## Brooklyn College Undergraduate Programs 2012-2013

## Disclaimer

The 2012-2013 Undergraduate Bulletin represents the academic policies, services, and course and program offerings of Brooklyn College that are in effect through August 2013. 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.

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## About

## Brooklyn College

Brooklyn College is recognized for its academic excellence, innovative programs, urban engagement and outstanding alumni accomplishments. The college offers more than 125 undergraduate degree programs and more than 100 graduate degree and advanced certificate programs in business; education; the humanities and social sciences; natural and behavioral sciences; and visual, media and performing arts..

For more than 80 years, Brooklyn College men and women - many of them immigrants or the children of immigrants - have received a superior, affordable education leading to productive careers and fulfilled lives. Noted for its renowned faculty, talented and diverse student body, and beautiful urban campus, Brooklyn College has been designated as one of "America's Best Value Colleges" by the Princeton Review.

Brooklyn College is accredited by the Middle States Commission on Higher Education (3624 Market Street, Philadelphia, PA 19I04; 267.284.5000; info@msche.org), the Council on Education for Public Health, the American Dietetic Association, and the National Council for Accreditation of Teacher Education. 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 speech-language 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.

Brooklyn College's academic programs are registered by the New York State Department of Education.

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 Study portion of this Bulletin.

## School of Business Willie Hopkins, Dean

Accounting
Economics
Finance and Business Management

## School of Education Deborah Shanley, Dean

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

## School of Natural and Behavioral Sciences

Kleanthis Psarris, Dean
Anthropology and Archaeology
Biology
Chemistry
Computer and Information Science
Earth and Environmental Sciences
Health and Nutrition Sciences
Mathematics
Physical Education and Exercise Science
Physics
Psychology

## Interdisciplinary Program

- Environmental Studies


## School of Humanities and Social Sciences

Kimberley Phillips, Dean
Africana Studies
Classics
English
History
Judaic Studies
Modern Languages and Literatures
Philosophy
Political Science
Puerto Rican and Latino Studies
Percy E. Sutton SEEK Program
Sociology
Speech Communication Arts and Sciences

## Interdisciplinary Programs

- American Studies
- Caribbean Studies
- Children's Studies
- Linguistics
- Studies in Religion
- Women's Studies


## School of Visual, Media and Performing Arts

## Maria Ann Conelli, Dean

Art
Film
Music
Television and Radio
Theater

## Interdisciplinary Programs

- Communication
- Performance and Interactive Media Arts (PIMA)

For more information, visit the Brooklyn College website.

## Admission

This chapter outlines procedures and requirements for admission consideration to regular and special programs for freshman, transfer and nondegree applicants.

As one of the senior colleges of the City University of New York (CUNY) Brooklyn College participates in centralized application procedures for freshman, SEEK and transfer students. Access to the online application for degree admission is available on the admissions website. Nondegree student applications are processed by the Brooklyn College Office of Undergraduate Admissions. The application may be downloaded from the admissions website. Applications for nondegree status are also available in the Office of Undergraduate Admissions, 222 West Quad Center.

## 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 parttime basis. Two types of students may apply for admission as matriculated students: first-year (freshmen) and transfer students.

First-year students. First-year students are students who have not attended any college since graduating from high school or receiving a General Equivalency Diploma (GED).

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

Applicants are considered for admission on the basis of their high school academic average, academic units, course selection, SAT scores and/or GED scores. A diploma from an accredited high school, an equivalency diploma, or a United States Armed Forces Institute diploma is required for entrance to the college. A high school certificate or an IEP diploma is not acceptable.

## 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 science-related area have four units each of science and math.)

First-year students will be considered for admission with a minimum high school academic average of 81 percent and a minimum combined SAT/ACT score of 1000 (critical reading and mathematics). Students with a GED diploma will be considered for admission with a minimum score of 3000 , provided they have successfully completed two units of college preparatory mathematics.

Admission 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 meet the standards of proficiency in the areas of mathematics, reading and writing as established by the college and CUNY prior to admission to a senior college.

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

## 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 Registrar's Office, 306 West Quad Center, Brooklyn College, Brooklyn, NY II2I0, within their first semester of enrollment at Brooklyn College. In some cases (e.g., physics), test booklets must be provided as well.

