conditions of migrant farm workers, extraction of resources from Native lands, population control initiatives directed at peoples-of-color, and the national and transnational export of toxic waste.

Prerequisite: any one of the following: [Core Curriculum 1220 [2.2], Core Studies 4, 9,] History 3005, Urban Sustainability *1001
[1], SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson

## SOCY 3203 Consumer Society and Consumer Culture

3 hours; 3 credits
Development of consumer society in modern times, with emphasis on the United States and comparison with other countries. Critical analysis of major institutions, media, and social and cultural norms, and gender, generational, and ethnic identities, that shape and reflect global consumer culture.

Prerequisite: one of the following: Business 3100 [50.2]; SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson

## SOCY 3204 Urban Sociology

3 hours; 3 credits
Urban and rural communities. Impact of community, social context, ecology on institutions and people. Social structure of the suburbs. Sociological factors of planning in metropolitan areas.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3205 Sociology of Globalization and Sustainability

3 hours; 3 credits
Nature and effects of globalization in the U.S. and internationally. Rise of multinational institutions and their critics. Immigration and cultural transformation in response to political conflict, economic dislocation and environmental change. Effect on race, class, and gender inequality.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3206 Sociology of Immigration

3 hours; 3 credits
Immigration in both historical and contemporary context. Major
sociological perspectives on immigration. The immigrant experience in the U.S. Discriminatory policies toward immigrants.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3207 Sociology of Education

3 hours; 3 credits
Education as a social institution. Theoretical perspectives, empirical studies and policy. The organization and structure of the American education system; inequality; peer-groups and socialization; race/class/gendered experiences in schools; current issues with the American education system; the politics of reform.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3303 Contemporary Urban Social Welfare Policy

3 hours; 3 credits
Development and re-organization(s) of U.S. welfare state in the 20th and 21st centuries, emerging directions and systems, underlying theoretical frameworks. Takes a theoretical approach to understanding social welfare systems in relation to larger social struggles over political and economic power, labor markets, and social inequality. Examines changes in policy in relationship to the state, economy, and corporations, and how policy changes impact low income communities. Situates welfare policy in relation to social movements and both the maintenance of and changes in class, race, and gender stratification, as well as historical changes in social constructions of race and gender. This course is the same as Women's and Gender Studies 3122.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3304 U.S. Drug Policy at Home and Abroad

3 hours; 3 credits
Development of U.S. drug policy from the early 20th century through the contemporary era, with attention to both domestic and international dynamics of these policies. Role of drug policy as a mechanism for regulating marginal social groups, immigration, and economic interests in the U.S. and other countries. Impact of U.S. drug policy and drug control strategies on population and economic development. Relationship between drug policy, social constructions of race, gender and class, and larger patterns of social and economic change.

Prerequisite: Sociology *1101 [5] or permission of the chairperson.

## SOCY 3305 Sociology of Housing

3 hours; 3 credits
Housing remains among the United States' most enduring social problems. This course provides an introduction to major housing problems in the U.S. and the social contexts and debates that surround them. Integrating sociological and related theory and methods, the course considers: major issues the U.S. faces in housing its population; the social, political, and economic contexts that contribute to them; the major social debates that frame them; and possible policy solutions.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

4 hours, 4 credits
Key areas of global cities, such as rural-urban migration, labor, housing and land use, health, and transportation, from a comparative perspective. Spans continents and specific geographical regions. Focus on tensions in urban politics in national and international policy-making contexts. This course is the same as Political Science 3347.

Prerequisite: Political Science course in the 1000-level range, or SOCY*1101 [5], or SOCY 1200 or SOCY 1200, or English 1010 or equivalent, or permission of the chairperson.

## SOCY 3446 Transgender Theories and Politics

## 4 hours; 4 credits

Study of transgender identities, sets of practices, social movements, and interventions in gender studies and queer theory. Theoretical overview of key early texts in gender theory.
Subsequent readings on social and legal constructions of sex in the United States and internationally and on social and political movements for transgender rights and gender self-determination. Examination of trans as both as a particular kind of claim for gender recognition and as a move away from norms organized around the gender binary. This course is the same as Women's and Gender Studies 3352 and Political Science 3446.

Prerequisite: Any Political Science course in the 1000-level range, or Women's and Gender Studies 1001 or Sociology 1101 or permission of the Chairperson, or English 1010 or equivalent, or permission of department.

## SOCY 3503 Sociology of Law

## 3 hours; 3 credits

Function of law in society. Relationships between social values, conduct, law. Comparison of legal institutions in primitive and modern societies. Laws in the context of family and occupational structure of the United States. Consideration of extent to which legal change can affect established patterns of social behavior. (Not open to students who have completed Sociology 34.)

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3504 Criminology

3 hours; 3 credits
Nature and cause of crime; its relationship to social structure. The criminal in society. Approaches to the study of crime and its treatment and prevention. (Not open to students who have completed Sociology 33.)

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3505 Sociology of Public Health

3 hours, 3 credits
Examination of the relationship between social, economic, and political systems and population-level patterns of health and illness. How a range of social policies not directly health-related, such as housing, shape health, illness and life expectancy across US populations. Interaction of race, class, gender and other systems of stratification with dynamics of health and illness. This course is the same as HNSC 3505.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3506 Mapping Social Data

## 3 hours; 3 credits

The objectives of the course are to acquaint students with methods to analyze spatially-referenced data with the procedures appropriate for a sociological theoretical base. Topics include coverage of essential theoretical concepts, the visualization of social data in Geographic Information Systems (GIS), techniques to construct or analyze social point, line, and polygon data using exploratory and confirmatory spatially-centered analytical approaches.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3507 Data Analytics and Data Visualization in the Social and Behavioral Sciences

3 hours; 3 credits
How the "data revolution" has transformed the way we understand and interact with the world around us. Fundamental concepts and practical techniques and skills needed for data analytics and data visualization. Availability of large datasets and their use across a variety of settings, including social networks, libraries, governments, non-profits, etc. Emergence of practices with regard to data analysis and visual communication in the social and behavioral sciences. This course is the same as PSYC 3470.

Prerequisite: PSYC 1000 or SOCY 1101 and SOCY 2112 or PSYC 3400

## SOCY 3604 Population and Society

3 hours; 3 credits
Introduction to the sociological study of population, basic issues, theories, concepts, and measures. Historical and contemporary views; developed and developing countries. Population change, fertility, mortality, immigration; social demography, including race, religion, class, and gender.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3605 Social Movements

3 hours; 3 credits
Study of collective action motivated by political goals. Basic structures of social movements in the U.S. and internationally. Role of leadership, tactics, strategy, resource moibilization, cultural frames, opportunity structures, cycles of protest and reform, interaction with the media, globalization and international diffusion.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3606 Political Sociology

3 hours; 3 credits
Sociological analysis of mass movements. Social structure of political parties. Secret societies and underground movements. Social ideologists in relation to political and economic structure. Utopias and social myths as dynamic concepts. Socialism, anarchism, communism, fascism, nationalism, Pan-Slavism, PanGermanism, democracy. (Not open to students who have completed Sociology 75.)

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3607 Working 9-5? The Sociology of Work in the U.S.

## 3 hours; 3 credits

Major issues in the sociology of work. Theories and research in the field. Historical and contemporary nature of work. Shifts in the labor market. Race, gender, immigration, and work. This course is the same as Women's and Gender Studies 3229.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3608 Workers United: The Sociology of Labor and Capital

3 hours; 3 credits
Theories of labor and work. History of labor struggles and worker's rights in the U.S. and globally. Relationship between the labor movement and immigrant groups. Development of worker centers as a response to declining labor union density. This course is the same as Women's and Gender Studies 3319.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3609 Balancing Acts: Negotiating Work and Family Life in the Contemporary United States

3 hours; 3 credits
Sociological exploration of the competing responsibilities of paid work and family work in the contemporary United States. Perspectives of women, men, and children on work-family negotiations and conflicts. Diversity of work-family arrangements as organized by the intersection of gender, race/ethnicity, class, sexuality and nationality. Social policy for work-family balance. This course is the same as Women's and Gender Studies 3318.

Prerequisite: any one of the following: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or Women's and Gender Studies 1001 [12] or Sociology 3607 [43.2] or permission of the chairperson

## SOCY 3802 Visual Sociology

3 hours; 3 credits
Visual media as a method for sociological data collection and critical analysis. Representations of collective identity and social conflict. Introduction to history of visual media. Role of visual media in contemporary society. New media technology as social practice. photographs, film, and video as sociological data. A substantial field research project is required.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 3902 Special Topics

3 hours; 3 credits
Issues in social theory, social institutions, social and cultural processes, social organization, social policy. Topics vary from term to term. Course description may be obtained in the department office before registration. Students may not repeat topics completed in Sociology 60.1, 60.2, or 60.3.

Prerequisite: SOCY *1101 [5] or SOCY 1200 or SOCY 1201 or permission of the chairperson.

## SOCY 4900 Internship in Applied Sociology

1 hour lecture, 6 hours supervised fieldwork; 3 credits Supervised internships in organizations in the private and public
sector. Development of research and related skills in the study of formal organizations, group dynamics and leadership, urban planning, decision making, and market and evaluation research. Students will be responsible for required readings, a diary of field experiences and observations, and a term paper. (Students may elect to complete either one or two semesters, but 4900 is not required prior to 4901 . Only one internship course, either 4900 or 4901, may count towards the requirement that majors complete five advanced electives in Sociology.)

Prerequisite: at least three courses in sociology numbered 2000 or higher and permission of the chairperson.

## SOCY 4901 Internship in Applied Sociology

1 hour lecture, 6 hours supervised fieldwork; 3 credits Supervised internships in organizations in the private and public sector. Development of research and related skills in the study of formal organizations, group dynamics and leadership, urban planning, decision making, and market and evaluation research. Students will be responsible for required readings, a diary of field experiences and observations, and a term paper. (Students may elect to complete either one or two semesters, but 4900 is not required prior to 4901 . Only one internship course, either 4900 or 4901, may count towards the requirement that majors complete five advanced electives in Sociology.)

Prerequisite: at least three courses in sociology numbered 2000 or higher and permission of the chairperson.

## SOCY 5101 Independent Supervised Research I

Minimum of 9 hours conference and independent work; 3 credits Independent research supervised by a faculty member. Approved topic. Periodic conferences. Research paper. Not primarily for department honors.

Prerequisite: Permission of the chairperson.

## SOCY 5102 Independent Supervised Research II

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent research supervised by a faculty member. Approved topic. Periodic conferences. Research paper. Not primarily for department honors.

Prerequisite: Sociology 5101 and permission of the instructor and the chairperson.

## SOCY 5201W Senior Seminar

3 hours plus conference and independent work; 4 credits Capstone seminar for majors. Topics will vary each semester. Course description may be obtained in the Sociology Department office prior to registration. Final paper involves empirical research and is written in the style of an academic journal article. Writingintensive course.

Prerequisite: Sociology 2101, 2102, 2111, and 2112 with a grade of B- or higher; English *1012; senior status or permission of the chairperson.

# Television, Radio \& Emerging Media 

Department office: 304 Whitehead Hall
Phone: 718.951.5555
Full-time Faculty
Professors: Fry, Patkanian, Rodman, Sosa, Wasser
Associate Professors: Jannone, Macias, Moore, Robinson
Assistant Professor: Hashmi
Lecturer: Dunphy
The Department of Television, Radio \& Emerging Media seeks to cultivate in its students a deep understanding of electronic and emerging digital media and a proficiency in their use. Research, critical analysis, development and applied media production are key elements of the department's programs.

The department offers a bachelor of arts degree in television and radio, a bachelor of science degree in journalism and media studies, and minors in television and radio for film and theater majors, and a minor in journalism. We offer our students departmental scholarships, industry-sponsored internships, and teaching assistant and research credits. Our association with the College radio station (WBCR) gives our students the opportunity for involvement with the College community and exposure to state-of-the-art media and digital technology in the College's recording and broadcasting facilities.

Students' television production work is shown on CUNY-TV-Channel 75 in Manhattan, and on BCAT, Brooklyn's community access channel. Production work can also be found on the departmental YouTube channel. Radio production work is webcast internationally on www.brooklyncollegeradio.org, and locally over WBCR. In addition, student work appears on select National Public Radio programs.

Alumni of the department find jobs in a wide variety of communication professions, including advertising, public relations, crossplatform journalism, corporate communications, sales, and education, as well as in television and radio facilities and other digital media outlets. Many of our graduates are in leadership positions in these fields, and some return to us as adjunct instructors and curriculum development advisers. Many of our students seek advanced degrees to further their career goals. Students who wish to pursue graduate studies may apply to the master's programs offered by this department.

## B.A. degree program in television and radio HEGIS code 0603; SED program code 76212

Department requirements (36 credits)
All of the following: Television, Radio \& Emerging Media 1165, 2265, 2420, 2616, 4430W.
Two of the following: Television, Radio \& Emerging Media 3841 or 3861, or 3871, or 3951.
Nine additional credits in Television, Radio and Emerging Media Department courses numbered 2000 and higher.
An additional 6 credits of advanced course work in any department or area other than the departments in the School of Visual, Media, and Performing Arts. These credits must be approved by Television, Radio and Emerging Media faculty.

Students may not offer more than six credits for a baccalaureate degree from Television, Radio \& Emerging Media 4175, 4176, 4177, 4578 and 4870.

The department chair or program director may, with the approval of the chair of the department's undergraduate curriculum committee, allow substitutions for one or more required classes consistent with the educational goals of the program.

All the required courses used to meet these degree requirements must be completed with a grade of C or higher.
A student may not enroll for a third time in any course in which $s /$ he has twice received a grade of C or lower or the administrative grades of W or WU. An exception may be made following written appeal to the Department Chair, but only if a student can establish changed circumstances that would permit satisfactory performance in the course.

## B.S. degree program in journalism and media studies HEGIS code 0605; SED program code 83638

Department Requirements (48 credits)
I. All of the following: Television, Radio \& Emerging Media 1165, 2032, 2401, 2726W, 3401, 4401 and 4777; one of 3223 or 3535; and one of the following: 4177 or 5010.
II. Nine credits from the following: Television, Radio \& Emerging Media 3405, 3782, 3841, 3891, 3925, 3951, 4040, 4042, 4045, and 4728.
III. Six credits from the following: Television, Radio \& Emerging Media 3402, 3403, 3404, 4047, 4160, 4173 and 4403. TREM 4047 may be taken twice to fulfill this requirement so long as the topics are different.

The department chair or program director may, with the approval of the chair of the department's undergraduate curriculum committee, allow substitutions for one or more required classes consistent with the educational goals of the program.

Admissions Requirement: Students must successfully complete one of the College's English Composition courses (ENGL 1012 or higher) with a grade of B or better in order to enroll in any Journalism and Media Studies program course above Television, Radio \& Emerging Media 1165 or to declare the major. Transfer students must have successfully completed a course equivalent to ENGL 1012 or higher with a grade of B or better and have received a transfer credit equivalency for ENGL 1012 or higher to enroll in any Journalism and Media Studies program course above Television, Radio \& Emerging Media 1165 or to declare the major.

Residency Requirement: Of the 48 required Television, Radio \& Emerging Media credits in the Journalism and Media Studies major, at least 36 must be completed in residency. The use of transfer or other course credit is prohibited for Television, Radio \& Emerging Media 2032, 2726W, and 3401 .

Academic Standing: All courses used to meet these degree requirements must be completed with a grade of $C$ or higher. No course in this curriculum may be taken more than twice for the purposes of degree advancement.

## Departmental Minor(s)

## Minor in Journalism

## Department Requirements (18 credits)

Required Courses: TREM 2401, 2032, 3401.
Nine credits chosen from the following: TREM 2726W, TREM 3402, TREM 3403, TREM 3404, TREM 3405, TREM 3782, TREM 3841, TREM 3891, TREM 3951, TREM 4040, TREM 4042, TREM 4045, TREM 4403

## Minor in TV and Radio

## Department Requirements

Television, Radio \& Emerging Media 1165, 2265, 2616, 2420, and one other advanced course, beyond 2420, with appropriate prerequisites.

## Graduate Studies

The Television, Radio \& Emerging Media Department offers a master of fine arts degree program in television and digital media production and a master of science in media studies. For information, students should consult the department's deputies for graduate studies.

## Courses

*Courses marked with an asterisk (*) are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in this department.

## TREM 1165 Introduction to Mass Media

3 hours; 3 credits
Survey of the history, industry practices, and controversies involved in the media of mass communication. Mainstream mass
media of books, newspapers, magazines, film, radio, recordings, television, and the Internet. Analysis of news, entertainment, advertising, and public strategies, as well as media impact, legal issues, and ethics.

## TREM 2032 Tools of Storytelling

1 hour lecture, 4 hours laboratory; 3 credits
Fundamental principles of multi-platform journalism and media literacy. Writing for the web, creation of basic audio and visual texts, introduction to the tools of multi-platform journalism in both theory and practice.

Prerequisite: Television, Radio and Emerging Media 1165. Prerequisite or corequisite: Television, Radio and Emerging Media 2726W.

## TREM 2221 British Television

3 hours; 3 credits
Survey of broadcasting in Great Britain from the creation of the BBC through current times. Broadcasting as part of the cultural landscape of a people. Comparison and rivalries of public and commercial broadcasting. Channel 4 and other experiments. Such TV writers as Dennis Potter, Alan Bennett, Monty Python, Mike Leigh and others. Swinging London and pop music on the telly. BBC and its controversies. US and UK exchanges of action shows and sit-coms, then and now.

## TREM 2222W Communication Research

3 hours; 3 credits
Qualitative and quantitative methods in communication research. Includes the use of surveys, depth interviews, focus group research, statistics, computer data analysis, and report writing. Writing Intensive Course. (This course is the same as Communication 3150W).