Transfer students. Applicants who have attended an accredited college or university are considered for admission with advanced standing if they have completed 25 or more credits with a cumulative grade point average (GPA) of 2.30
or higher. Applicants who have completed fewer than 25 college credits will be considered for admission provided that they have a 2.30 GPA or higher and also satisfy our current freshman criteria for admission. Applicants awarded an associate's degree from a CUNY community college will be considered for admission with a 2.00 or higher GPA. Applicants awarded a bachelor's degree from an accredited college or university will be considered for admission with a 2.00 or higher GPA. In addition to meeting the admissions criteria, transfer students must also fulfill the City University of New York Assessment Program requirements for senior college admission.

Admissions criteria are subject to change.
The college has established equivalencies regarding the fulfillment of Core Curriculum requirements by transfer students. These equivalencies, listed below, refer only to courses completed at another college before entering Brooklyn College. Transfer students must also satisfy Academic Foundations requirements (see the section "Academic Foundations requirements" in this Bulletin).

Transfer students from a four-year college may be exempt from the lower-tier Core Curriculum after examination of their transcript. When a senior college transfer student transfers 60 or more total credits from a domestic, not foreign institution, at least 30 of which are traditional liberal arts credits from a broad range of departments, he or she is assumed to have fulfilled the lower-tier Core Curriculum requirements. Such students must fulfill the 6-credit upper-tier Core requirements at Brooklyn College.

A student who transfers to Brooklyn College with an A.A. or A.S. or bachelor's degree from another college in the United States is exempt from the lower-tier Core requirement but must fulfill the 6-credit upper-tier Core requirement at Brooklyn College. This lower-tier exemption policy does not apply to students transferring with an A.A.S. degree or to transfer students from outside the United States.

Transfer students who enrolled at Brooklyn College prior to fall 2006 and who are exempt from lower-tier Core course requirements are also exempt from one of the two upper-tier Core courses. They need only complete one upper-tier Core course to meet the Core Curriculum course requirement. This policy does not apply to students with an A.A.S. degree. This policy does not apply to students who readmitted in fall 2006 or thereafter.

## Evaluation of transfer credit

The maximum number of credits that may be transferred from a two-year institution is 60 . The maximum number of credits that may be transferred from a four-year institution is 90. Transfer credit will be granted only from institutions that are listed on the student's admissions application. Transfer credit for institutions not listed on the admissions application may be denied. In addition, failure to list all postsecondary institutions attended will subject a student to disciplinary action and a review of the admission decision.

Applicants are required to provide official copies of transcripts for every institution attended, including a transcript(s) for course work that was in progress at the time of application. As soon as "in progress" courses are completed, a final transcript must be submitted to Brooklyn College.

Credit is given only for courses taken at institutions that are accredited by one of the regional accrediting commissions. Credit may be assigned for courses equivalent to courses at Brooklyn College that were completed with a grade of D- or higher at CUNY colleges and/or with a grade of C- or higher at other accredited colleges.

For courses for which there are no specific equivalents at Brooklyn College, credit may be assigned at the recommendation of the department. For departmental review, students are required to provide course descriptions and/or additional information, such as the course syllabus.

Transfer students who have taken courses on a pass/fail basis at another institution must provide a letter from that institution stating that a Pass ( P ) grade represents competence of a level of C - or better in the course or indicating what criteria were required to obtain a pass grade.

If additional course information is needed to evaluate the course(s), students must submit the supporting documentation within the first semester of attendance. Failure to do so may result in the loss of opportunity to receive transfer credit for the course(s).

Credit cannot be earned twice for the same course.
After the completion of 60 credits, no credit will be given toward the baccalaureate degree for work completed at a two-year college.

SEEK students. For information on how to apply to the Search for Education, Elevation, and Knowledge (SEEK) program, see the section "Special Programs" in this chapter.

## Nondegree students

A nondegree student is one who is registered for creditbearing courses but is not pursuing a degree program. Postbaccalaureate and certificate students may be admitted to this status. Nondegree students must meet all academic admission criteria and complete the nondegree admissions application. Students may obtain the application, requirements and materials by consulting the admissions website, or by contacting the Office of Undergraduate Admissions, 718.951.500I.

Nondegree students may attend class during day or evening sessions. Students with nondegree status may transfer their credits to a degree program by filing an application for status change with the Admissions Office. 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, 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 at Brooklyn College. 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

All students educated abroad, including permanent residents and foreign nationals, should file the appropriate CUNY application online as specified on the Brooklyn College admissions website. Freshman applications should be filed by students who have never attended postsecondary institutions; transfer applications should be filed by those who have attended postsecondary institutions. For admission in September, both freshman and transfer applicants must file
complete applications by Feb. I. For admission in January, both freshman and transfer applicants must complete applications by Sept. 15 .

Applications are not complete until all required documents have been submitted. Official translations must be submitted for all documents not written in English. Official transcripts from all postsecondary institutions must also be submitted.

Foreign nationals who were educated in a non-English speaking environment must demonstrate proficiency in the English language by submitting test scores from either the Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS academic format test).

Applicants with F-I student status must attend full time and pay tuition as stated in the chapter "Tuition and Fees." In order to obtain the I-20 Certificate of Eligibility from the college, students must present a documented Certificate of Finance. Students must subscribe to a medical insurance plan and arrange for their own housing.

The Office for International Students, 1600 James Hall, 718.95I.4477, provides counseling and other special services for international students enrolled with F-I visas, including processing of United States Citizenship and Immigration Services (USCIS) and other forms for travel, employment, practical training, transfer of funds and spouse/dependent visas. Students must apply at least one week in advance for processing of these requests. International students should report to this office upon arrival and send notice of any change of address or status. For more information, visit the international students section of the admissions website. Additional information may be found on the USCIS website.

## General information

## Readmission

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

## Student immunization requirement

New York State Law requires all students 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; blood test results showing immunity to each disease or an exact date of having had mumps or measles with a copy of the blood test showing immunity. (Disease history is not considered valid proof of immunity for rubella.)

Students may obtain immunization information and forms online or in the Health Programs/Immunization Requirements Office, 07 IO James Hall, 7I 8.95I.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.

New York Public Health Law 2167 requires all students 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 SEEK program, and the ESL program and certificate programs.

## The 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, Engineering Honors, the Mellon Mays Undergraduate Fellowship program and Minority Access to Research Careers (MARC).

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 Honors College at only one participating CUNY college. This application serves as both the freshman admission application to CUNY and to the Honors College and for Brooklyn College scholarships.

Admission to the Honors College will depend on high school grades, SAT/ACT scores, an essay, recommendations and, in some cases, an interview.

For more information, contact the Admissions Office, 718.951.500I.

## 8 Admission

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 membership 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.

Further information, a complete description of the Scholars Program and assistance in filling out the entrance application are available in the Honors Academy, 223I Boylan Hall, and on the Brooklyn College website.

Coordinated B.A.-M.D. Program. This honors program leads to a baccalaureate degree awarded by Brooklyn College and to an M.D. degree granted by Downstate 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 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 from the Brooklyn College Admissions Office, 222 West Quad Center, 718.95I.500I; the B.A.-M.D. office, 223I Boylan Hall, 718.95I.4706; and the college website.

Engineering Honors. 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, 7I8.95I.54I8, or visit the Brooklyn College website.

## SEEK program

The 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.

The SEEK Program Office is located in 2208 Boylan Hall. 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 Boylan Hall,

718.95I.593 I. 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. Students monitor learning through the Benchmark for Success program.

## SEEK Tutorial Center, 1424 Ingersoll Hall,

718.95I.5I35. The center offers SEEK students tutoring and supplemental instruction in basic skills, Core courses, and introductory and advanced courses in all majors. It assists students in adapting to the college curriculum. The tutorial center 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 computer labs for SEEK students. SEEK students may visit the center to schedule individual or small-group sessions.

## SEEK Study and Reading Laboratory,

2432 Ingersoll Hall, 718.95 I.4I23. Faculty members and tutors guide students in improving their comprehension, reading speed, vocabulary, study skills, and analytical and testtaking abilities; they also provide supplemental ESL and writing instruction in conjunction with the SEEK Tutorial Center. The laboratory 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 (I) 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, computers and programming, film production, 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.

## Special Programs and Opportunities

## First College Year

The First College Year program facilitates the transition to college and integrates students into the college community as engaged learners and participants in campus life. It fosters a sense of belonging and an appreciation of social differences. Students are encouraged to understand and value the meaningful connections between the liberal arts and their career aspirations and challenged to reflect critically on the educational process. A coherent curricular and cocurricular program strengthens the academic, personal and civic skills that will set students on a successful path to graduation.