Prerequisite: English 1012 and either: Television, Radio and Emerging Media 2265, or Core Studies 5, or both Core Studies 5.1 and 5.2, or Core Curriculum 1311 or 1312, or Mathematics 1311, or Communication 1001.

## TREM 2265 Industry, Institutions, and Audiences in Television and Radio

## 3 hours; 3 credits

Development of broadcast systems from radio through the Internet. Technological and aesthetic innovations, socio-economic forces, government, private industry, advertisers, creative producers, and audiences from a historical perspective. U.S. and global perspectives.

Prerequisite: Television, Radio and Emerging Media 1165 [6.5].

## TREM 2401 Introduction to News Writing and Reporting

## 3 hours; 3 credits

Introduction to news writing and reporting across media platforms. Developing journalistic judgment.

Prerequisite: English 1012 or equivalent or higher English composition class with a grade of $B$ or higher. Prerequisite or corequisite Television, Radio and Emerging Media 1165.

## TREM 2420 Sight/Sound/Motion: Basic Production Theories and Techniques

3 hours; 3 credits
Application of basic production theories and techniques; relationship between the tools and language of sight, sound, and motion and the theories that have evolved around them. Practice in the use of tools with a view to strengthening the basis for aesthetic
judgment on matters of aural/visual/kinetic communication. (Not open to students who are enrolled in or have completed Television, Radio and Emerging Media 3861 [26.1].)

Prerequisite: Television, Radio and Emerging Media 1165 [6.5]

## TREM 2517 Television and Radio Advertising

3 hours; 3 credits
Examination of persuasive strategies that use the major mass media. Advertising and the relationship of market, copy, and media variables. Analytical and practical exercises implement theory. This course is the same as Business 3130.

Prerequisite: Television, Radio and Emerging Media 1165 [6.5] or Business 3100 [50.2] or permission of the chairperson.

## TREM 2519 Public Relations

3 hours; 3 credits
This course will focus on the communications tools in the electronic media used by public relations professionals to fulfill their objectives. Students will develop a fundamental knowledge of the many publics an organization must deal with, the ethics of public relations, problems in public relations, writing news releases, effective publicity techniques, and crisis management.

Prerequisite: Television, Radio and Emerging Media 1165 [6.5] or Business 3100 [50.2] or permission of the chairperson

## TREM 2615 Social Media Communication

3 hours; 3 credits
Theory and practice of social media communication. History and growth of social media as a 21st century communication tool, impact of social media on interpersonal relationships, organizational communication, civic engagement, political participation, strategies by individuals and organizations for effective social media usage. Practical case studies. (This course is the same as CASD 2615.)

## TREM 2616 Television, Radio and Emerging Media Writing

3 hours; 3 credits
Basic communication skills required of the writer in television, Radio and Emerging Media. Techniques of writing news, documentary, comedy, drama, and advertising for these media.

Prerequisite: Television, Radio and Emerging Media 1165 and English 1010.

## TREM 2660 Business and Corporate Writing

3 hours; 3 credits
Writing and written communication skills needed in business, finance, government, and public relations. How to outline, research, write, edit and rewrite business documents. Assignments include writing corporate letters, memos, brochures, reports and other documents. Students will also share in simulated boardroom corporate communications decision making, as selected documents are reviewed and rewritten by the class. This course is the same as Business 3010.

Prerequisite: English 1010 [1].

## TREM 2726W Journalism and Society

3 hours; 3 credits
History and political economy of journalism in the United States,
from pre-Revolution to the present day. Critical examination of journalism as a profession and its role in democratic governance. Writing-Intensive course.

Prerequisite: Television, Radio and Emerging Media 1165 or permission of the Director of Journalism and Media Studies.

## TREM 3190 Anthropology of Media

3 hours lecture; 2 hours laboratory; 4 credits
Anthropological approaches to production, reception, circulation, and distribution of various forms of media around the world; topics include public spheres, national communities, cultural imperialism, transnational circuits of production and consumption, virtual worlds, and mediated social movements. Includes lectures and independent ethnographic research on media production and consumption. This course is the same as Anthropology 3190.

Prerequisite: Anthropology *1000 or 2100 or 1100 or 1200 or 1300 or 1400 or Television, Radio and Emerging Media 1165 or a Pathways required or flexible core course or permission of the chairperson.

## TREM 3223 Ethical Issues in the Electronic Mass Media

## 3 hours; 3 credits

Analysis and discussion of ethical issues related to television, Radio and Emerging Media. Case histories and role playing provide value judgments concerning entertainment, information, and advertising functions of mass media. This course is the same as Philosophy 3319. (Not open to students who have completed Philosophy [4.1].)

Prerequisite: Television, Radio and Emerging Media 1165 [6.5], and Philosophy 3306 [6] or Core Studies 10.

## TREM 3232 Global Television

3 hours; 3 credits
Globalization of television industries, audiences, and texts through global media flows, industry competition, cultural hybridity, diasporic identities, media convergence, participatory fan cultures, media policy, and state regulation. Case studies will include telenovelas, export of American television programs, multinational co-productions, global news channels, diasporic television, international syndication of television formats, and global channels such as MTV.

Prerequisite: Television, Radio and Emerging Media 2265 [16.5].

## TREM 3261 Satire and Mass Media

3 hours; 3 credits
Introduction to satire in electronic media. History of the genre in all mass media formats. Screening and close reading of outstanding examples from mainstream and alternative media outlets in their socio-political context.

Prerequisite: Television, Radio and Emerging Media 2265 [16.5] or permission of the chairperson

## TREM 3401 Advanced News Writing and Reporting

## 3 hours; 3 credits

Advanced techniques for news writing and reporting across media platforms. Developing journalistic judgment.

Prerequisite: TREM 2401 and TREM 2032.

3 hours, 3 credits
This course focuses on a Brooklyn neighborhood to teach students the techniques of feature writing. Students learn to report and write a number of types of feature stories in a cross-platform media environment.

Prerequisites: TREM 2032 and 3401.

## TREM 3404 Multimedia Editing

1 hour recitation and conference, 2 hours lecture; 3 credits Technique of handling copy, proofreading, assessing news values in digital and analog environments. Headline writing, layout and SEO, keyword selection for web-based publication and social media distribution.

Prerequisite: TREM 2032, 2401, Pre-or co-req 3401.

## TREM 3405 Multimedia Magazine Journalism

3 hours; 3 credits
Study of magazine journalism and the techniques of writing for magazines, both print and online. Audio and photography as important components of reporting and creating stories.
Conceptualization and production of an online magazine.
Prerequisites: TREM 2032, TREM 3401.

## TREM 3434 Constructions of Gender and Sexuality in the Media

3 hours; 3 credits
Role of mass media--including music, television, advertising, film, and video games--in shaping the cultural meanings of gender. Formation of gender identities as inseparable from the formation of other axes of identity, such as race, religion, age, class, sexuality, ethnicity, and physical ability. This course is the same as Women's and Gender Studies 3121.

Prerequisite or co-requisite: Television, Radio and Emerging Media 1165 [6.5] or Women's and Gender Studies 1001 [12].

## TREM 3481 Television Genres

3 hours; 3 credits
Studies in genre types and production techniques from aesthetic, sociocultural, historical, and economic perspectives. Narrative structure, character and social group stereotyping, and popular appeal of archetypal patterns. Each term focuses on an individual genre chosen from:action/adventure, dramatic, serial, situation comedy, news and documentary, television commercial, etc. Students may take this course for credit twice, but may not repeat topics. (Not open to students who have completed Television, Radio and Emerging Media 4173.)

Prerequisite: Television, Radio and Emerging Media 2616 [16] and 2265 [16.5].

## TREM 3482 Alternative Television

## 3 hours; 3 credits

Audiovisual creations of independent television producers in the genres of artist's video, video verite, direct video documentary, multimedia performance, and community video. Distribution sites, including public access cable channels, Internet Web sites, gallery and museum exhibitions, and public installations. Characteristics distinguishing alternative television from "mainstream" television.

2265 [16.5].

## TREM 3535 Communication Law and Policy

## 3 hours; 3 credits

US Media Law. First Amendment. Intellectual Property. US Media
Policy History. Digital and satellite challenges for policy and law. Theories of public interest and deregulation. Cultural and political implications of law and policy. (This course is the same as CASD 3235 and Communication 3300.)

Prerequisite: Television, Radio and Emerging Media 1165 [6.5] or instructor's permission.

## TREM 3537 New Media and Business

3 hours; 3 credits
The history, theory, and practice of new media in today's networked society and how this is affecting the profit and not-forprofit sectors; the implications of the convergence of technology and convergence of disciplines; Internet marketing; and the societal implications of the new connectedness. The latest research on the impact of second generation web-based media such as social networking, blogs, wikis, and virtual communities will be examined. This course will focus on how the new media is being used and/or should be used by the corporate world. This course is the same as Business 3110 and Computer and Information Science 1597.

Prerequisite: Sophomore status or permission of the chairperson.

## TREM 3564 Electronic Delivery Systems

## 3 hours; 3 credits

Emerging electronic delivery systems. Social, educational, and cultural implications. Programming and marketing considerations.

Prerequisite: Television, Radio and Emerging Media 2265 [16.5] or permission of the chairperson.

## TREM 3565 Public Television

3 hours; 3 credits
Television as an educational medium. Public and instructional programming.

Prerequisite: Television, Radio and Emerging Media 2265 [16.5].

## TREM 3661 Advanced Television Comedy Scriptwriting

3 hours; 3 credits
Scriptwriting for television comedy programming. Developing scripts based on research, character analyses, plot analysis, and story treatments. Course will feature comedy scripts. (Not open to students who have completed Television, Radio and Emerging Media 4173 [73], Special Topics: Advanced Television Writing: Comedy.)

Prerequisite: Television, Radio and Emerging Media 2616 with a grade of $B$ or better, or Film 1301 Screenwriting I with a grade of $B$ or better, or permission of the chair.

## TREM 3662 Advanced Television Dramatic

3 hours; 3 credits
Scriptwriting for television dramatic programming. Developing scripts based on research, character analyses, plot analysis, and story treatments. Course will feature dramatic scripts. (Not open to students who have completed Television, Radio and Emerging Media 4173 [73], Special Topics: Advanced Television Writing: Drama.)

Prerequisite: Television, Radio and Emerging Media 2616 with a grade of B or better, or Film 1301 Screenwriting I with a grade of B or better, or permission of the chair.

## TREM 3663 Advanced Television Documentary Scriptwriting

3 hours; 3 credits
Scriptwriting for television documentaries. Developing scripts based on research and story structure.

Prerequisite: Television, Radio and Emerging Media 2616 with a grade of B or better, or Film 1301 Screenwriting I with a grade of B or better, or permission of the chair.

## TREM 3729 Summer Broadcast News Institute

4 hours lecture, 8 hours laboratory; 9 credits Introduction to on-air journalism producing, production, and delivery of news programs and messages. Functioning as a member of a broadcast news producing, performance, and production team. Laboratory and field practice in writing and producing for news broadcasts. Methods of reporting and editing script. Aspects of instudio and field television production.

Prerequisite: Television, Radio and Emerging Media 4728 or permission of the director of the Broadcast Journalism program.

## TREM 3782 Audio Storytelling

1 hour lecture, 4 hours laboratory; 3 credits Fundamental principles of identifying, recording, editing, and writing for audio across a variety of platforms. Covers techniques of field and studio story production.

Prerequisite: Television, Radio and Emerging Media 2616. For Journalism and Media Studies majors: Television, Radio and Emerging Media 2032 and 2401.

## TREM 3841 Multimedia Design and Production

1 hour lecture, 4 hours laboratory; 3 credits
Multimedia storytelling and design for cross-platform distribution. Integration of video, audio, text, and graphic elements for compelling storytelling and best aesthetic effect. Interface design and navigational considerations of interactive content.

Prerequisite: Television, Radio and Emerging Media 2265 and 2420. For Journalism and Media Studies majors: Television, Radio and Emerging Media 2032.

Prerequisite or corequisite: Television, Radio and Emerging Media 2616 or 2401.

## TREM 3850 Directing Television Adaptation. Analysis and Production

2 hours lecture, 2 hours television laboratory; 3 credits A workshop combining literary and technical skills. In-depth analysis of scenes from critically acclaimed adaptations of literary and dramatic texts. Principles and techniques of directing adaptation for television. Students learn elements of all phases of production: research and interpretation, working with actors, studio production techniques, teleplay director's craft, editing and mixing sound in multi-camera live environment and post production. Students direct their own interpretation of a script provided by professor. For the final common class project students choose one production position, according to their interests and skills. This course is the same as English 3195.

Prerequisite: A course in dramatic literature or Television, Radio and Emerging Media 3951 [25.1] or 3861 [26.1] or 3871 [27.1].

## TREM 3861 Multi-Camera Television Production

1 hour lecture, 4 hours laboratory; 3 credits
Aspects of television studio operation that contribute to the aesthetics of production. Laboratory practice with cameras, microphones, sound effects, properties, lighting instruments and control, audio console, and switcher-fader.

Prerequisite: Television, Radio and Emerging Media 2265 and 2420. For Journalism and Media Studies majors: Television, Radio and Emerging Media 2032.

Prerequisite or corequisite: Television, Radio and Emerging Media 2616 or 2401.

## TREM 3871 Single Camera Television Production

1 hour lecture, 4 hours laboratory; 3 credits
Aspects of production of television segments and programs in nonstudio locations. Selection and use of portable cameras, lighting, and sound equipment. Aesthetic considerations necessary for effective post-production editing. Comparison of requirements for recording scripted and spontaneous events. Director's and Producer's roles in creating and distributing such programs. Collaborative production of finished material suitable for telecasting and online distribution.

Prerequisite: Television, Radio and Emerging Media 2265 and 2420.

Prerequisite or corequisite: Television, Radio and Emerging Media 2616

## TREM 3881 Storytelling for Virtual Reality

1 hour lecture, 4 hours laboratory; 3
Introduction to conceptual frameworks of storytelling with virtual reality technology. Hands-on experience. Foundational techniques to write and direct VR content.

Prerequisite: TREM 2420 or Permission of the Instructor

## TREM 3891 Videography for Journalists

1 hour lecture, 4 hours laboratory; 3 credits
Aspects of video field reporting for journalists. Selection and use of equipment appropriate to the situation. Aesthetic considerations necessary for effective post-production and distribution of content across internet, mobile and social platforms. Reporters' roles in the production of video field work with an emphasis on the preparation required for mobile multimedia journalists.

Prerequisite: Television, Radio and Emerging Media 2032 and 2726W.

Prerequiste or corequisite: Television, Radio and Emerging Media 2401.

## TREM 3925 Sound Design

2 hours lecture, 2 hours laboratory; 3 credits
Introduction to principles of sound design for television production and sound art. Aesthetics and techniques of sound design through all stages of production: research and development through postproduction. Construction of a complex soundscape in a variety of
digital platforms. This course is taught as a workshop.
Prerequisite: Television, Radio and Emerging Media 3841 or 3824 or 3951 or 3861 or 3871 or permission of the Department Chair. For Journalism and Media Studies majors: Television, Radio and Emerging Media 2032 and either Television, Radio and Emerging Media 3782 or 3951.

## TREM 3951 Introduction to Radio Production

1 hour lecture, 4 hours laboratory; 3 credits
Radio and audio aesthetics and production. Laboratory practice in conceiving, scripting, developing, and producing a variety of radio programs using field and studio equipment including emerging digital technology.

Prerequisite: Television, Radio and Emerging Media 2265 and 2420. For Journalism and Media Studies majors: Television, Radio and Emerging Media 2032.

Prerequiste or corequisite: Television, Radio and Emerging Media 2616 or 2401.

## TREM 3953 Radio Culture

3 hours; 3 credits
Historical survey of radio technology, program production and format, and conceptions of listenership. Development of radio programming around the world with a focus on English-speaking radio. Established radio forms and radio experimentation, theories of the social/political/cultural role of radio, and hypotheses on radio's future.

Prerequisite: Television, Radio and Emerging Media 1165 [6.5]. Prerequisite or corequisite: Television, Radio and Emerging Media 2265 [16.5].

## TREM 4040 Mobile and Social Media

1 hour lecture, 4 hours laboratory; 3 credits Production and distribution of journalism via portable devices. Mobile media field production and streaming techniques. Effective utilization of social media networks to find, develop, and disseminate story ideas and engage with audiences and news communities.

Prerequisite: Television, Radio and Emerging Media 2032, 3535, and 2401.

## TREM 4042 Information Curation and Verification

1 hour lecture, 4 hours laboratory; 3 credits
Theoretical consideration of and practical experience in information selection, verification and fact-checking. Examination of data and content "curation" in an online environment. Consideration of the ethical, political, social, technological and representational implications of information organization and dissemination in a socially networked world.

Prerequisite: Television, Radio and Emerging Media 2032, 3404, and either Television, Radio and Emerging Media 3223 or 3535.

## TREM 4045 Data Journalism and Visualization

1 hour lecture, 4 hours laboratory; 3 credits Fundamental principles of data journalism - finding, gathering, analyzing and querying datasets; creation of static and interactive infographics to tell journalistic stories. Practical and theoretical considerations about use of data and the creation of data
journalism in the converged media environment.
Prerequisite: Television, Radio and Emerging Media 2032, 2726W, and 2401.

## TREM 4047 Reporting Topics

1 hour lecture, 4 hours laboratory; 3 credits
Advanced course in news and feature reporting which varies in subject focus, including but not limited to sports, politics, economics, technology, arts and culture, health, and science.

Prerequisite: Television, Radio and Emerging Media 2032, 2726W, 3728, and one of the following: Television, Radio and Emerging Media 3891, 3951, or 4040.