First College Year begins in the summer. The Pre-freshman Academy strengthens skills in college-level reading, writing, critical thinking and/or mathematics, and prepares ESL and SEEK students to pass the CUNY Assessment Tests. The Unified Science Bridge introduces entering students interested in science, technology, prehealth sciences or math to a supportive instructional environment that includes a specially designed precalculus course, exploration of careers in science and hands-on Math-Science link activities.

The Freshman Common Reading 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.

First College Year includes comprehensive and ongoing student orientation and advising programs implemented by professional academic advisers prior to first-semester registration and continued through Students Engaged in Responsible Volunteer Action/The Orientation Project (SERVA/TOP) and the Center for Academic Advisement and Student Success. Benchmarks for the first and second years guide students through a curricular and cocurricular path leading to declaration of major, internships and roles in campus leadership and service. First-year students are encouraged to enroll in Learning Communities, which strengthen bonds among new students and between students and faculty and create opportunities for integrated and experiential teaching and learning. Course work in the communities, which includes courses in English composition and the Core Curriculum, an interdisciplinary first-year seminar and gateway sciences, is coordinated with the college's

Learning Center, where students are offered one-on-one and small-group tutoring and computer-assisted instruction. Peer mentors, career advisers and library faculty provide additional academic resources.

For information, contact the Office of the Associate Provost for Academic Programs, 3208 Boylan Hall, 718.951.577।.

## Honors Academy

The Brooklyn College Honors Academy, 223I 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 four-year program for students guaranteed entrance to the State University of New York Downstate College of Medicine; Engineering Honors, a twoyear engineering curriculum leading to transfer to engineering studies elsewhere; the Mellon Mays Undergraduate Fellowship program, a two-year upper-division program for students from underrepresented groups considering scholarly study in the humanities and other fields; and Minority Access to Research Careers (MARC), a 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 Core Curriculum 1110, 1210,1220 , 1230, and 3101 through 3111 ; 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 colloquium is offered for students 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 Core Curriculum, Academic Foundations and major requirements.

The Honors College seminars are taught at Brooklyn College by outstanding faculty. Students in the Honors College complete a minimum of 12 credits of honors courses in addition to the Honors College seminars. University Scholars take honors in their majors, which may involve a senior thesis. They are also required to complete an internship or honors-
level 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 3.30 grade point average (GPA) by the end of their first year and a 3.50 GPA 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 Core Curriculum 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 credi and pass with a grade of A or B are indicated on their transcripts with an H. Scholars students must achieve a cumulative 3.30 grade point average by the end of their freshman year and a 3.50 by the end of their sophomore year 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

This honors program leads to a baccalaureate degree awarded by Brooklyn College and to an M.D. degree granted
by Downstate College of Medicine of the State University of New York (SUNY) Health Science Center at Brooklyn. The B.A.-M.D. Program offers an integrated course of study 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.

Students 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.

## Engineering Honors Program

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

During their two years in the Engineering Honors Program, students follow a course of study of more than 70 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 Core Curriculum program. Students also take courses in such subjects as engineering mechanics, electrical circuit analysis, data structures and computer organization. These courses are equivalent to courses required during the first two years of study at most engineering schools. Further details are described in the "Preprofessional studies in engineering" section of this chapter.

Upon completion of the program, students are guaranteed enrollment as juniors at City College School of Engineering, the College of Staten Island Engineering Science Program or NYU-Poly. They may also apply for admission to any other engineering school.
For members of Engineering Honors who decide not to pursue engineering, the program's Core Curriculum requirements enable students to continue in one of the more than 125 undergraduate programs available at Brooklyn College.

## Mellon Mays Undergraduate Fellowship

The goal of the Mellon Mays Undergraduate Fellowship is to reduce categorical underrepresentation in college and university faculties and the educational consequences of these disparities. The program is open to African American, Hispanic, Native American and other undergraduates who will pursue advanced study in the humanities and selected other fields. The major requirements are those of the department in which the student enrolls and will not be modified for this program.

Applicants must be full-time students in the second semester of their sophomore year (45-60 credits). Requirements for entrance include evidence of solid academic achievement, two letters of recommendation from faculty members, a written essay describing career interests and an interview by the screening committee. Applications for admission and additional information are available from the director.