## TREM 4160 Media Literacy

3 hours; 3 credits
Survey of the field of media literacy, an emerging movement focused on critically understanding and using media forms and content. Foundational theories, concepts, projects, and current practices. Emphasis on the digital media environment. Course culminates in research-based media literacy projects.

Prerequisite: Television, Radio and Emerging Media 1165

## TREM 4173 Special Topics

3 hours; 3 credits
Topics vary from term to term. Course description may be obtained in the department office before registration. Students may take courses numbered Television, Radio and Emerging Media 71 through 74 for a total of eight credits, but may not repeat topics.

Prerequisite: Permission of the chairperson.

## TREM *4175 Television and Radio Colloquium

1 hour lecture and recitation; 1 credit
Critical review of current topics in the broadcast industry. Guest lectures by professionals. Students may not offer more than six credits toward a baccalaureate degree from Television, Radio and Emerging Media *4870 [70], 4175 [75], 4176 [76], 4177 [77], and 4578 [78]. (Not open to students who have completed Television, Radio and Emerging Media * 4176 [76], 4177 [77], or 4578 [78].)

Prerequisite: 12 credits in Television, Radio and Emerging Media courses and permission of the chairperson.

## TREM *4176 Television and Radio Internship

1 hour lecture, minimum 7 hours unsupervised fieldwork; 2 credits Field experience in a professional telecommunications facility. Administrative, production, or technical duties as assigned by a cooperating facility. Preparation and presentation of a critical report of the experience. May be taken for credit twice, but students may not offer more than six credits toward a baccalaureate degree from Television, Radio and Emerging Media *4870 [70], 4175 [75], 4176 [76], 4177 [77], and 4578 [78].

Prerequisite: senior class standing, 12 credits in Television, Radio and Emerging Media courses and permission of the chairperson.

## TREM 4177 Television and Radio Internship

1 hour lecture, minimum of 14 hours unsupervised fieldwork; 3 credits
In-depth field experience in a media facility with professional standards and practices. Administrative, production, or technical
duties as assigned by the cooperating facility. Preparation and presentation of critical report on the experience. May be taken for credit twice, but students may not offer more than six credits toward a baccalaureate degree from Television, Radio and Emerging Media *4870, 4175, 4176, 4177, and 4578.

Prerequisite: senior class standing, 12 credits in Television, Radio and Emerging Media courses, and permission of the chairperson.

## TREM 4401 Digital News Laboratory

2 hours lecture, 8 hours laboratory, 6 credits
Students act as reporters, rewrite persons and feature storytellers, covering a day in the life of New York alongside members of the working press and across all media platforms. Students' stories are examined in class and compared with those produced by many different news outlets.

Prerequisite: TREM 2032, 2726W, 3401 and any two of the following: TREM 3402, 3403, 3404, 3405, or permission of the program director.

## TREM 4403 Beat Reporting

3 hours; 3 credits
Students cover a beat, such as health, education, immigration, poverty, publishing, the arts or politics or may shape a specialty beat informed by their own interests and career goals.

Prerequisite: TREM 2032 and Television, Radio and Emerging Media 3401.

## TREM 4430W Television and Radio Criticism

3 hours; 3 credits
Survey of television and radio criticism. Influence of the medium and of individual programs on American Society. Writing-intensive course.

Prerequisites: Television, Radio and Emerging Media 3841 or 3824 [24.1] or 3951 [25.1] or 3861 [26.1], or 3871 [27.1] or permission of the chairperson; English *1012 [2].

## TREM 4561 Television and Radio Program Development and Scheduling

3 hours; 3 credits
Integration of the skills and background information required in planning successful programs.

Prerequisite: a grade of B or higher in Television, Radio and Emerging Media 3951 [25.1], 3861 [26.1], 3871 [27.1], or permission of the chairperson.

## TREM 4562 Television Program Development, Management, and Distribution

3 hours; 3 credits
The business and management side of the producer's function. Personnel management; program budgeting; rights and clearances; relations with unions, agents, and licensing organizations. Programming and marketing considerations of commercial TV, cable channels and other distribution outlets such as public television and the new web-TV outlets.

Prerequisite: A grade of B- or higher in Television, Radio and Emerging Media 3951 [25.1] 3861 [26.1]. or in Television, Radio and Emerging Media 3871 [27.1] or permission of the chairperson.

## TREM *4578 Fieldwork in Media Programming and Marketing

20 hours fieldwork, 1 hour conference; 6 credits
Supervised fieldwork at a participating organization in the development of programming and advertising for broadcast, cable, or related distribution systems. Application of theoretical principles to actual programming and advertising projects. Individual and group conferences with field supervisor(s). Individual and group conferences with instructor. Field notes, readings, and term paper required. (No degree credit for students who have completed Television, Radio and Emerging Media *4176 [76] or 4177 [77].)

Prerequisite: Television, Radio and Emerging Media 2517 [17] and 4561 [26.15]; or permission of the chairperson.

## TREM 4728 Video Storytelling

1 hour lecture, 4 hours laboratory; 3 credits
Fundamental principles of identifying, recording, editing, and writing for video across a variety of platforms. Covers techniques of field and studio story production.

Prerequisite: Television, Radio and Emerging Media majors with a B or better in Television, Radio and Emerging Media 3871 and Television, Radio and Emerging Media 2401 may be admitted with the permission of the Department Chair. For Journalism and Media Studies majors: Television, Radio and Emerging Media 2401 and 3891.

## TREM 4729 Newsroom Institute

4 hours lecture, 10 hours laboratory; 9 credits Learning how to function effectively in an operational newsroom with regular production deadlines. Intensive laboratory and field practice in story identification, planning, reporting, editing, and distribution across a variety of electronic media platforms including, but not limited to, radio, television, and social networks. Provision of content for the Brooklyn News Service and other CUNY-wide journalism initiatives.

Prerequisite: TREM 4728 or permission of the Director of Journalism and Media Studies or Department Chair.

## TREM 4777 Capstone in Journalism and Media Studies

2 hours lecture, 8 hours laboratory; 6 credits
Students engage in the creation of portfolios of their work including a culminating project designed and created during the semester. Students commit individual and communal acts of journalism devised by them as a cohort and news unit across multiple platforms. The semester's work culminates in public portfolio review and the publication of a web-native essay in which students articulate their journalistic practices and achievements in the context of current scholarship in journalism ethics, practices and industrial strategies.

Prerequisite: Senior class standing plus Television, Radio and Emerging Media 2032, 2726W, 2401; and two of the following: Television, Radio and Emerging Media 3402, 3403, 3404, 4403, 4173 or 4047; and two of the following: Television, Radio and Emerging Media 3782, 3841, 3891, 3925, 3951, 4040, 4042, 4045 , or 4728 , or permission of the Director of Journalism and Media Studies or Department Chair.

## TREM 4824 Advanced Multimedia Production: New Media for Television <br> 1 hour lecture, 4 hours laboratory; 3 credits

Developing strategies and methodologies for creating crossplatform content for multimedia communication. Designing story architecture for interactive narratives and immersive environments, the aesthetic principles of combining CGI, conventional video, web sites, and computer based animation.

Prerequisite: Television, Radio and Emerging Media 3841 or 3824 [24.1], 3871 [27.1], or permission of the chair.

## TREM 4827 Advanced Single Camera Production: Documentary

4 hours; 3 credits
Intensive production work in documentaries. Production teams, each of which will complete a short documentary project. Lectures on research, development, preproduction planning, scheduling, location and studio production, and postproduction. This course is the same as Film 2201. (Not open to students who have taken Film 2201.)

Prerequisite: Television, Radio and Emerging Media 3871 [27.1] or 3729 [29] or permission of the chairperson.

## TREM 4849 International Documentary Production

1 hour lecture, 4 hours lab; 3 credits
A workshop in directing and producing documentaries outside the borders of the United States. Site-based through the college's study abroad program. (This course is the same as Film 3202.)

Prerequisites: Television, Radio and Emerging Media 1165 [6.5], 2265 [16.5], 3871 [27.1], and permission of the instructor

## TREM 4862 Television Production and Direction

1 hour lecture, 4 hours laboratory; 3 credits
Continuation of Television, Radio and Emerging Media 3861. Various types of television program production and the techniques employed in each.

Prerequisite: Television, Radio and Emerging Media 3861 [26.1] and permission of the chairperson.

## TREM *4870 Television and Radio Laboratory

Minimum of 45 hours of satisfactory participation; 1 credit Satisfactory participation in projects and activities not included in specific course work in any area of the Department of Television, Radio and Emerging Media. Students may take this for credit four times. Students should consult the department office about the special registration procedures required for this course. Final grade is given as "credit" on satisfactory completion of required work. Students may not offer more than six credits toward a baccalaureate degree from Television, Radio and Emerging Media *4870 [70], *4175 [75], *4176 [76], *4177 [77], and *4578 [78].

Prerequisite: 12 credits in Television, Radio and Emerging Media courses or permission of the chairperson.

## TREM 4891 Advanced Post-Production for Digital Media: Principles and Techniques

1 hour lecture, 3 hours laboratory; 3 credits
Creative principles and technical skills for post-production of visual storytelling, using pre-existing footage. Advanced practices and workflows for post production including advanced editing, color correction, image manipulation, titles and effects, rendering, compression schemes, and exporting high-quality video for television and cross-platform online distribution.

Prerequisite: Television, Radio and Emerging Media 3871 or 3841 or 4728 or 3729.

## TREM 4925 Advanced Radio Production

1 hour lecture, 4 hours laboratory; 3 credits Individual and group production of short- and long-form radio projects such as: promotional spots, features, magazines, documentaries, series, and radio drama. Project conception, development, management, and implementation. Contact with radio professionals.

Prerequisite: Television, Radio and Emerging Media 3951 [25.1] or Music 3261 [26.1] or Film 2601 [48] or permission of the chairperson.

## TREM 5010 Independent Projects

Minimum 9 hours independent work and conferences; 3 credits Directed television, radio, or multimedia project approved and supervised by an instructor. Substantial final project such as television, radio, or multimedia production; broadcast-related research paper; live broadcast; or a combination of these forms. May be taken for credit twice.

Prerequisite: Television, Radio and Emerging Media 2265 and 2420; or either English 2402 or Television, Radio and Emerging Media 3535; or permission of the chairperson.

## TREM 5020 Independent Research

Minimum of nine hours independent work and conference or class meetings; 3 credits
Research or fieldwork in television, Radio and Emerging Media supervised by a faculty member. Approved topic. Final report or paper.

Prerequisite: Television, Radio and Emerging Media 1165 [6.5], 2616 [16], 2265 [16.5], 2420 [20], 3951 [25.1] or 3861 [26.1] or 3871 [27.1], 4430W and a scholastic index of 3.0 or higher; and an index of 3.25 or higher in all courses taken in the department; and sponsorship by a member of the department faculty; and permission of the chairperson.

## TREM 5030 Seminar

Minimum of 9 hours independent work and conference or class meetings; 3 credits
Readings in television, Radio and Emerging Media. Examination.
Prerequisite: Television, Radio and Emerging Media 1165 [6.5], 2616 [16], 2265 [16.5], 2420 [20], 3951 [25.1] or 3861 [26.1] or 3871 [27.1], 30.5 and a scholastic index of 3.0 or higher; and an index of 3.25 or higher in all courses taken in the department; and sponsorship by a member of the department faculty; and permission of the chairperson.

## TREM 5040 Workshop

Minimum of 9 hours independent work and conferences or class meetings; 3 credits
Creation of an acceptable piece of work in television or radio. Limited facilities may preclude use of college equipment.

Prerequisite: Television, Radio and Emerging Media 1165 [6.5], 2616 [16], 2265 [16.5], 2420 [20], 3951 [25.1] or 3861 [26.1] or $3871,4430 \mathrm{~W}$ and a scholastic index of 3.0 or higher; and an index of 3.25 or higher in all courses taken in the department; and sponsorship by a member of the department faculty; and

## Theater

## Department office: 091T Claire Tow Center for the Performing Arts <br> Phone: 718.951.5666

## Full-time Faculty

Professors: Bullard, Marsh, Tesman, Vivier
Associate Professors: Snider-Stein, Townsend
Assistant Professor: Sabongui

The Department of Theater at Brooklyn College is one of New York City's leading training institutions for theater professionals. Our comprehensive curriculum includes courses in acting, voice, movement, improvisation, stage combat, directing, stagecraft, stage design, costume design, lighting design, stage management, performing arts management, and world theater history, including a series of electives focusing on different genres and time periods. The department offers a bachelor of arts in theatera bachelor of fine arts in theater with two areas of specialization, acting and design and technical production, as well as several minors and a concentration for Education majors.

The Department of Theater provides undergraduates with a comprehensive understanding of professional theater--performance, directing, design, and stagecraft. Specific skills, including writing and research, developed in relation to individual fields and the greater discipline of theater, are fine tuned in a working environment that stresses ensemble work, collaboration, and effective communication. Theory and practice combine as student directors develop projects and work with student designers, technicians, and actors to showcase their mutual artistic vision.

Performance and production opportunities are ample and required. Each year the Department of Theater produces seven productions, which will occur on the Whitman Theater stage and in the New Workshop Theater, our 120-seat black box theater. The demands of campus productions may limit opportunities for off-campus professional internships until the senior year; however, guest artists are invited to give classroom workshops and direct Mainstage productions, creating a bridge between the College and the professional theater. Past presenters include Todd Thaler, Mary Robinson, and Kevin Kennison.

Professional artists are an integral part of the adjunct faculty of the department. Students in all disciplines within the department have the opportunity to work with theater professionals in the classroom, on productions, and as interns with commercial organizations throughout the city. Special courses are offered based on the specific skills of the theater artists on staff during a given semester, from Acting for the Camera, with commercial actors, to The Business of Acting, with professional coaches, to student productions that are often directed by guest directors whose careers encompass NYC theater as well as regional.

Our students work with such prestigious organizations as the Manhattan Theatre Club, the New York Shakespeare Festival, Soho Repertory, Barefoot Theater Company and the Hangar Theater. Many students maintain contact with the theater artists who have trained them, creating excellent support and networking opportunities for their transition to a professional environment. Our graduates work as actors, stage managers, designers, teaching artists, directors, and producers in New York City and regional organizations.

The fundamental skills of theater--collaboration, communication, and analysis--are invaluable for a range of careers or as a basis for an advanced degree. Students who wish to pursue graduate studies may apply to the master's and doctoral degree programs offered by or in conjunction with this department.

## Admission to the degree programs in theater

B.A. A written application and interview are required. Interviews are held annually in early March. Candidates should contact the department no later than February 1 to obtain a written application and an interview slot.
B.F.A. In the area of acting, a written application and an audition is required. Auditions are held annually in early March. Candidates should contact the department no later than February 15 to obtain a written application and an audition slot. International or out-of-state students may audition by submitting video recordings (contact the Undergraduate Theater office for guidelines). Entrance into the design and technical program is by interview. Candidates must bring to the interview any pertinent materials that will facilitate the committee's assessment of their abilities.

## Department crew requirements

Theater degrees and certain theater courses have crew requirements. A student must register for one of the Production Practica--Theater

1202, 1203, 1204, 1205, 1206, and 1207--for each course requiring a corequisite. However, no student shall be required to register for more than two Production Practica in one semester, and theater majors who have completed four crew assignments need not register for further courses from this list.

## B.A. degree program in theater HEGIS code 1007; SED program code 76210

Department requirements (46 credits)
Students must earn a grade of C or higher in each theater course numbered 2000 or above that is applied toward the fulfillment of department requirements. Any substitution of courses must be approved by the chairperson or designee/ undergraduate deputy chair.

All of the following: Theater 1001, 1101, 1201, 1202, 1203, 1204, 1601.
One additional credit from the following courses: Theater 1202, 1203, 1204, 1205, 1206, 1207. (Students may not exceed more than 9 credits in practicum courses.)

One of the following sequences: Theater 3501 or 3502 W , and 3503 ; or Theater 4501, 4502, 4503, and 4504W.
Two of the following courses: Theater 2001, 2201, 2202, 2310, 2311, 2312, 2313, 2320, 3320, 3321, 3330, 3331, 3333, 3340, 3341, 3351, 4320, 4330, 4331, 4340, 4351, 4701, 4702, 4703, 4704, 4705, 4706. (Students may take Business 3200 or 3100 as a substitute for Theater 2001).

Two of the following courses: Theater 2102, 2103, 3102, 3103, 3120, 3601, 3602, 3620, 3701, 4102, 4710, 4620.
One of the following: Theater 3602, 3620, 4620, 4710.
Additional credits in Department of Theater courses; Classics 3220; Comparative Literature 3610, 3611; or English 3306, 3307, 3122, 3123, $3124,3132,3170$, to total a minimum of forty-six credits.

## B.F.A. degree program in theater HEGIS code 1007; SED program code 83119

The B.F.A. degree program has two areas of specialization: acting and design and technical production (which includes scenic, lighting, and costume design).
Students must complete one of the following areas with a grade of $C$ or higher in each theater course that is applied toward the fulfillment of department requirements. Any substitution of courses must be approved by the chairperson or designee/undergraduate deputy chair.

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Department requirements (59-66 credits)
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Acting (59-60 credits)

All of the following: Theater 1201, 1202, 1203, 1204, 3201, 3202, 3203, 3204, 3205, 3206, 3207, 3208, 3401, 3402, 3403, 3404, 3405, 3406, 3407, 3436, 4400W.

One of the following sequences: Theater 3501 or 3502 W , and 3503 ; or three of the following: Theater 4501, 4502, 4503, or 4504W.
One additional credit from the following courses: Theater 1202, 1203, 1204, 1205, 1206, 1207. (Students may not exceed more than 9 credits in practicum courses.)

One of the following: Theater 4701, 4702, 4703, 4704, 4705, 4706.

[^3]All of the following: Theater 1001, 1202, 1203, 1204, 2310, 2320, 3321, 3330, 3331, 3341, 2201. (Students with no previous experience may need to complete Theater 1201 before registering for more advanced technical courses. See course prerequisites.)

One of the following sequences: Theater 3501 or 3502W, and 3503; or Theater 4501, 4502, 4503, and 4504W.
Three credits from the following courses: Theater 1202, 1203, 1204, 1205, 1206, 1207. (Students may not exceed more than 9 credits in practicum courses.)

One acting course or Communication Arts, Sciences, and Disorders 1717.
One of the following: Theater 2501, 2502, 3504, 3505, 3506. (One of the following may substitute for one of the above: Classics 3220, Comparative Literature 3305, 3610, 3611, English 3122, 3124, 3132, 3170.)

Additional credits from the following to total a minimum of 66 credits: Theater 2002, 2202, 2311, 2312, 2313, 2321, 3002, 3310, 3320, 3322, 3332, 3333, 3340, 3342, 4320, 4321, 4330, 4331, 4340, 4341, 3351, 4351, 4701, 4702, 4703, 4704, 4705, 4706, 5805, 5806, 5807, Art 2210, 2211, 2310, 2311, 2320, 3321.

## Departmental Minor(s)

## Minor in Acting

Department Requirements
Theater 1101, 1202, 1203, and 1204; and twelve credits chosen from the following courses, each completed with a grade of $C$ or higher: Theater 2102, 2103, 3102, 3103, 2110, 2111, 2112, 2113, 3620, 3701, 4620, 4710. Any substitution of courses must be approved by the chairperson or designee/ undergraduate deputy chair.

## Minor in Theater

Department Requirements
Theater 1001, 1101, 1201, 1202, 1203, 1204; and twelve additional credits of advanced courses in theater, each approved by the department and completed with a grade of C or higher. Any substitution of courses must be approved by the chairperson or designee/ undergraduate deputy chair.

## Minor in Theater Production

## Department Requirements

Theater 1201, 1202, 1203, 1204;
All of the following courses each completed with a grade of C or higher: Theater 2310, 3330 and two other technical courses approved by the department.
Any substitution of courses must be approved by the chairperson or designee/undergraduate deputy chair.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Theater

The requirements for the teacher education programs indicated above are described in the section of the Undergraduate Bulletin relating to the Department of Early Childhood Education and Art Education and the Department of Childhood, Bilingual and Special Education. Students must meet with a Theater Department adviser to declare their intention to complete this concentration. They should also meet with an adviser in the appropriate Education department regarding the appropriate sequence of teacher education courses. Any substitution of courses must be approved by the chairperson or designee/ undergraduate deputy chair.

Concentration requirements:
Theater 1001, 1101, 1201, 1202, 1203, 2102, 2103.
Three additional courses from the following: Theater 2501, 2502, 3501, 3502, 3503, 3504, 3505, 3506; Comparative Literature 3610, 3611; English 3122, 3123, 3124, 3132, 3170, 3184; Africana Studies 3201, 3205; Anthropology 3197.

Additional credits necessary to total a minimum of 30 credits for the Concentration, chosen from among the following: any Theater Department courses; Comparative Literature 3610, 3611, English 3122, 3123, 3124, 3132, 3170, 3184; Africana Studies 3201, 3205; Anthropology 3197. (Students may take Theater 1003 only if it has not been taken as a paired course with Education 3202.)

## Graduate Studies

The Theater Department offers a master of arts degree program in theater and a master of fine arts degree program in theater. Some courses may be creditable toward the CUNY doctoral degree. For information, students should consult the department's deputy for graduate studies.

## Courses

§Independent work means not less than three additional hours each week of conference, research, independent reading, and writing as assigned by the instructor.

## Introductory and general courses

## THEA 1001 Introduction to Theater Arts

## 3 hours: 3 credits

Study of the nature and history of the theatrical event. Selected periods and styles of production. Contributions of the playwright, actor, director, designer, architect, critic, and producer. Attendance at departmental productions. (Not open to students who have completed Theater 1001 [1.1] or 1.2.)

## THEA 1003 Performance Techniques for the Classroom

## Teacher

3 hours; 3 credits
Creative drama techniques to develop the prospective teacher's ability to become an effective communicator and to explore dramatic and creative methods of presentation.

Prerequisite: permission of the instructor.

## THEA 1601 Art of Theater: Practical Process and Collaboration

1 hour; 1 credit
Introduction to the practical and collaborative processes essential to the discipline of theater.

Prerequisite: Theater majors only. Permission of undergraduate deputy chairperson.

THEA 2001 Theater Management

Theater management, including problems of financing, promoting, labor relations, unions, and programming for educational, community, and professional theater.

Prerequisite: Theater 1001 [1]

## THEA 2002 Text Analysis

3 Hours; 3 Credits
An exploration of the tools needed for effective reading and analysis of plays for practitioners of theater in all disciplines.

Prerequisite: Theater 1001 [1].

## THEA 3002 Special Topics in Theater

3 hours; 3 credits
Topics vary from term to term. Course descriptions may be obtained in the department office before registration. Students may take this course twice, but may not repeat topics.

Prerequisite: Permission of the undergraduate deputy chairperson.

## History of theater

## THEA 2501 Theater of the Twentieth Century

3 hours; 3 credits
Twentieth-century theater from the work of Appia and Craig to the contemporary theater, including off-Broadway and off-offBroadway. Innovative theater practitioners in acting, directing, and design.

Prerequisite: Theater 1001 [1]

## THEA 2502 Black Theater

## 3 hours; 3 credits

Lectures, studies, and workshops in Black theater. Liaison with professional and community theater. This course is the same as English 3169 and Africana Studies 3225.

## THEA 3501 History of Western Theater I

3 hours; 3 credits
Theater history in the West from Periclean Greece to Jacobean England. Major periods of theater activity investigated with special emphasis on theater architecture, methods of production, audiences, traditions, documents, allied arts, and the social milieu.

Prerequisite: Theater 1001 [1]

## THEA 3502W History of Western Theater I

3 hours; 3 credits
Theater history in the West from Periclean Greece to Jacobean England. Major periods of theater activity investigated with special emphasis on theater architecture, methods of production, audiences, traditions, documents, allied arts, and the social milieu. Writing intensive section.

Prerequisite: Theater 1001 [1] and English *1012 [2]

## THEA 3503 History of Western Theater II

3 hours; 3 credits
Theater history in the West from neoclassic France to the present. Major periods of theater activity investigated with special emphasis on theater architecture, methods of production, audiences, traditions, documents, allied arts, and the social milieu.

Prerequisite: Theater 1001 [1]

## THEA 3504 History of the Theater in the United States

3 hours; 3 credits
The growth and development of theater in colonial North America and the United States from the eighteenth century to the present. Critical examination of native dramatic literature and the history of its performance.

Prerequisite: Theater 1001
3501 [40.1]; 3503 [40.2]

## THEA 3505 Theater in Asia

3 hours; 3 credits
Survey of the major theatrical traditions of East and Southeast Asia. Classical types. Production methods, performance styles, audiences, and social milieu.

Prerequisite: Theater1001

## THEA 3506 Women in Theater

## 3 hours; 3 credits

Exploration and examination of women's history of, participation in, and contributions to the performing arts as actresses, playwrights, directors, theorists. Combines theory and practice. This course is the same as WGST 3355..

Prerequisite: Theater 3501, or a 3000-level CORC course in Exploring literature or Exploring global connections.

## THEA 4501 World Theater History I

2 hours; 2 credits
Survey of theater and performance in oral and written cultures before 1600. Topics and cultures covered include ancient ritual, classical Greece and Rome, medieval Europe, and early drama in India, China, and Japan.

Prerequisite: English 1010 or equivalent

## THEA 4502 World Theater History II

2 hours; 2 credits
Survey of theater and performance in print cultures from 1500 to 1900. Topics include Chinese opera, European neoclassicism, drama in Spain and South America, Indian kathakali, melodrama, and Romanticism.

Prerequisite: English 1010 or equivalent

## THEA 4503 World Theater History III

2 hours; 2 credits
Survey of theater and performance in modern media cultures from 1850 to 1970. Topics include modern realism and naturalism, avant-garde modernism, variety entertainment, and US American musical theater.

Prerequisite: English 1010 or equivalent

## THEA 4504W World Theater History IV

3 hours; 3 credits
Survey of theater and performance in the age of global communications (1950 to the present). Topics include postcolonial and intercultural theater, community-based theater, and postmodernism. Writing intensive.

Prerequisite: English 1010 or equivalent

## THEA 4801 Theater and the City

3 hours; 3 credits (hybrid course: 36 class hours, 9 hours online) Introduction to New York City's theater industry through exploration of the historical, sociological, economic, and cultural aspects of theater production in the city. Features working professionals as guest speakers. Theater attendance required

Prerequisite: permission of undergraduate deputy chair.

## Acting

## THEA 1101 Introduction to Acting

3 hours; 3 credits
Introduction to the craft of acting. Exercises designed to introduce the student-actor to the language of the theater, to a method of working, and to an understanding of his or her responsibilities as an actor.

## THEA 2102 Acting Workshop I

3 hours; 3 credits
Further study in the craft of acting. Continuation of the exercises and methods introduced in Theater 1101 [2].

Prerequisite: Theater 1101 [2]

## THEA +2103 Acting Workshop II

3 hours; 3 credits
Continuation of Theater 2102 [10.1]. May be taken twice for credit.

Prerequisite: Theater 2102 [10.1]

## THEA 2110 Acting Practicum I

2 hours workshop; 1 credit
Students work a minimum of two projects in rehearsal and performance for theater directing students' course work or for film or television projects. Supervised by faculty members.

Prerequisite: Theater 2102 [10.1] or B.F.A. acting status, and permission of the undergraduate deputy chairperson.

## THEA 2111 Acting Practicum II

2 hours workshop; 1 credit
Continuation of Theater 2110 [12.5]
Prerequisite: Theater 2110 [12.5].

## THEA 2112 Acting Practicum III

2 hours workshop; 1 credit
Continuation of Theater 2111 [12.6]
Prerequisite: Theater 2111 [12.6].

## THEA 2113 Acting Practicum IV

2 hours workshop; 1 credit
Continuation of Theater 2112 [12.7].
Prerequisite: Theater 2112 [12.7].

## THEA 3102 Performance Techniques I

3 hours; 3 credits
Intensive study of a specific theater discipline as it applies to acting, voice, speech, singing, movement, and/or ensemble work. Topics vary from term to term. May be taken twice for credit.

Prerequisite: THEA 2102 [10.1]

## THEA 3103 Performance Techniques II

3 hours; 3 credits
Intensive study of a specific theater discipline as it applies to acting, voice, speech, singing, movement, and/or ensemble work. Topics vary from term to term. May be taken twice for credit.

Prerequisite: Theater 2102 [10.1].

## THEA 3120 Puppetry for the Theater

3 hours; 3 credits
Introduction to the history, theory, methods, and practice of Puppet Theater. Intensive application in the creation of short works for the stage.

Prerequisite: Theater 1001

## THEA 4102 Performance Techniques III

4 hours; 4 credits
Intensive study of a specific theater discipline as it applies to acting, voice, speech, singing, movement, and/or ensemble work. Topics
vary from term to term. May be taken twice for credit.
Prerequisite: Theater 2103 or permission of the undergraduate deputy chairperson.

## Design and technical theater

## THEA 2310 Stagecraft I

3 hours; 3 credits
Materials and techniques involved in mounting scene designs for the stage.

Prerequisite: Theater 1001 [1] and 1201.
Corequisite: see section "Department crew requirements" above.

## THEA 2311 Property Construction

3 hours; 3 credits
Study of equipment, methods, and professional practices in the execution of stage and personal properties.

Prerequisite: Theater 1001 [1] and 1201

## THEA 2312 Stage Makeup

2 hours lecture, and an average of 2 hours laboratory; 3 credits Basic study of all aspects of stage makeup.

Prerequisite: Theater 1001 [1]
Corequisite: see section "Department crew requirements" above.

## THEA 2313 Scene Painting

3 hours; 3 credits
Equipment, materials, and professional procedures involved in painting for the stage.

Prerequisite: Theater 1001 and 1201
2310 [20.1]
Corequisite: see section "Department crew requirements" above.

## THEA 2320 Costume Construction for Stage and Screen I

3 hours; 3 credits
Theory and practice of costume construction in performance based media.

Prerequisite: Theater 1001 [1] and 1201
Corequisite: see section "Department crew requirements" above.

## THEA 2321 Costume Rendering

3 hours; 3 credits
Study and application of the methods, techniques and media used by the costume designer in the realization and presentation of the costume sketch

Prerequisite: Theater 1201
THEA 3320 Costume Construction for the Stage and Screen II
3 hours; 3 credits
The theory and practice of theatrical costume construction in performance based media.

Prerequisite: Theater 2320.
THEA 3321 Costume Design for the Stage I

3 hours; 3 credits
Study of contemporary and period costume design to acquaint the student with stage costuming. Application of study through design projects and work on productions.

Prerequisite: Theater 1001 and 1201
2320 [21.3]
Corequisite: see section "Department crew requirements" above

## THEA 3322 Costume Design for the Stage II

3 hours; 3 credits
Expanded study of contemporary and period costume design in order to deepen the student's understanding and proficiency in costume design for the stage and entertainment media. Application of study through design projects.

Prerequisite: Theater 3321
Corequisite: see section "Department crew requirements" above

## THEA 3330 Scenographic Techniques

3 hours; 3 credits
Study and execution of all necessary technical drawings used in preparation of theater scenery and lighting.

Prerequisite: Theater 1001 [1] and 1201
1201 [3]; 2310 [20.1]
Corequisite: see section "Department crew requirements" above

## THEA 3331 Scene Design I

3 hours; 3 credits
Aesthetic and functional elements of designing for the stage.
Development of a setting through sketches, color plates, working drawings, and models.

Prerequisite: Theater 3330 [22.2]
Corequisite: see section "Department crew requirements" above

## THEA 3332 Scene Rendering

3 hours; 3 credits
Media and techniques involved in visual communication of the stage designer.

Prerequisite: Theater 3330

## THEA 3333 Scenic Design II

3 hours; 3 credits
Concentration on scenic design, problems of interpretation, style, and staging.

Prerequisite: Theater 3331 [22.5]

## THEA 3340 Fundamentals of Stage Lighting

3 hours; 3 credits
The mechanics of stage lighting; electricity, instruments, control equipment, safety, professional standards of electrical work.

Prerequisite: Theater 1201.

## THEA 3341 Lighting Design I

3 hours; 3 credits
Design of stage lighting. Application and principles of light, color, illumination, and electricity.

Prerequisite: Theater 3330 [22.2]
Corequisite: see section "Department crew requirements" above.

## THEA 3342 Lighting Design II

3 hours; 3 credits
Design of stage lighting. Advanced application and principles of light, color, illumination, and electricity.

Prerequisite: Theater 3341.
Corequisite: see section "Department crew requirements" above
THEA 4320 Costume Construction for the Stage and Screen III
3 hours; 3 credits
Advanced theory and practice of theatrical costume construction in performance based media.

Prerequisites: Theater 2320 and 3320.

## THEA 4330 Scenographic Techniques II 2D CADD

3 hours; 3 credits
Study of Computer Assisted 2D Drafting and Design as applied to the disciplines of scenery, lighting, and costume design.

Prerequisite: Theater 3330

## THEA 4331 Scenographic Techniques III: 3D CADD

3 hours; 3 credits
Study of Computer Assisted 3D Drafting and Design as applied to the disciplines of scenery, lighting, and costume design.

Prerequisite: Theater 4330

## THEA 4340 Stage Lighting Workshop

6 laboratory hours; 3 credits
Practical laboratory work in stage lighting techniques and mechanics for departmental productions.

Prerequisite: Theater 1201

## Directing

## THEA 3601 Directing Techniques

3 hours; 3 credits
Investigation of the fundamental techniques in bringing a text and an acting group into performance. Working with the actor and the environment. May be taken twice for credit.

Prerequisite: Theater 1001,1201, 2102 and permission of the undergraduate deputy chairperson.

## THEA 3602 Directing Workshop

3 hours; 3 credits
Selection, casting, rehearsal, and production in class of a short contemporary play.

Prerequisite: Theater 3601 and permission of the undergraduate deputy chairperson.

## THEA 3620 Devising and Collaborative Creation

## 3 hours; 3 credits

Collaborative devising and performance of short, original theater pieces. The process of devising and collaborative creation analyzed
and explored in a workshop setting. Not open to students who took Theater 3002 [45] in Spring 2009.

Prerequisite: THEA 1001 [1].

## Production

## THEA 1201 Introduction to Theater Production

3 hours; 3 credits
Methods of production, physical theater layout, and practical experience in productions.

Corequisite: see section "Department crew requirements".

## THEA 1202 Scene/Electrics Shop Practicum

3 hours; 1 credit
Weekly scene/electrics shop hours in a lab setting. May be taken five times for credit

## THEA 1203 Costume Shop Practicum

3 hours; 1 credit
Weekly scene/electrics shop hours in a lab setting. May be taken five times for credit

## THEA 1204 Running Crew Practicum I

3 hours; 1 credit
Running Crew on a departmental production. May be taken five times for credit.

Prerequisite: permission of the instructor.

## THEA 1205 Running Crew Practicum II

3 hours; 1 credit
Running Crew on a departmental production. May be taken twice for credit.

Prerequisite: permission of the instructor.

## THEA 1206 Running Crew Practicum III

3 hours; 1 credit
Running Crew on a departmental production. May be taken twice for credit.

Prerequisite: permission of the instructor.