## Minority Access to Research Careers (MARC)

The MARC program is for minority honors students (including, but not limited to, African American, Hispanic, Pacific Islander or Native American) who are interested in pursuing research careers in the biomedical sciences. For more information, see the section "Minority Access to Research Careers (MARC)" later in this chapter.

## Preprofessional studies

Brooklyn College provides individualized advising and other services for undergraduate and post-baccalaureate 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.

The Magner Center for Career Development and Internships, 1303 James Hall, 7I8.95I.5696, is a major resource for students interested in pursuing preprofessional studies and provides a wide range of free career programs to Brooklyn College undergraduates, graduate students and alumni. Services include career counseling and assessment, internship preparation and placement, e-recruiting, and professional school preparation and application advisement. Workshops on résumé writing, interview training, job search skills, dressing for success, choice of major and career, and finding the right internship are available in addition to access to employment recruiters, alumni mentors and information on the labor
market and occupations. Job and internship fairs are held each semester along with numerous corporate-sponsored workshops. For more information, visit the Magner Center website.

## Preprofessional studies in health-related careers

The director of Prehealth Professions Services monitors the academic progress of all undergraduate and post-baccalaureate prehealth professions students, meets with them individually on a regular basis throughout their academic career at Brooklyn College, and helps them plan suitable academic programs, get ready for the MCAT, and prepare their applications to professional schools. The Office of Prehealth Professions Services also maintains a credential service for forwarding letters of recommendation to medical and other health professions schools.

Brooklyn College students pursuing medicine or other healthrelated professions may major in any liberal arts discipline but must complete the following minimum requirements in science and mathematics: one year of general biology, one year of general chemistry, one year of organic chemistry, one year of general physics and at least one semester of precalculus mathematics. Students should meet with a prehealth professions adviser to ensure that they are meeting the minimum requirements of the medical and health profession schools of their choice.

Students who have completed at least 60 credits and other specific requirements may apply for transfer admission to health-related degree programs at the State University of New York (SUNY) Health Science Center at Brooklyn and other university health professions programs. The Health Science Center offers programs in diagnostic medical imaging, nursing, occupational therapy, physical therapy, physician assistant and public health. In addition, Brooklyn College has an articulation agreement with the Health Science Center for the physical therapy program. Students interested in the physical therapy program should contact a prehealth professions adviser in the Office of Prehealth Professions Services, II 22 Boylan Hall, 718.95I.3360 or 718.95I.336I.

A chapter of the American Medical Students Association is active at Brooklyn College.

Coordinated B.A.-M.D. Program. Brooklyn College and Downstate College of Medicine of the State University of New York at Brooklyn offer the Coordinated B.A.-M.D. Program for students who are graduating from high school and entering Brooklyn College as first-year students. The program is designed to produce physicians who are well educated in the humanities and social sciences as well as in science.

Beginning in January 2003, Brooklyn College and the State University of New York State College of Optometry implemented an agreement whereby up to six Brooklyn College students per year may be admitted into a sevenyear 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 prehealth professions adviser in the Office of Prehealth Professions Services for further information.

## Preprofessional studies in legal careers

A prelaw advisement team - composed of faculty advisers, career advisers in the Magner Center for Career Development and Internships, 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 Center provides career assessment and counseling, panels of special speakers, workshops for professional development, opportunities for mentoring and internships, and up-to-date 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 Center for Career Development and Internships, I 303 James Hall, 7I 8.95I.5696.

## Preprofessional 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 more than 70 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 in this Bulletin.

Coordinated engineering programs. Brooklyn College has three coordinated engineering programs with the City College School of Engineering, the College of Staten Island Engineering Science Program and NYU-Poly. In these programs, the well-prepared 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 NYU-Poly, the College of Staten Island or the City College School of Engineering for an additional two years to fulfill bachelor of science degree requirements in one of the following fields: aerospace, chemical, civil and environmental, computer, electrical or mechanical engineering; or engineering science. The Brooklyn College courses in these programs are fully transferable to City College, the College of Staten Island or NYU-Poly, 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/NYU-Poly Coordinated Engineering Program

Students must complete their engineering studies with a grade point average of 2.50 or better 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-Poly engineering program. Areas of specialization comprise chemical, civil and environmental, electrical and computer, and mechanical and aerospace engineering. Students transferring to NYU-Poly through this program may be required to complete certain courses during the summer before the junior year. The engineering degree will be awarded from NYU-Poly.