## THEA 1207 Running Crew Practicum IV

3 hours; 1 credit
Running Crew on a departmental production. May be taken twice for credit.

Prerequisite: permission of the instructor.

## THEA 2201 Stage Management

## 3 hours; 3 credits

Professional procedures and practices involved in organization, rehearsal and technical preparation, and performance of theater, opera, and dance productions.

Prerequisite: Theater 1001 [1] and Theater 1201 [3]; and permission of the undergraduate deputy chairperson. Corequisite: see section "Department crew requirements" in the
bulletin.

## THEA 2202 Stage Management 2

3 hours; 3 credits
An examination of the stage manager's responsibilities as communicator, leader, and organizer for the production team.

Prerequisite: Theater 2201 [26.1] with a grade of $B$ or higher. Corequisite: see section "Department crew requirements" in the bulletin.

## THEA 3351 Sound Recording

3 hours; 3 credits
Study of equipment, methods and professional practices used in the production of sound for the stage. (Not open to students who are enrolled in or have completed Television, Radio and Emerging Media 3951.)

Prerequisite: Theater 1201.

## THEA 4351 Sound Recording Workshop

6 hours laboratory; 3 credits
Practical laboratory work in sound recording for departmental productions in preparation.
Prerequisite: Theater 3351 and permission of the concentration head.

Prerequisite: Theater 3351 and permission of the concentration head.

## BFA acting courses

## THEA 3201 Dynamics I

4 hours; 3 credits
Study of the actor's stage movement and voice production. Work related directly to work being done in acting classes.

Prerequisite: Acceptance into the BFA Acting Program and permission of the concentration head.

## THEA 3202 Dynamics II

3 hours; 2 credits
Study of the actor's stage movement and voice production. Work related directly to work being done in acting classes.

Prerequisite: Acceptance into the BFA Acting Program and permission of the concentration head.

## THEA 3203 Dynamics III

3 hours; 2 credits
Study of the actor's stage movement and voice production. Work related directly to work being done in acting classes.

Prerequisite: Acceptance into the BFA Acting Program and permission of the concentration head.

## THEA 3204 Dynamics IV

3 hours; 2 credits
Study of the actor's stage movement and voice production. Work related directly to work being done in acting classes.

Prerequisite: Acceptance into the BFA Acting Program and permission of the concentration head.

## THEA 3205 Dynamics V

## 4 hours; 3 credits

Study of beginning stage combat for the actor. Practical knowledge of unarmed combat, development of skills in fight choreography.

Prerequisite: Theater 3204. Acceptance into the BFA Acting Program and permission of the concentration head.

## THEA 3206 Dynamics VI

4 hours; 3 credits
Study of the actor's stage movement and voice production. Work related directly to work being done in acting classes.

Prerequisite: Theater 3205. Acceptance into the BFA Acting Program and permission of the concentration head.

## THEA 3207 Dynamics VII

## 4 hours; 3 credits

Study of the actor's stage movement and voice production. Work related directly to work being done in acting classes.

Prerequisite: Theater 3204. Acceptance into the BFA Acting Program and permission of the concentration head.

## THEA 3208 Dynamics VIII

4 hours; 3 credits
Study of the actor's stage movement and voice production. Work related directly to work being done in acting classes.

Prerequisite: Theater 3204. Acceptance into the BFA Acting Program and permission of the concentration head.

## THEA 3401 Acting I: Fundamentals

2 lecture, 2 laboratory/ 3 credits
Physical, ensemble, and text-based exercises to integrate the actor's instrument with the processes of instinctual and experiential learning.

Prerequisite: Acceptance into the BFA acting program and permission of the concentration head.
Corequisite: Theater 3201 and 3202.

## THEA 3402 Acting II: Introduction to Scene Study

4 hours; 3 credits
Introduction to scene study. Basic approaches to preparing a role through text analysis and performance of scenes.

Prerequisite: Theater 3401 and 3201. Acceptance into the B.F.A. Acting Program and permission of the concentration head.
Corequisite: Theater 3202 and 3203.

## THEA 3403 Acting III: Contemporary Realism

4 hours; 3 credits
Application of basic acting techniques to the preparation and performance of scenes from realistic plays by Williams, Hellman, Miller or O'Neill.

Prerequisite: Theater 3402 and 3202 and 3203 and 3204.
Acceptance into the B.F.A. Acting Program and permission of the concentration head.
Corequisite: Theater 4702.

4 hours; 3 credits
Application of acting techniques to the performances of such classics of modern realism as those of Ibsen and Chekhov.

Prerequisite: Theater 3403 [11.3], acceptance into the BFA Acting Program and permission of the concentration head.
Corequisite: Theater 3436.

## THEA 3405 Acting V: Introduction to Shakespeare

4 hours; 3 credits
Introduction to style and form, with emphasis on the actor's understanding of the text of Shakespeare and its expression on the stage.

Prerequisite: Theater 3404 [11.4] and premission of the concentration head.
Corequisite: Theater 3205.

## THEA 3406 Acting VI: Advanced Acting Workshop

4 hours; 3 credits
Application of acting techniques essential to performing specialized genres. Each semester will focus on one such genre as solo performance, musical theater, or new plays.

Prerequisite: Theater 3405 and 3205 and permission of the concentration head.
Corequisite: Theater 3206.

## THEA 3407 Business of Acting and Audition Technique

3 hours; 3 credits
Examination of the audition process and practical aspects of the business of acting. Resume preparation, selection and preparation of material for the audition setting, investigating the complexities of the entertainment industry. Open to BFA Acting majors only.

Prerequisite: Theater 3404 [11.4] and permission of the concentration head.

## THEA 3410 Acting for the Camera

3 hours; 3 credits
Trains the advanced actor in the specialized demands of working for the camera; performance of selected scenes on video tape. Differences between stage and film techniques. This course is the same as FILM 3402.

Prerequisite: three courses in acting or the equivalent, and audition; and permission of the concentration head.

## THEA 3436 Dialects for the Actor

3 hours; 3 credits
Application of skills learned in CASD 1113 [13] (special section for actors) applied to classical texts and accents from the British Isles, Europe, and the Caribbean. (Not open to students who completed Theater 46 in spring, 1995.)

Prerequisite: permission of concentration head.

## THEA 4400W Senior Rehearsal and Performance

3 hours, 2 credits
Under faculty supervision students will study and evaluate their working procedures and development in a selected role throughout the rehearsal and performance process. Students will also develop a comprehensive written thesis that focuses on their research for the role, in-depth analysis of text and character, and analysis of the
creative process of the production. This is a writing intensive course.

Prerequisites: senior B.F.A. status in acting, English 1012, and permission of the chairperson.

## Workshops

## THEA 3701 Theater Workshop

4 hours; 3 credits
Writing and production of original scripts. Writing and production problems formulated, analyzed, and tested on the stage. Unified study of writing, acting, and directing. Students registered in Theater 3701 [36] assume responsibility for the direction of at least one production. Offered jointly by the Department of English and the Department of Theater. This course is the same as English 3309.

Prerequisite: Theater 3601 [30.1] or English 3306 [17.1].

## THEA 4620 Devising Workshop

4 hours; 4 credits
Collaborative devising and workshop performance of an original play. May be repeated twice for credit.

Prerequisites: Theater 2103, 3502, 3503, 3620 and permission of the undergraduate deputy chairperson.

## THEA 4701 Theater Laboratory I

6 hours; 3 credits
Supervised special project or laboratory work in one aspect of theater production culminating in a performance or term paper.

Prerequisite: permission of the instructor.

## THEA 4702 Theater Laboratory II

6 hours; 3 credits
Supervised special project or laboratory work in one aspect of theater production culminating in a performance or term paper.

Prerequisite: permission of the instructor.

## THEA 4703 Theater Laboratory III

6 hours; 3 credits
Supervised special project or laboratory work in one aspect of theater production culminating in a performance or term paper.

Prerequisite: permission of the instructor.

## THEA 4704 Theater Laboratory IV

6 hours; 3 credits
Supervised special project or laboratory work in one aspect of theater production culminating in a performance or term paper.

Prerequisite: permission of the instructor.

## THEA 4705 Theater Laboratory V

## 6 hours; 3 credits

Supervised special project or laboratory work in one aspect of theater production culminating in a performance or term paper.

## THEA 4706 Theater Laboratory VI

6 hours; 3 credits
Supervised special project or laboratory work in one aspect of theater production culminating in a performance or term paper.

Prerequisite: permission of the instructor.

## THEA 4710 Performance Ensemble

6 hours; 6 credits
Collaborative conceptualization, rehearsal and performance of a play or text. The process of researching a play and working as an ensemble analyzed, explored and practiced in rehearsal and performance. May be repeated twice for credit.

Prerequisite: Theater 2102 [10.1] and permission of the deputy chair.

## Honors courses

## THEA 5801 Theater Laboratory

Minimum of 45 hours satisfactory participation; 1 credit Satisfactory participation in projects and activities not included as part of the work of a specific course in any area of the Department of Theater. Students may take this course for credit four times. Students should consult the department office about the special registration procedures required for this course.

## THEA 5805 Independent Research

Minimum of 9 hours independent work $\S$ and conference or class meetings; 3 credits
Research or fieldwork in one of the divisions of theater supervised by a faculty member. Final report or paper.

Prerequisite: completion of an approved program of advanced courses in theater with an average grade of B or higher, and permission of the chairperson.

## THEA 5806 Seminar

Minimum of 9 hours independent work§ and conference or class meetings; 3 credits
Readings in theater. Examination.
Prerequisite: completion of an approved program of advanced courses in theater with an average grade of $B$ or higher, and permission of the chairperson.

## THEA 5807 Workshop

Minimum of 9 hours independent work§ and conference or class meetings; 3 credits
Creation of an acceptable piece of work in one of the several fields of theater.

Prerequisite: completion of an approved program of advanced courses in theater with an average grade of $B$ or higher, and permission of the chairperson.

The following inactive course(s) will only be offered if there is sufficient demand:
THEA 1002 Mini Course in Theater Arts
THEA 3310 Stagecraft II
THEA 3424 Special Topics in Dynamics

# Urban Sustainability Program 

Department office: 4151 Ingersoll Hall<br>Phone: 718.951.5000 x2159

## B.A. degree program in urban sustainability HEGIS code 0420; SED program code 21627

The urban sustainability program takes a unique interdisciplinary approach by offering concentrations in economics, environmental science, and sociology. Students will examine the causes of urban sustainability problems and devise solutions that promote environmental protection, social equity, and economic vitality. Alongside their coursework, students will learn how to map economic, environmental and social data using our geographic information system (GIS) laboratory to produce and analyze data. Our place-based teaching approach features hands-on engagement with the natural and built environment of New York City - including field trips to community gardens, local waterways, and city parks - preparing students to understand and find solutions to global issues affected by urban development in an era of climate change.

Students choose from one of three options:
Concentration in Environmental Science

Defining and solving many of the problems confronting urban centers requires an understanding of the physical, chemical and biological processes of coupled natural-human systems. Students in the Environmental Science concentration will use the natural laboratory of New York City to examine issues such as urban soil contamination, loss of wetlands, coastal impacts of sea level rise and effects of nitrogen pollution on marine ecosystems. Students will be prepared for graduate study in environmental and sustainability programs and acquire skills and knowledge that can be applied to careers in government, non-government, and private sector positions requiring management of resources and/or researching on ways to protect the natural environment.

Concentration in Environmental Economics and Business Management
Economic sustainability requires economic "development which meets the needs of the present without compromising the ability of future generations to meet their own needs." (Our Common Future, 2007). Students choosing Environmental Economics and Business Management as a concentration examine environmental economics and policy, environmental management, economic growth, development and trade. Environmental economists study the interrelationships between economic institutions and the natural environment at multiple spatial scales -neighborhood, urban, regional and global. Students completing the Economics concentration will be able to: 1) apply economic principles to problems related to the natural sciences; 2) understand the interdependence of risk and uncertainty in social behavior and natural systems; and 3) be familiar with multidisciplinary collaborative approaches for solving complex human-natural system problems. Students will be prepared for graduate study in environmental and sustainability programs, environmental law and public policy programs, as well as entry-level jobs in environmental government agencies, the not-for-profit sector, and environmental health and safety functions in Fortune-500 corporations.

## Concentration in Environmental Sociology

Sustainability requires that social institutions respond to ecological changes and constraints. Students choosing Sociology as a concentration will examine public policy, advocacy efforts, and environmental justice. Environmental sociologists uncover the role of social structures and institutions in shaping how people interact with the natural environment. For example, students will examine how social institutions structure science and how that affects our views and uses of nature. Students will also examine how social groups compete to shape environmental policies, and how those policies affect social inequality and environmental justice. Students will examine institutions working to shape sustainability, such as social movement organizations, community groups and government agencies. Students who concentrate in Sociology will acquire skills and knowledge that can be used in careers in environmental public policy, advocacy, diplomacy, education, and other fields.

## Program requirements (52.5-61 credits)

Students must complete both $A$ and $B$ below:
A. All of the following courses:

Urban Sustainability 1001, Urban Sustainability 2001W, Biology 1001, Biology 3083, Earth and Environmental Sciences 1201, 3750, Economics 2200, 3254, Sociology 1101, 2201, Philosophy 3309, Urban Sustainability 4001.
Economics 3400 or Earth and Environmental Sciences 3800 or Sociology 2112.
B. Students must complete one of the three Options below:

Option 1: Concentration in Environmental Science
Earth and environmental sciences 3600, 3610, 3675, 3900.

Chemistry 1040 or 1100, or Chemistry 1050 and 2050, or Earth and Environmental Sciences 3100.
Option 2: Concentration in Environmental Economics and Business Management
Economics 3202, 4400W, and two of the following: Economics 3232, 3252, Business 3180, 3181, 3182.
Option 3: Concentration in Environmental Sociology
Sociology 2701, 3202, 3204, 3205.
With the permission of the Urban Sustainability Program Steering Committee, students may be allowed to take up to 6 credits of other courses to satisfy the requirements listed in $A$ and $B$.

## Interdepartmental Minor(s)

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C- or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Urban Sustainability

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in urban sustainability must complete at least 30 credits in the Urban Sustainability Program with a grade of C or higher in each course. Students must meet with a program adviser to declare their intention to complete this sequence.

## Concentration requirements:

Urban Sustainability 1001.
One statistics course chosen from: Economics 3400, Health and Nutrition Sciences 3300, Mathematics 1501, Political Science 3422, Psychology 3400, Sociology 2113.

One of the following courses: Economics 2200; Political Science [1.5], 1002, 3163.
Philosophy 3309 and Sociology 2201.
Twelve credits (at least 6 of which must come from courses numbered 20 or higher) chosen from the following: General Science 2010, 2020, 2030, 2040, 3050; Earth and Environmental Sciences 1041, 3525, 3400W, 3600, [38.1]; Health and Nutrition Sciences 1100, 2130, 2120, 2131.

Urban Sustainability 4001.
Other advanced electives and special topics courses relevant to environmental studies may be substituted with the permission of the program director. The list of courses available each semester may be obtained from the program office.

## Courses

*Courses marked with an asterisk (*) are not counted toward the advanced courses required for the major or the 12 credits of advanced electives required for the minor.

## SUST *1001 Introduction to Urban Sustainability

3 hours; 3 credits
Introduction to urban sustainability; ecological, economic and social analyses of the human-nature interface in urban environments; problem-based and place-based approaches; data analysis, communication, group projects and interdisciplinary skills; site visits. (This course is the same as and not open to students who have taken Earth and Environmental Sciences 1500, Economics 2251 or Sociology 2202.)

## SUST 2001W Urban Sustainability Theory

3 hours lecture, 1 hour conference, 4 credits Interdisciplinary intellectual history and contemporary questions, debates, and theories surrounding urban sustainability. Theoretical contributions from natural sciences, economics, and sociology to understanding the human-nature interface in urban environments; analysis and synthesis of primary texts and policy documents. This course is not open to students who have taken ECON 3251, EESC 1501 or SOCY 3201. Writing-intensive course.

Prerequisites: SUST 1001, ECON 2251, EESC 1500 or SOCY 2202; EESC 1201; SOCY 2201; and ECON 2200.

## SUST 2101 Mapping Inequalities: Revealing and Combating Racism in America

3 hours; 3 credits
Relationship between environment, sustainability, and landscape, focusing specifically on the production of inequality. From
segregation to gentrification, from slavery to global capitalism and disaster capitalism, inequality is produced spatially and impacts our ability to build sustainable environments and societies. Understanding the geography of inequality helps illustrate the roots of inequality, as well as possible solutions. This course is the same as AMST 3502.

## SUST 2201 Our Digital Planet: Crowdsourcing and the Cloud

3 hours; 3 credits
Overview of geospatial technologies including Geographic Information Systems (GIS), Global Positioning Systems (GPS), remote sensing; geospatial technology applications in government, business, research; public participation in activities such as citizen science and crowdsourcing; societal implications of the digital Earth, including issues such as privacy, social justice and equity, data quality, and surveillance. This course is the same as AMST 3501.

## SUST 3900 Special Topics

3 hours; 3 credits
Issues in sustainability that includes a discussion of the integration of equity, environmental, and economic processes. Topics vary from term to term. Course description may be obtained in the department office before registration. A student may take this course for credit twice, but may not repeat topics.

Prerequisites: Sophomore or Junior or senior standing or permission of the instructor and the director of the program.

## SUST 4001 Capstone in Urban Sustainability

2 hours lecture and 2 hours of independent work and conference per week; 3 credits
Seminar in recent and current topics in urban sustainability with focus on research methodology. Seminars by invited speakers; student seminars and discussions moderated by instructor. Students will collaborate to complete and present a project for a client selected by the urban sustainability steering committee.