For further information, call the Brooklyn College engineering coordinator, 718.951 .5418 , or the NYU-Poly associate director of admissions, 718.260 .3100 .

## Brooklyn College/City College Coordinated Engineering Program

Students must complete their engineering studies with a grade point average of 2.00 or better in required computer and information science, engineering, mathematics and science courses in order to transfer with junior-year status to the City College School of Engineering. Areas of specialization comprise civil, computer science, and electrical and mechanical engineering. Students transferring to City College through this program may be required to complete certain courses during the summer before the junior year. For further information, call the Brooklyn College engineering coordinator, 718.95I.54I8.

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

Students must complete their engineering studies with a grade point average of 2.00 or better 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, environmental and mechanical engineering. For further information, call the Brooklyn College engineering coordinator, 718.95I.54I8.

## Professional option

Students who wish to enter professional school before completing a baccalaureate program at Brooklyn College may, in some cases, earn the B.A. or B.S. after the first year of professional school. Students who wish to pursue this option must have satisfactorily completed all requirements at Brooklyn College except 30 elective credits and have satisfactorily completed at least one year's work in an accredited dental, engineering, law, medical, optometry, podiatry or veterinary school.

Courses offered to fulfill degree requirements, including those completed in the professional school, must constitute an acceptable degree program approved by the Center for Academic Advisement and Student Success (CAASS). A student's professional school record is examined for duplication of work done at Brooklyn College, the extent of liberal arts work, the appropriateness of the professional courses as supplementary work in a liberal arts program, and the quality of the work.

Students interested in engineering should consult the engineering coordinator in the Physics Department, 3438 Ingersoll Hall. Students interested in health professions should consult the director of Prehealth Professions Services, 3223 Boylan Hall, 718.95I.5000, extension 6209. Students interested in legal professions should consult the faculty adviser or a prelaw career counselor in I 303 James Hall.

## 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 6 credits in English with a grade of C+ or higher and at least 8 credits in each of the following fields, with a grade of 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 and/ or DAT scores at or above NYCPM's minimum requirement, satisfactory evaluation in a personal interview, and at least an overall GPA of 3.00 in undergraduate course work.

Brooklyn College accepts as transfer credits those courses which 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 NYCPM program adviser in the Biology Department.

## 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, 718.95I,547I; 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, help in preparing applications to graduate school and tuition waivers for the first year of study in a CUNY Ph.D.
program. Applications and further information on CUNY Pipeline may be obtained from the program coordinator, 223I Boylan Hall, 718.951 .4114 .

## Leadership Alliance

Brooklyn College participates in the Leadership Alliance, a consortium of colleges and universities that seeks 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, 43II James Hall, 7I8.95I.56I0. Deadline for application is early February.

## Center for Achievement in Science Education (CASE)

CASE 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 sessions in addition to academic year activities.

CASE has multiple entry points for high school, incoming firstyear, 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.

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

The NYC-LSAMP in science, technology, engineering and mathematics is an alliance of 16 CUNY colleges and the CUNY Graduate Center. The goal of the LSAMP program is to ensure
a long-term capacity to produce significantly greater numbers of individuals from groups underrepresented in science, technology, engineering and mathematics (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 facultysupervised research teams at Brooklyn College.

Eligible students must be U.S. citizens or permanent residents 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; major in a STEM discipline; and have a GPA of 3.00 or higher.

For more information, visit the LSAMP website or contact the program activity coordinator, 14I Ingersoll Hall Extension, 718.951 .4346 . Deadline for summer and fall application is May I; deadline for spring application is Dec. I.

Research Initiative for Scientific Enhancement (RISE)
The goal of the RISE program is to encourage more students from groups underrepresented in the sciences to pursue careers in scientific research in such areas as behavioral sciences, biology and chemistry by increasing the number who apply to and complete doctoral programs. The program focuses on academics in the freshman and sophomore years and has a research focus in the junior and senior years. Students receive a stipend for taking part in RISE program activities, individual counseling in planning their academic program, peer-run study workshops for difficult classes and academic counseling.

The RISE program is open to incoming first-year students who have been admitted to and plan to attend Brooklyn College in the fall semester with the intent to major in biology, chemistry, health and nutrition sciences, or psychology and with career interests in scientific research. Other first-year students may be admitted on a space-available basis. Eligible students must be U.S. citizens or permanent residents and have an overall high school science average of at least 80 . For more information, call the program coordinator, 7I8.95I.4I55. Deadline for fall application is April I.