Prerequisites: SUST 2001W, EESC 3750, advanced standing in the urban sustainability major and permission of the director of the Urban Sustainability Program.

## SUST 5001 Internships in Urban Sustainability

120 hours supervised fieldwork, 14 hours seminar; 3 credits Supervised participation in professional activities with public, private or non-profit entity; on-campus seminar meetings; creating a work journal and professional portfolio; internship must be preapproved by urban sustainability program director prior to enrolling.

Prerequisites: SUST 2001W and permission of program director.

## Women's and Gender Studies

## Department office: 1207 Ingersoll Hall <br> Phone: 718.951.5476

The interdisciplinary Women's and Gender Studies Program provides students with skills to examine and critique cultural, economic, historical, political, social and sexual issues using feminist and queer philosophical paradigms. Aside from learning about a cross section of feminist and queer thinkers, places and events, the students will explore ideas such as how one's gender affects access to power and whether or not the idea of power itself is an inherently problematic arrangement. The students will also have the opportunity to study how other factors such as race, class, sexuality and ability further impact one's feminist identification. The interdisciplinary Brooklyn College program in Women's and Gender Studies offers students a bachelor of arts degree and a minor. It also offers a minor in lesbian, gay, bisexual, transgender and queer (LGBTQ) studies, which investigates many of the same issues from the perspectives of queer theory and queer thinkers. Additionally, we offer a concentration for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades 1-6). The program is committed to providing students with an excellent education, advisement, and support.

The Women's and Gender Studies lecture series introduces students to national and international debates within feminist scholarship and gives students an entrée into the broader academic world. Women's and Gender Studies students have the opportunity to take field trips to feminist academic conferences, museums, and libraries. Majors and minors also have the opportunity to participate in internships specifically designed to enhance their academic and professional goals. Program courses stress the importance of women's and LGBTQ rights in the context of a diverse world.

A major or minor in the Women's and Gender Studies Program indicates that the student is willing to see a more complete picture of any field. Students in the program state that the courses open their eyes to new, creative ways of thinking and conceptualizing their careers. As an interdisciplinary major, a degree in Women's and Gender Studies opens up the door for careers in activism, education, law, medicine, nonprofit, politics, psychology and various other fields.

## B.A. degree program in women's and gender studies HEGIS code 4903; SED program code 02117

Program requirements (30-32 credits)

Students must complete parts 1 through 5 with a grade of $C$ or higher in each course:

1. Women's and Gender Studies 1001 and two of the following: Women's and Gender Studies 2100, 3120, 3165, 3328, 3340, 3405, 3436, 3501, 3550, 4404 or 4405.
2. Two of the following:

Women's and Gender Studies 3115, 3117, 3118, 3119, 3121, 3135, 3137, 3150, 3152, 3222, 3224, 3228, 3238, 3332, 3333, 3355, 3441,
3610, 3710, 3715.
Africana Studies 3260. (This course is the same as English 3162 and Women's and Gender Studies 3117.)
Africana Studies 3360. (This course is the same as Women's and Gender Studies 3446.)
Africana Studies 3365. (This course is the same as Political Science 3412 and Women's and Gender Studies 3447.)
Art 3089.
Classics 4032. (This course is the same as Women's and Gender Studies 3715.)
Classics 3238. (This course is the same as Women's and Gender Studies 3710.)
Comparative Literature 3630, Africana Studies 3246. (These courses are the same as Women's and Gender Studies 3118.)
English 3187. (This course is the same as Women's and Gender Studies 3119.)
English 3166. (This course is the same as Women's and Gender Studies 3115.)
English 3162. (This course is the same as Africana Studies 3260 and Women's and Gender Studies 3117.)
English 4110.
Film 3122. (This course is the same as Women's Studies and Gender 3150.)
History 3002
History 3206. (This course is the same as Women's and Gender Studies 3224.)
History 3328. (This course is the same as Women's and Gender Studies 3238.)
History 3545. (This course is the same as Women's and Gender Studies 3332.)
History 3337. (This course is the same as Women's and Gender Studies 3333.)
History 3336. (This course is the same as Women's and Gender Studies 3338.)
History 3418. (This course is the same as Women's and Gender Studies 3228.)

Judaic Studies 3020. (This course is the same as Women's and Gender Studies 3222.)
Philosophy 3306.
Philosophy 3720. (This course is the same as Women's and Gender Studies 3135.)
Philosophy 3725. (This course is the same as Women's and Gender Studies 3137.)
Puerto Rican and Latino Studies 3205.
Puerto Rican and Latino Studies 2250. (This course is the same as Women's and Gender Studies 3152 and American Studies 3310.)
Television, Radio \& Emerging Media 3434. (This course is the same as Women's and Gender Studies 3121.)
Theater 3506. (This course is the same as Women's and Gender Studies 3355.)
(Note: Women's Studies 3115 is not open to students who completed Women's Studies 3165 or English 3166 in fall 1993, or spring 1994.)
3. Women's and Gender Studies 3510 or Women's and Gender Studies 3230
4. Three of the following:

Women's and Gender Studies 3122, 3213, 3218, 3229, 3317, 3318, 3319, 3330, 3345, 3349W, 3350, 3351, 3352, 3353, 3354, 3356, 3357 , 3359, 3420, 3446, 3447, 3488, 3449, 62, 3606, 3608.
Africana Studies 3362 (This course is the same as Women's and Gender Studies 3488.)
Anthropology 3310. (This course is the same as Women's and Gender Studies 3213.)
Anthropology 3170. (This course is the same as Women's and Gender Studies 3218.)
Business 3245.
Business 3250 (This course is the same as Women's and Gender Studies 3345.)
Economics 3154 (This course is the same as Women's and Gender Studies 3317.)
Economics 3222.
Health and Nutrition Sciences 2180. (This course is the same as Women's and Gender Studies 3606.)
Health and Nutrition Sciences 2181.
Health and Nutrition Sciences 4153. (This course is the same as Women's and Gender Studies 3608.)
Judaic Studies 3017.
Political Science 3152. (This course is the same as Women's and Gender Studies 3351.)
Political Science 3341. (This course is the same as Women's and Gender Studies 3357.)
Political Science 3411. (This course is the same as Women's and Gender Studies 3356.)
Political Science 3412. (This course is the same as Africana Studies 3365 and Women's and Gender Studies 3447.)
Political Science 3146. (This course is the same as Women's and Gender Studies 3359.)
Political Science 3153. (This course is the same as Women's and Gender Studies 3353.)
Political Science 3155. (This course is the same as Women's and Gender Studies 3330.)
Political Science 3157. (This course is the same as Women's and Gender Studies 3350.)
Political Science 3393W. (This course is the same as Women's and Gender Studies 3349W.)
Political Science 3442 (This course is the same as Women's and Gender Studies 3354.)
Political Science 3446. (This course is the same as Women's and Gender Studies 3352 and Sociology 3446.)
Psychology 3360.
Sociology 2600. (This course is the same as Women's and Gender Studies 3420.)
Sociology 3607 (This course is the same as Women's and Gender Studies 3229.)
Sociology 3303 (This course is the same as Women's and Gender Studies 3122.)
Sociology 3608 (This course is the same as Women's and Gender Studies 3319)
Sociology 3609 (This course is the same as Women's and Gender Studies 3318.)
5. Women's and Gender Studies 4410W.

Other advanced electives and special topics courses relevant to the study of women may be substituted with the permission of the program coordinator. The list of available courses may be obtained each semester in the program office.

Women's and Gender Studies 4401, 4402, 4407 or 4408 may be used to fulfill the requirements in either section 2 or 4.

## Departmental Minor(s)

## Minor in Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) studies

## Program requirements (12-14 Credits)

All courses must be completed with a grade of $C$ or higher.

1. Women's and Gender Studies 2100.
2. At least three courses from the list below. (Students may take no more than two of the following courses: Women's and Gender Studies 3352,

3359, 3715.)
Women's and Gender Studies 3137, 3213, 3238, 3330, 3405, 3436, 3353, 3354, 3352, 3359, 3710, 3715, 4401, 4404, 4407; English 4110; Health and Nutrition Sciences 2181. One of the following: Women's and Gender Studies 4408, 4410W may be included with permission of the coordinator.

Students may take no more than two of the following courses: Women's and Gender Studies 3352, 3359, 3715.

## Minor in Women's and Gender Studies

## Program Requirements

A program of 12-14 credits in advanced electives in the Women's and Gender Studies Program with a grade of C or higher in each course. Students may take no more than two of the following courses: Women's and Gender Studies 3349W, 3350, 3352, 3359, 3715.

## Interdepartmental Minor(s)

## Minor in Global Studies

Students must complete twelve credits of advanced electives chosen from courses listed below, with a grade of C- or higher in each course. Courses must come from at least two departments or programs. Courses presented for this minor may be counted toward the major in any of the participating departments or programs.
a. Global Institutions and Processes

Anthropology 3160, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 3301, 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 2140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 3341; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's and Gender Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 2215, 3130, 3395; Children and Youth Studies 3110; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's and Gender Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television, Radio \& Emerging Media 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Urban Sustainability 4001; or Earth and Environmental Sciences 1101, 1201; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Women's Studies

The requirements for early childhood education teacher (birth-grade 2) are described under the Department of Early Childhood and Art Education in the Undergraduate Bulletin. The requirements for childhood education teacher (grades 1-6) programs are described under the Department of Childhood, Bilingual and Special Education in the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in women's studies must complete at least 30 credits in the Program in Women's and Gender Studies with a grade of C or higher in each course. Students must meet with the Women's and Gender Studies Program coordinator to declare their intention to complete this concentration. They should also meet with an adviser in the School of Education regarding the appropriate sequence of teacher education courses.

## Concentration requirements:

Women's and Gender Studies 1001.
Seven courses chosen from the following: Women's and Gender Studies 3120, 3115, 3606, 3340, 3441, 3351, 3354, 3224, 3228, $3446,4401$. Women's and Gender Studies 4410W .

## Courses

## WGST 1001 Introduction to Women's Studies: Sex, Gender, and Power

3 hours; 3 credits
An interdisciplinary introduction to the study of women. From the first and second waves of feminism to grll power's cyberactivism and empowerment through femininity. Material and social constructions of sex and gender. Power and dynamics, which drive and structure women's lives. Expressions and representations of women's experiences. Starting fall 2018 satisfies Pathways Flexible Core US Experience in Its Diversity requirement.

## WGST 2100 Key Ideas in LGBTQ

3 hours; 3 credits
Concepts, theories, and texts central to the study of lesbian, gay, bisexual, transgender, and queer experience: definitions of sex, gender, sexuality, sexual orientation; queer theory; intersections of sexuality, race, gender, ethnicity, (dis)ability, and class; study of LGBTQ (lesbian, gay, bisexual, transgender and queer) politics, communities, identities, and new social movements; representations of gender and sexuality in popular culture, religion, arts, literature, and visual culture; examination of different disciplinary and methodological approaches.

Prerequisite: Core Curriculum 1230 or WGST 1001 or permission of the coordinator.

## WGST 3115 Contemporary U.S. Women Writers: Diverse Cultural Perspectives

4 hours; 4 credits
Literature of selected contemporary Native American, African American, Latina, Asian American, and other women writers, analyzed from the perspective of feminist literary theories.A comparative course focusing on the literature of two or more groups. This course is the same as English 3166. (Not open to students who completed Women's Studies 3165 [58] or English 3187 [50.4] in fall, 1993, or spring, 1994.)

Prerequisite: Women's and Gender Studies 1001 [12], or English 1010 [1] or 1.7.

## WGST 3117 Black Women's Fiction

4 hours; 4 credits
Black women novelists, short story writers, and essayists. Crosscultural comparisons with African and Caribbean novelists. Readings of selected essays in Black feminist criticism. This course is the same as English 3162 and Africana Studies 3260.

Prerequisite: one of the following: Africana Studies 24, 3220 [24.1], 3221 [24.2], 3360 [44.6]; or English 1010 [1], 1.7; or Core Studies 1; or Core Curriculum 1110 [1.1]; or Classics 1110; or Women's and Gender Studies 1001 [12] or 3115 [33].

## WGST 3118 Caribbean Sexualities

## 4 hours; 4 credits

Sex and sexuality in the Caribbean and its diaspora; exploration of how sexuality intersects with and diverges from culture, nationalism, notions of gender, race, and ethnicity. Social science and literary texts explore a range of experiences from the nineteenth to the twenty-first centuries, including heterosexuality, interracial relationships, homosexuality, love, violence, and desire;
critical and theoretical texts examine the structures of gender and sexual relations, and relationships between sex and race. This course is the same as Africana Studies 3246, Caribbean Studies 3118, and Comparative Literature 3620.

Prerequisite: English 1010

## WGST 3119 Women and Literature

4 hours; 4 credits
Sexual roles and the sources of sexual conflict in English and American literature. Problems of sensibility, style, and audience. Function of literary images of women. This course is the same as English 3187.

Prerequisite: English 1010 or 1.7.

## WGST 3120 Women and the Creative Arts: Arts, Crafts and Music

3 hours; 3 credits
Aspects of American women's experience reclaimed from their own records in arts, crafts, letters, diaries, and folk songs. How criteria have been established for defining art; the social influences that encouraged women to limit themselves to certain "acceptable" media. Contemporary validation of women's creativity, readings, slide presentations, and audiovisual presentations.

Prerequisite: Women's and Gender Studies 1001 [12] or permission of the program coordinator.

## WGST 3121 Constructions of Gender and Sexuality in the Media

3 hours; 3 credits
Role of mass media-music, television, advertising, film, video games-in shaping the cultural meanings of gender. Formation of gender identities as inseparable from the formation of other axes of identity such as race, religion, age, class, sexuality, ethnicity, and physical ability. This course is the same as Television, Radio and Emerging Media 3434.

Prerequisite: Television, Radio and Emerging Media 1165 [6.5] or Women's and Gender Studies 1001 [12] or permission of the coordinator.

## WGST 3122 Contemporary Social Welfare Policy

3 hours; 3 credits
Development and re-organization(s) of U.S. welfare state in the 20th and 21st centuries, emerging directions and systems, underlying theoretical frameworks. Takes a theoretical approach to understanding social welfare systems in relation to larger social struggles over political and economic power, labor markets, and social inequality. Examines changes in policy in relationship to the state, economy, and corporations, and how policy changes impact low income communities. Situates welfare policy in relation to social movements and both the maintenance of and changes in class, race, and gender stratification, as well as historical changes in social constructions of race and gender. This course is the same as Sociology 3303.

Prerequisite: WGST 1001 or Sociology 1101.

## WGST 3135 Philosophy and Feminism

3 hours; 3 credits

Philosophical feminism. Critical examination of current issues in feminist scholarship. Issues of discrimination, equality, and difference; women in relation to science, epistemology, and political and moral philosophy. This course is the same as Philosophy 3720.

Prerequisite: Core Studies 10, or one philosophy course, or one women's studies course, or permission of the director.

## WGST 3137 Queer Philosophy

3 hours; 3 credits
Examination of metaphysical, epistemological and ethical issues arising from the experience of the LGBT community, including: philosophical critiques and defenses of the concept of sexual orientation; homosexuality in the Western philosophical tradition; LGBT marriage and familial relations; the ethics of outing and of being closeted; ethical issues affecting LGBT people in medicine, education and the law. This course is the same as Philosophy 3726.

## WGST 3150 Women in Film

## 3 hours; 3 credits

The various images of women in film from the beginning to the present. Readings and discussions of myths, fears, and fantasies that have led to the production of such images. The star system and its relationship to women performers. Screenings include films made by and about women. This course is the same as Film 3122.

Prerequisite: Film *1101 [1] or permission of the chairperson.

## WGST 3152 Digital Life Stories: Chicana/Latina Testimonio

3 hours; 3 credits
Latina feminist tradition of testimonios, autobiographical narratives, short-stories, poems, and oral histories to reveal the complexity of Chicana/Latina identity. The connection between life experience and new knowledge creation. Theorize Latinidades at the intersection of racism, sexism and heterosexism. Rethink feminism, women, gender and sexuality studies, Latin@, American and cultural studies. Students will create their own digital life stories. This course is the same as Puerto Rican and Latino Studies 2250 and American Studies 3310.

Prerequisite: English 1010 or equivalent.

## WGST 3165 Special Topics in Humanities

3 hours; 3 credits
Selected topics in the humanities examined from the perspective of the study of women. Topics vary from term to term. Course description may be obtained in the program office before registration. Students may take Women's Studies 3165 [58] or 59 for credit twice, or 3165 [58] and 3550 [59] for credit once each, but may not repeat topics.

Prerequisite: Women's and Gender Studies 1001 [12], or permission of the program coordinator.

## WGST 3213 Anthropology of Language, Sex, and Gender

3 hours; 3 credits
Language, as a human universal, is uniquely available for defining, maintaining, and enacting the cultural categories of gender and sexual orientation. This course offers a cross-cultural perspective on the relationships between language and gender, which helps us understand both how we use language in gender-specific ways and how gender is enacted through language practices. This course is the same as Anthropology 3310.

Prerequisite: Anthropology*1001 [1] or Women's or Gender Studies 1001 [12].

## WGST 3218 Women: Anthropological Perspectives

3 hours; 3 credits
Cross-cultural analysis of women's lives. Problems of nature and nurture, gender stereotyping and self-images, the position of women in all cultural spheres, and changes over the life cycle. This course is the same as Anthropology 3170.

Prerequisite: Anthropology *1000 or 2100 or 1100 or 1200 or 1300 or 1400 or a Pathways required or flexible core course or Women's and Gender Studies 1001 or permission of the chairperson.

## WGST 3222 Gender in Classical Jewish Texts

3 hours; 3 credits
This course will explore the role of gender in classical Jewish texts from the Bible to the Mishnah, Talmud, Midrash, and the Zohar, with a particular emphasis on Talmud and Midrash. From the creation story to homoeroticism, gender ambiguity, and marital law, this course will cover a range of topics looking at biblical and rabbinic Judaism through the lens of gender theory. This course is the same as Judaic Studies 3020.

Prerequisite: English 1010 or equivalent

## WGST 3224 Women, Gender, and Sexuality in Europe from 1800

3 hours; 3 credits
History of women, gender, and sexuality in Europe from the era of revolution, industrialization, and demographic transition to the present. How did gendered notions of humanity play out in forms of political representation, the nature of the workplace, and the structure of the state? What were the implications for family life and social organization? How did sexual identities and the life course evolve in modern and postmodern societies? This course is the same as History 3206.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or History 3005 or permission of the program coordinator.

## WGST 3228 Daughters of the Promised Land: Women in American History

3 hours; 3 credits
The history of women in the United States, with emphasis on the last two centuries. Gender intersections with race, class, and ethnicity in the areas of work, personal relationships, and control over reproduction. Women in organizations of labor, religion, and politics, including the feminist movements. Changing images of women. (Not open to students who have completed History 3490 [43.9] topic: Daughters of the Promised Land: Women in American History.) This course is the same as History 3418.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or History 3005 or permission of the program coordinator.

## WGST 3229 Working 9-5? The Sociology of Work in the U.S.

3 hours; 3 credits
Survey of the literature in the Sociology of Work. Covers both historical and contemporary nature of work. Shifts in the labor market. Race, gender, immigration and work. This course is the same as Sociology 3607.

Prerequisite: : Core Curriculum 1230 [2.3] with a grade of B- or higher, Core Studies 3 with a grade of B- or higher, or Sociology *1101 [5].

## WGST 3230 History of Feminism

3 hours; 3 credits
Definitions of feminism; feminists in the Renaissance and early modern Europe; feminist demands arising from the French Revolution; early radical feminism in the United States, France, and the Germanies; liberal and Marxist feminism; women's movements from the 1850s to World War I in the West; the development of women's movements outside of Europe and America; imperialism, feminism, and national independence; the "second wave": women's liberation movements since 1968. This course is the same as History 3335.

Prerequisite: Core Studies 4, or Core Curriculum 1220 [2.2] or History 3005 or permission of the program coordinator.

## WGST 3238 History of Sexuality in the Americas

3 hours; 3 credits
Sexuality in practice and thought in North and South America since colonial times. Surveys continuities, commonalities and differences from cultural, geographic and temporal perspectives, looking at the effects of major social movements including nationalism, industrialization and globalization. Uses secondary sources and a wide variety of primary sources from Inquisition documents to Flapper films. Students explore the topic both through theory and careful historical contextualization. This course is the same as History 3328.

Prerequisite: Core Curriculum 1230 [2.3] or Women's or Gender Studies 1001 [12] or permission of the coordinator.

## WGST 3317 Women and the Contemporary Economy

3 hours; 3 credits
History of the socioeconomic position of women; evidence on the changing economic position of women in the post-civil rights era; assessments of the welfare-to-work transition; political economy of marriage and childbearing decisions. (This course is the same as Economics 3154.)

Prerequisite: Women's and Gender Studies 1001 [12].

## WGST 3318 Balancing Acts: Negotiating Work and Family Life in the Contemporary United States

## 3 hours; 3 credits

Sociological exploration of the competing responsibilities of paid work and family work in the contemporary United States. Perspectives of women, men, and children on work-family negotiations and conflicts. Diversity of work-family arrangements as organized by the intersection of gender, race/ethnicity, class, sexuality and nationality. Social policy for work-family balance. This course is the same as Sociology 3609.

Prerequisite and/or corequisite: Core Curriculum 1230 [2.3] with a grade of B - or higher, or Core Studies 3 with a grade of B - or higher, or Sociology *1101 [5], or Women's or Gender Studies 1001 [12], or Sociology 3607 [43.2] or permission of the program coordinator.

## WGST 3319 Workers United: The Sociology of Labor and Capital

3 hours; 3 credits
Theories on labor and work. History of labor struggles and worker's rights in the U.S. and globally. Relationship between the labor
movement and immigrant groups. Development of worker centers as a response to declining labor union density. This course is the same as Sociology 3608.

Prerequisite and/or corequisite: Core Curriculum 1230 [2.3] with a grade of B - or higher, Core Studies 3 with a grade of B - or higher, or Sociology *1101 [5], or Women's or Gender Studies 1001 [12] or permission of the program coordinator.

## WGST 3328 Women, War, and Peace

3 hours 3 credits
An interdisciplinary study of women's relationship to war, peace and militarism, including the theoretical debate over women as "essentially" maternal and therefore more pacifistic. Women's roles within the military and militarized societies Military policy depends upon notions of masculinity and femininity. Relationship between war, militarism, gender inequality and racism. Similarity and differences between personal violence against women (rape, battering) and state organized and supported violence. Relationship between feminism and peace activism.

Prerequisite: Women's or Gender Studies 1001 [12], or permission of the program coordinator.

## WGST 3330 Queer Politics in Modern America

3 hours; 3 credits
Concepts and theories of the political, social, and cultural construction of sexuality. Investigation of the intersection of gender, sexuality, sexual orientation, race/ethnicity, and class as forms of power and identification in America. Diverse social movements that have been built around issues of sexualities in the 20th and 21st centuries. This course is the same as Political Science 3155.

Prerequisite or corequisite: Core Curriculum 1230 [2.3] or Women's or Gender Studies 12 or English 1010 [1] or English *1012 [2] or permission of the coordinator.

## WGST 3332 Women in Indian History (1800-Present)

## 3 hours; 3 credits

Traces continuities and changes in women's lives in the geopolitical area of South Asia, mainly India, from the nineteenth century to the present. Effects of British colonial rule on different groups of women; women's question and nationalism; construction and transformation of gender roles; women's involvement in organizational activities, freedom struggles and other resistance movements; women and partition of India and Pakistan; women in family and state; contemporary issues related to democracy, women's rights, uniform civil code, and others. This course is the same as History 3545.

Prerequisite and/or corequisite: History 3543 preferred, or Women's and Gender Studies 1001.

## WGST 3333 Gender, Race, and Empire (19th-20th

## Centuries)

3 hours; 3 credits
Traces intersection of gender, race, and empire in regulation and maintenance of European, particularly British, colonies in different parts of Asia and Africa in the nineteenth and twentieth centuries; investigates the impact of race and gender specific ideologies introduced by colonial regimes and their impact on native population in a comparative framework; explores how those ideas were appropriated, internalized, and challenged; connection between women and imperialism; involvement and activism of

European and American women with nationalist and women's question in South Asia and beyond. This course is the same as History 3337.

Prerequisite and/or corequisite: History 3543 preferred, or Women's and Gender Studies 1001.

WGST 3338 The Home and the World: Gender, Family, and Nation-State -- A Cross-Cultural Perspective
3 hours; 3 credits
Exploration of gender, family, and households, and their connection with nation and state formation; social construction of gender, different forms of families and households, class-caste-racial hierarchies, the life-course, sexualities, gender, labor, and family inequalities across time in various geopolitical contexts, sociocultural and political-economic processes. This course is the same as History 3336 and Children and Youth Studies 3338.

Prerequisite: English 1010 or permission of the Coordinator

## WGST 3340 Sex, Power, Money: Political Economy of Women in the United States

## 3 hours; 3 credits

Economic and political analysis of women's power in United States society. Women as paid workers in the formal economic structure and as unpaid workers in the parallel home economy. Social class, gender, and race in the allocation of economic and political power. Formal and informal challenges to the legal and political system.

Prerequisite: Women's and Gender Studies 1001 [12] or permission of the program coordinator.

## WGST 3341W Sex, Power, Money: Political Economy of Women in the United States <br> 4 hours; 3 credits

Economic and political analysis of women's power in the United States society. Women as paid workers in the formal economic structure and as unpaid workers in the parallel home economy. Social class, gender, and race in the allocation of economic and political power. Formal and informal challenges to the legal and political system. Writing intensive section.

Prerequisites: Women's and Gender Studies 1001 [12] or permission of the program coordinator; and English *1012 [2].

## WGST 3345 Diversity and Inclusion in the Workplace: A Global Perspective

3 hours; 3 credits
Knowledge and skills that will enable students to effectively analyze the interplay between diverse identities and organizational dynamics both in the U.S. and global contexts. The course will: (1) Analyze the evolution of the relationship between sex, gender, other identities, and work around the world; (2) Compare and contrast the labor market and organizational experiences of men and women in the U.S. in a comparative perspective with other countries; and (3) Examine strategies for successfully building diverse and inclusive organizations. Real life examples and cases will be used to illustrate and integrate the studied concepts. This course is the same as BUSN 3250.

Prerequisite: Upper sophomore status or Women's and Gender Studies 1001 [12] or Business 3240 [40.3] or Psychology 3172 [12.7].

## WGST 3349W Critical Writing on African Women and

 Feminism4 hours; 4 credits
Critical examination of major issues on African women and feminism. Commonalities of experiences through the exercise of patriarchy and injustices privileging and oppressing some people based on their gender. Critiques of feminism that have emerged from African women scholars, as a hierarchical structure that privileged western thought and experiences. Consequences of debate to gender relations on the African continent. Focus on developing students' writing skills. Writing-intensive course. This course is the same as Political Science 3393W and Africana Studies 3364.

Prerequisites: English *1012 [2] and one of the following: Political Science *1001[1.51], 1002[1.7], 1003, 1004, 1005, or 1006, or Core Curriculum 1230[2.3] or Women's and Gender Studies 1001 or Africana Studies 1001.

## WGST 3350 Women in the Black Freedom Struggle

4 hours; 4 credits
Analysis of the role of women in the black freedom struggle concentrating on the period from 1940-1980. Focus on women activists, theorists, and women-led organizing efforts that helped to define and orient the black freedom struggle. Examine interlocking issues of gender, sexuality, class, and race in postwar America and the development of the modern civil rights movement. This course is the same as Political Science 3157 and Africana Studies 3127.

Prerequisite: Political Science *1001[1.51], 1002[1.7], 1003, 1004, 1005, or 1006 or Core Curriculum 1230[2.3]; or Women's and Gender Studies 1001 or Africana Studies 1020.

## WGST 3351 Women and Politics in the United States

3 hours; 3 credits
Women and politics in the context of the United States of America. Gaining the right to vote; the Equal Rights Amendment; women as political leaders; racial and ethnic diversity of U.S. women; the "gender gap." Policy issues including the feminization of poverty and social welfare. This course is the same as Political Science 3152.

Prerequisite: Women's and Gender Studies 1001 [12] or permission of the program coordinator.

## WGST 3352 Transgender Theories and Politics

4 hours; 4 credits
Study of transgender as an identity, as sets of practices, as social movements, as interventions in gender studies and queer theory. Theoretical overview of key early texts in gender theory. Subsequent readings on social and legal constructions of sex in the United States and internationally and on social and political movements for transgender rights and gender self-determination. Examination of trans as both as a particular kind of claim for gender recognition and as a move away from norms organized around the gender binary. This course is the same as Political Science 3446 and Sociology 3446.

Prerequisite: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or Women's and Gender Studies 1001 or Sociology 1101 or permission of the Chairperson, or English 1010 or equivalent, or permission of department.

## WGST 3353 The Politics of Masculinities

3 hours; 3 credits

Concepts and theories of the political, social, and cultural construction of masculinity/masculinities and femininity/femininities. The investigation of the intersection of gender, sexuality, sexual orientation, race/ethnicity, and class as forms of power and identification in the lives of American men. Exploration of the variations in men's experiences across racial/ethnic, class, and sexual lines. This course is the same as Political Science 3153.

Prerequisite or corequisite: Core Curriculum 1230 [2.3] or Women's and Gender Studies 1001 [12] or English 1010 [1] or English *1012 [2] or permission of the coordinator.

## WGST 3354 Politics and Sexuality

3 hours; 3 credits
Examination of the theory and practice of lesbian, gay, bisexual, and transgender politics in the US including: the many ways the state regulates sexuality and gender through law and policy; the emergence of modern civil rights movements of sexual minorities, and brings in several theoretical approaches including queer theory, Black queer studies, and transgender studies. This course is the same as Political Science 3442.

Prerequisite: Women's and Gender Studies 1001 [12] or permission of the program coordinator.

## WGST 3355 Women in Theater

3 hours; 3 credits
Exploration and examination of women's history of, participation in, and contributions to the performing arts as actresses, playwrights, directors, theorists. Combines theory and practice. This course is the same as THEA 3506.

Prerequisite: THEA 3501 or an Upper-Tier Core Curriculum course in Exploring literature or Exploring global connections, or WGST 1001 or permission of the coordinator.

## WGST 3356 Gender and Political Theory

3 hours; 3 credits
Analysis of political concepts of identity, power, citizenship, race, nation and class in relation to gender and sexuality. Examination of the way ideologies of gender are deployed within the political theory tradition. Sameness/difference debate, identifying the forms of gender-based domination and resistance, and antiracist approaches to feminism. This course is the same as Political Science 3411.

Prerequisite: Women's Studies 10.7 or WGST 1001 [12] or permission of the coordinator.

## WGST 3357 Global Gender Politics

3 hours; 3 credits
Study of gender politics and policy around the globe. Examination of women's citizenship and impact of gender on public policy and of public policy on gender in a range of societies. Exploration of the gendered foundations and impacts of the international processes of globalization, militarization, and democratization. Exposure to several types of political analysis such as political ethnography and feminist comparative policy. (This course is the same as Political Science 3341.)

Prerequisites: Any Political Science course in the 1000-level range or Women's and Gender Studies 1001 [12] or permission of the instructor.

## WGST 3359 The Politics of Queer Theory

4 hours, 4 credits
Introduction to the concepts and themes associated with the development of the field of Queer Theory. Investigation of the connections among debates regarding the concepts of identity and power in Queer Theory and in the fields of Political Theory, Women's Studies, and Lesbian and Gay Studies. Examination of essentialist and constructionist understandings of social identity. Exploration of the relationship between sex, gender and sexuality as forms of identification and power and other forms of identification and power such as race and class. This course is the same as Political Science 3416.

Prerequisites: Core Studies 3 or Core Curriculum 1230, or any Political Science course in the 1000-level range, or Women's and Gender Studies 1001, or English 1010 or equivalent, or permission of department.

## WGST 3405 Women's Sexualities

3 hours; 3 credits
Interdisciplinary study of women's sexualities, women's lives and strategies of lesbian survival, bisexual and transgendered people's survival, primarily in male dominated societies. Struggle for lesbian, bisexual, and transgendered self-expression in historical and cultural context. Past and present views of women's sexualities. Interrelationship of feminist, lesbian, bisexual, and transgendered movements. Materials drawn from history, psychology, sociology, literature, and the arts.

Prerequisite: Women's and Gender Studies 1001 [12] or permission of the program coordinator.

## WGST 3420 Gender and Society

3 Hours; 3 Credits
Relationships between men and women in America today. Cultural consequences of biological differences. Sexual stereotypes in mass media. Legal position and education of women in comparison with men. Different work opportunities and the problems of combining work and family. Role of minority group women. Movement toward sexual equality. This course is the same as Sociology 2600.

Prerequisite: Core Curriculum 1230 [2.3] with a grade of B - or higher, or Core Studies 3 with a grade of B- or higher, or Sociology *1101 [5], or permission of the coordinator.

## WGST 3436 Global Perspectives on LGBTIQ Sexualities

3 hours; 3 credits
Global perspectives on lesbian, gay, bisexual, transgender, intersex, and queer (LGBTIQ) sexualities and genders; study of the LGBTIQ global movement for human rights; consideration of global sexualities and genders in relation to the Western sex/gender system; changing theoretical frameworks in the investigation of global LGBTIQ sexualities and genders.

Prerequisite: Core Curriculum 1230 [2.3] or Women’s or Gender Studies 1001 [12] or permission of the coordinator.

## WGST 3441 Women in the Cities

3 hours; 3 credits
Problems women experience as a part of city living, including housing, employment, crime, healthcare, childcare, education, community involvement, family responsibility, and social supports. Study of services presently available to women. Critique of institutional responses to women's needs. Focus on the influence
of ethnicity, race, and social class on women's urban experiences.
Prerequisite: Core Studies 3 or 4, or Core Curriculum 1220 [2.2] or 1230 [2.3] or History 3005 or permission of the program coordinator.

## WGST 3446 The Black Woman in America

## 3 hours; 3 credits

Interpretation and critical evaluation of the history, role, and image of the Black woman in America; emphasis on the burdens of racism, sexism, the economy, the Black"matriarch", health care, feminism and womanism, andcontemporary issues. This course is the same as Africana Studies 3360.

Prerequisite: Africana Studies 1020 or 3260, Core Studies 3 or 9 or Core Curriculum 1230 or 3207 [20.07], Women's and Gender Studies 1001, or permission of chairperson.

## WGST 3447 African Women and Feminism

## 3 hours; 3 credits

Explorations of gender-based inequality and the way African women exercise formal power. African women scholars' and activists' theoretical and practical analyses of feminism and the consequences of such analyses on gender relations in the continent. Theoretical readings and case studies. Course may have a national, regional, or continental focus. This course is the same as Political Science 3412 and Africana Studies 3365.

Prerequisite: Core Studies 3 or Core Curriculum 1230 or Core Studies 9, or any Political Science course in the 1000-level range, or Africana Studies 1001, or Women's and Gender Studies 10.7 or 1001, or English 1010 or equivalent, or permission of department.

## WGST 3449 Dialogue to Truth: The Female Voice in Education

3 hours; 3 credits
Introduction to female educators and their contribution to our understanding of curriculum, pedagogy and schooling.

Prerequisite: Women's and Gender Studies 1001 [12], and Core Curriculum 1230 [2.3].

## WGST 3488 Race, Gender and Inequality

3 hours; 3 credits
Historical constructions of race and gender; difference as it contributes to structural and institutional inequalities; ideological debates among marginalized groups within nation states, legislatures, schools, neighborhoods, prisons, marketplaces, social and political organizations and government institutions; the intersection of race, ethnicity, gender, sexuality and class in social movements, grassroots organizations, political parties and civic associations. This course is the same as Africana Studies 3362.

Prerequisite: Africana Studies 1020 or Women's and Gender Studies 1001

## WGST 3501 Women and Reproductive Rights

## 3 hours; 3 credits

An interdisciplinary course on women's experiences of fertility control, childbirth, sex education, teen pregnancy, reproductive technologies, and reproductive hazards. Major themes include the influences of historical period, political perspectives, race, ethnicity, and social class on the perceptions and realities of reproductive rights for women.

Prerequisite: permission of the Women's and Gender Studies coordinator.

## WGST 3510 Feminist Theories

3 hours; 3 credits
A focus on theories, conceptual developments, debates, epistemological and methodological issues. Critical interrogation of different feminist intellectual traditions. Important feminist theories examined include: liberal feminism; radical feminism; Marxist feminism/socialist feminism; postmodern feminism; postcolonial feminism. Feminist traditions examined from explicitly interdisciplinary perspectives, highlighting methodological contributions made by feminist scholars from different disciplinary backgrounds.

Prerequisite: Women's and Gender Studies 1001 [12] or permission of the instructor or program coordinator.

## WGST 3550 Special Topics in Social Science

3 hours; 3 credits
Selected topics in the social sciences examined from the perspective of the study of women. Topics vary from term to term. Course description may be obtained in the program office before registration. Students may take Women's Studies 3550 [59] or 3165 [58] for credit twice, or Women's Studies 3165 [58] and 3550 [59] for credit once each, but may not repeat topics.

Prerequisite: Women's and Gender Studies 1001 [12], or permission of the program coordinator.

## WGST 3606 Women and the Medical System: A Feminist Perspective

## 3 hours; 3 credits

Modern medical systems and women's place as medical workers and consumers of medical services. History of women healers and health workers. Influences of race, class, ethnicity, and sexual orientation on illness and treatment of women. Politics of contraception, sterilization, abortion, and childbirth. Self-help care movement. This course is the same as Health and Nutrition Sciences 2180.

Prerequisite: Women's and Gender Studies 1001 [12]; or Health and Nutrition Sciences 6.1; or permission of the program coordinator.

## WGST 3608 Lesbian, Gay, Bisexual and Transgender Health

3 hours; 3 credits
Develop an understanding of historical and contemporary health issues facing sexual minorities (Lesbian, Gay, Bisexual, Transgender, Queer). Topics include factors that contribute to negative health outcomes in LGBT populations related to mental health, HIV/STIs, substance use, smoking, certain types of cancer, and victimization. (This course is the same as HNSC 4153)

Prerequisite: HNSC 2181

## WGST 3610 Gender and the Information Age

3 hours; 3 credits
An interdisciplinary study of gender in cyberculture, science, and technology. The evolutions of gender and feminist theories as well as activism will be considered in terms of rapid advances in technology and sciences information. This course does not require prior knowledge of technoscience.

Prerequisite: Women's and Gender Studies 1001 [12] or permission of the program coordinator.

## WGST 3710 Gender and the Body in Ancient Religions

3 hours; 3 credits
Study of social, historical, cultic, and literary contexts of gender roles, the body, and sexuality in ancient Greco-Roman religions, ancient Judaisms, and early Christianities. Application of modern theory to ancient evidence. This course is the same as Classics 3238 and Studies in Religion 3042.

Prerequisite: English 1010 or permission of the chairperson.

## WGST 3715 Gender and Sexuality in Ancient Greece and Rome

3 classroom hours plus conference and independent research; 4 credits
An exploration into the ways in which individual sexual experience was categorized and evaluated by society in the ancient world, with special attention to questions of gender role, sexual orientation, and the intersection of the personal and the political. Evidence from such literary and nonliterary sources as lyric poetry, epigram, drama, oratory, history, philosophy, epigraphy, and the visual arts. Emphasis on research methodologies. This course is the same as Classics 4032. (Not open to students who have completed Classics 14 or 62.3.)

Prerequisite: English 1012 and at least sophomore standing; or permission of chairperson.

## WGST 4401 Interdisciplinary Project

Minimum of 9 hours conference and independent work; 3 credits Independent or group project approved by a faculty committee. The project must involve more than one department in the college. Achievement evaluated by the participating faculty. Students may repeat the course once, but may not repeat topics.

Prerequisite: junior or senior standing; and Women's and Gender Studies 1001 [12]; and three electives from those listed under program requirements; and permission of the program coordinator and at least one sponsoring faculty member.

## WGST 4402 Community Internship in Women's Studies

42 hours fieldwork; 1 credit
Community service experience working at a site approved by the program, linked with enrollment in one of the following courses: Women's Studies 1001 [12] Introduction to Women's Studies: Sex: Gender and Power Women's Studies 3120 [32] Women and the Creative Arts: Crafts and Music, Women's Studies 3115 [33] Contemporary U.S. Women Writers Women's Studies 3405 [34] Women's Choices Women's Studies 3606 [35] Women and the Medical System Women's Studies 3340 [36] Political Economy of Women in United States Society Women's Studies 3501 [37] Women and Reproductive Rights Women's Studies 3441 [38] Women in the Cities, Women's Studies 3165 [58] Special Topics in Humanities Women's Studies 3550 [59] Special Topics in Social Science Completion of at least one written assignment and 42 hours of community fieldwork to be evaluated by the instructor of the three-credit Women's Studies course to which this internship is attached.

Corequisite: enrollment in one of the following courses: Women's and Gender Studies 1001 [12], 3120 [32], 3115 [33], 3405 [34], 3606 [35], 3340 [36], 3501 [37], 3441 [38], 3165 [58], 3550 [59].

## WGST 4404 Community Internship in LGBTQ Institutions

6 conferences and independent work; 3 credits
In-depth experience in a working/learning supervised internship in an approved lesbian, gay, bisexual, transgender, or queer (LGBTQ) community organization or organization with an LGBTQ or sexual rights project; conferences with instructor; report or term project; students are encouraged to meet with instructor one term prior to registration to discuss and arrange placement.

Prerequisite: Women's and Gender Studies 1001 [12] or permission of the program coordinator.

## WGST 4405 Community Internship in Women's Studies

6 hours conferences and independent work; 3 credits In-depth experience in a working/learning supervised internship in an approved woman-focused community agency or women's organization; conferences with instructor; report or term project; students are encouraged to meet with instructor one term prior to registration to discuss and arrange placement.

Prerequisite: Women's and Gender Studies 1001 [12] or permission of the instructor or program coordinator.

## WGST 4407 Seminar in LGBTQ Studies

## 3 hours; 3 credits

Selected topics in the humanities and social sciences examined within the context of LGBTQ Studies. Topics vary from term to term. Course description may be obtained in the program office before registration. Students may take Women's Studies 4407 one time.

Prerequisite: Women's and Gender Studies 1001 [12] or 2100 or permission of the program coordinator.

## WGST 4408 Independent Study

Minimum of 9 hours conference and independent work; 3 credits Independent course of study supervised by a faculty member. Regular conferences. Written reports. Students may only take this course once.

Prerequisite: Women's and Gender Studies 1001, upper junior or senior status and permission of the coordinator.

## WGST 4410W Senior Seminar

3 hours; 3 credits
Required advanced seminar to study interdisciplinary theory and methodology applied to a selected theme. Colloquia and research and/or fieldwork. Senior thesis written individually or collectively. A student completing the course with distinction is recommended for honors. (Not open to students who have completed Humanities 83.1 or Social Science Interdisciplinary Studies 83.1.) Writing intensive course.

Prerequisites: English *1012 [2]; and Women's and Gender Studies 1001 [12]; and at least two courses in Women's Studies approved by the program coordinator.

## Inventory of Registered Programs at Brooklyn College

The following undergraduate degree, advanced certificate, and combined undergraduate/graduate degree programs are offered at Brooklyn College. These programs have been approved by the New York State Education Department (SED) and are listed in the Inventory of Registered Programs. Please be informed that each undergraduate bachelor's degree has a corresponding Macaulay Honors College (MHC) program counterpart and these MHC programs are also listed in the SED Inventory of Registered Courses but do not appear in the list below. The Higher Education General Information Survey (HEGIS) code numbers and the SED program code numbers appear next to the appropriate programs. These codes are distinct from the CUNYfirst class numbers that appear in the Schedule of Classes and are used for registration and other internal purposes. Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain student aid awards.

| HEGIS Code | SED Program Code | Certificate or Program Name | Certificate or Degree(s) Awarded |
| :---: | :---: | :---: | :---: |
| Accounting |  |  |  |
| 0502 | 01990 | Accounting | B.S. |
| 0502 | 92277 | Internal Accounting | B.S. |
| 0502 | 35423 | Public Accounting and Business Management and Finance | B.S. |
| 2211 | 02112 | Africana Studies | B.A. |
| 0313 | 01978 | American Studies | B.A. |
| 2202 | 02102 | Anthropology | B.A. |
| Art |  |  |  |
| 1002 | 02015 | Art | B.A. |
| 1002 | 82460 | Art | B.F.A. |
| 1003 | 81408 | Art History | B.A. |
| Biology |  |  |  |
| 5407 | 33154* | Biotechnology | A.S. (Kingsborough C.C.) |
| 0401 | 33154* | Biology | B.A. (Brooklyn College) |
| 5407 | 33155* | Biotechnology | A.S. (Kingsborough C.C.) |
| 0401 | 33155* | Biology | B.S. (Brooklyn College) |
| 0401 | 01985 | Biology | B.A. |
| 0401 | 01984 | Biology | B.S. |
| 0401.01 | 26814 | Biology Teacher | B.A. |
| 1299.30 | 32345 | Exercise Science | B.S. |
| 0506 | 30604 | Business Administration | B.B.A. |
| 0506 | 85067 | Business, Management, and Finance | B.S. |
| 0308 | 82001 | Caribbean Studies (dual major only; degree awarded depends on primary major) |  |
| 1905 | 02082 | Chemistry | B.A. |
| 1905 | 02084 | Chemistry | B.S. |
| 1905.01 | 26813 | Chemistry Teacher | B.A. ${ }^{+}$ |


| HEGIS Code | SED Program Code | Certificate or Program Name | Certificate or Degree(s) Awarded |
| :--- | :--- | :--- | :--- |
| 2009 | 33088 | Children and Youth Studies | B.A. |
| 1504 | 02049 | Classics | B.A. |
| 0601 | 31603 | Communication | B.A. |

## Computer and Information Science

| 0701 | 01991 | Computer Science | B.S. |
| :--- | :--- | :--- | :--- |
| 1701 | 02067 | Computational Mathematics | B.S. |
| 0702 | 32153 | Information Systems | B.S. |
| 0799 | 31604 | Multimedia Computing | B.S. |

Earth and Environmental Sciences

| 1914 | 02090 | Earth and Environmental Sciences | B.A. |
| :--- | :--- | :--- | :--- |
| 1914 | 02092 | Earth and Environmental Sciences | B.S. |
| 1917.01 | 32681 | Earth Science Teacher (grades 7-12) | B.A. |
| 5499 | $34242^{*}$ | Earth and Planetary Sciences | A.S. |
| 1914 | $34242^{*}$ | Earth and Environmental Sciences | B.S. |
| 2204 | 01889 | Economics | B.A. |


| Education <br> 0802 | 26828 |
| :--- | :--- |
| 0802 | 26829 |
|  |  |
| 0823 | 26737 |
|  |  |
| 0823 | 27988 |
| 5503 | $26738^{*}$ |
| 0823 | $26737^{*}$ |
| 0835 | 26746 |


| Childhood Bilingual <br> Education Teacher (grades 1-6) <br> Childhood Education <br> Teacher (grades 1-6) | B.A. |
| :--- | :--- |
| Early Childhood Education <br> $\quad$ Teacher (birth-grade 2) | B.A. |
| Early Childhood Special Education | B.A. |
| Educational Studies | B.A. |
| Early Childhood Education Teacher | A.S. (Kingsborough C.C.) |
| Physical Education Teacher | B.S. |

## English

| 1501 | 02043 | English | B.A. |
| :--- | :--- | :--- | :--- |
| 1503 | 02047 | Comparative Literature | B.A. |
| 1507 | 87220 | Creative Writing | B.F.A. |
| 1501.01 | 26812 | English Teacher | B.A. |
| 1505 | 02051 | Linguistics | B.A. |
|  |  |  |  |
| 1010 | 02023 | Film | B.A. |
| 5008 | 87520 | Film Production | Certificate |
| 0506 | 37634 | Finance | B.B.A. |
| 1102 | 02025 | French | B.A. |
| 1102.01 | 26796 | French Teacher | B.A. |


| HEGIS Code | SED Program Code | Certificate or Program Name | Certificate or Degree(s) Awarded |
| :---: | :---: | :---: | :---: |
| 1299 | 85300 | Health and Nutrition Sciences | B.A. |
| 1299 | 85301 | Health and Nutrition Sciences | B.S. |
| 2205 | 02106 | History | B.A. ${ }^{+}$ |
| 1104 | 02033 | Italian | B.A. |
| 1104.01 | 26804 | Italian Teacher | B.A. |
| 0309 | 01977 | Judaic Studies | B.A. |
| Mathematics |  |  |  |
| 1701 | 02064 | Mathematics | B.A. |
| 1701 | 02065 | Mathematics | B.S. |
| 1701 | 34143 | Actuarial Mathematics | B.S. |
| 1701 | 34144 | Financial Mathematics | B.S. |
| 1701 | 02067 | Computational Mathematics | B.S. |
| 1701.01 | 26735 | Mathematics Teacher | B.A. |
| 1005 | 02021 | Music | B.A |
| 1004.10 | 02019 | Music Composition | B.Mus. |
| 0832 | 26815 | Music Education (all grades) | B.Mus. |
| 1004 | 02018 | Music Performance | B.Mus. |
| 5004 | 33584 | Non-Profit Fiscal Management | Certificate |
| 1509 | 02057 | Philosophy | B.A. |
| 1902 | 02071 | Physics | B.A. |
| 1902 | 02070 | Physics | B.S. |
| 1902.01 | 26808 | Physics Teacher | B.A. |
| 2207 | 02109 | Political Science | B.A. |
| 2001 | 02096 | Psychology | B.A. |
| 2001 | 02098 | Psychology | B.S. |
| 0308 | 01976 | Puerto Rican and Latino Studies | B.A. |
| 1510 | 82421 | Religion (dual major only; degree awarded depends on primary major) |  |
| 1106 | 02039 | Russian | B.A. |
| 2201.01 | 26754 | Social Studies Teacher | B.A. |
| 2208 | 02111 | Sociology | B.A. |
| 1105 | 02034 | Spanish | B.A. |
| 1105.01 | 26801 | Spanish Teacher | B.A. |
| 0420 | 21627 | Urban Sustainability | B.A. |

HEGIS Code SED Program Code Certificate or Program Name Certificate or Degree(s) Awarded

Communication Arts, Sciences, and Disorders

| 1506 | 81375 | 85189 | Professional Communication <br> Speech-Language Pathology, <br> Audiology, Speech and <br> Hearing Science |
| :--- | :--- | :--- | :--- |
| 5606 | $29486^{*}$ | Speech | B.A. |
| 1220 | $29486^{*}$ | Speech Language, <br> Pathology, Audiology | B.A. |
| 5606 | $29487^{*}$ | Speech Communication <br> Professional Communication | A.S. (Kingsborough C.C.) |
| 1506 | $29487^{*}$ | B.A. (Brooklyn College) |  |
|  | A.S. (Kingsborough C.C.) |  |  |
| B.A. (Brooklyn College) |  |  |  |

Television, Radio, and Emerging Media

| 0603 | 76212 | Television and Radio | B.A. |
| :--- | :--- | :--- | :--- |
| 0605 | 83638 | Journalism and Media Studies | B.S. |
|  |  |  |  |
| 1007 | 76210 | Theater | B.A. |
| 1007 | 83119 | Theater | B.F.A. |
| 4903 | 02117 | Women's and Gender Studies | B.A. |

[^4]† Programs currently not accepting majors.


[^0]:    Admission requirements and academic standing
    Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

    Students must have a B- in both Secondary Education 2001 and 2002, New York City Department of Education Fingerprint clearance, and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

    To take Secondary Education 4401, 4404 and 4482, students must earn a B- or higher in Secondary Education 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of the program.

    Students must earn a B- or higher in Secondary Education 4401, 4404 and 4482 and a GPA of 2.75 or higher in their major.

[^1]:    Program requirements (44-48 credits)

[^2]:    Admission requirements and academic standing
    Students must have a GPA of 2.70 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 2001 and 2002.

    Students must have a B- in both Secondary Education 2001 and 2002, New York City Department of Education Fingerprint clearance, and a GPA of 2.75 or higher based on a minimum of 30 credits in liberal arts and sciences to continue to Secondary Education 3401, and/or Secondary Education 3402, and/or Secondary Education 3456.

    To take Secondary Education 4401, 4404 and 4482, students must earn a B- or higher in Secondary Education 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of the program.

    Students must earn a B- or higher in Secondary Education 4401, 4404 and 4482 and a GPA of 2.75 or higher in their major.

[^3]:    Design and Technical Production (66 credits)

[^4]:    * Each pairing represents a jointly registered multiple degree program between Kingsborough Community College and Brooklyn College.