## 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) CSTEP 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.

Eligible students must be New York State residents, be a member of a minority group (African American/black, Hispanic/Latino, 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, 7I8.95I.5000, extension I7I2, or visit the CSTEP website. CSTEP accepts applications throughout the year.

## Minority Access to Research Careers (MARC)

The goal of MARC is to increase the number of underrepresented groups in biomedical research. MARC 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.

Eligible students must be U.S. citizens or permanent residents admitted to full-time study at Brooklyn College, be a member of an underrepresented group in the biomedical sciences (including but not limited to African Americans, Hispanic/ Latino, Native American 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, 43II James Hall, 7I8.95I.5I7I. Deadline for fall application is June 1 .

## Latin/Greek Institute

In the summer Latin/Greek Institute, Brooklyn College and the City University Graduate Center offer college-level work in language and literature. In the intensive II-week basic program, qualified students earn 12 undergraduate credits. No previous knowledge of Latin or Greek is required.

The Latin curriculum consists of study of forms and grammar, reading and analysis of representative texts from archaic remains through the Renaissance, and study of classical or
medieval Latin literature. The Greek curriculum consists of language study and reading and analysis of representative texts in Attic, lonic and Koine Greek.

Information and application forms may be obtained in the Department of Classics, 2408 Boylan Hall, 7I8.95I.5I9I, or at the Latin/Greek Institute Office, 365 Fifth Avenue, New York, NY 10016 (telephone: 212.8 I 7.208 I ). Further information is available on the institute's website.

## International education

The Office of International Education and Global Engagement coordinates the international education program and maintains a library of study-abroad information and program catalogs. An international education adviser is available to meet with students and to assist in locating programs to meet their interests. The adviser and the library of international education information are located in II 08 Boylan Hall, 7I8.95I.5I89.

For more information, visit the international education website of the Brooklyn College website or e-mail the office.

## 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 advising 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 Center for Career Development and Internships 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 10 majors: accounting; business, management, and finance; computer and information science; education; English; 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 Mentoring 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.

Information is available by contacting the adult literacy program at 718.951 .4117 .

## High school partnerships and collaborations <br> 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 twelfth 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 IIth and I2th 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, 718.95I.5209.

## Campus high schools

 Midwood High School at Brooklyn College.Midwood High School is the affiliated campus high school of Brooklyn College. The campus high school project reflects the college's continuing concern for strengthening public secondary education and building professional working relationships between its faculty and teachers in the city's schools. Its goal
is to strengthen the preparation of Midwood High School students for college and expand the constituency from which those students are drawn.

In this partnership, Midwood High School remains under the jurisdiction of the New York City Department of Education. In matters of curriculum design, school organization and high school-college articulation, the president of Brooklyn College maintains contact with the chancellor of the New York City public schools, the High School Division of the Department of Education and the Midwood High School principal.

Brooklyn College Academy. Brooklyn College Academy is a small comprehensive seventh- through twelfth-grade middle-college high school of approximately 600 students established in 1986 by the New York City Board of Education in collaboration with the City University of New York. Created for students who can benefit from smaller classes, more individualized attention, and a nurturing environment, Brooklyn College Academy was named one of the topperforming schools by the Chancellor's Office in June 2003.

The mission of the academy is to strengthen student performance and to expand students' horizons to include postsecondary educational opportunities and career goals. The academy is composed of two units. The Senior Institute, located in James Hall, houses grades II and I2. Bridges to Brooklyn, located off campus at 350 Coney Island Avenue, houses the Lower Institute Program for seventh and eighth graders and the Middle Institute for ninth and tenth graders. After completing the IOth grade, students make the transition to the college campus.

Admission to the academy is open to Brooklyn residents who may apply through their elementary school or junior high school guidance counselors for grades seven and eight. Grades nine through twelve must follow the high school application process.

## Science, Technology, and Research (STAR)

Early College School. The 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.

STAR opened in 2003 in partnership with Brooklyn College and the Gateway Institute for Pre-College Education and is one of 200 early-college high schools in the National Early College Initiative funded in part through the Woodrow Wilson Early College and Gates Education Foundations.

STAR accepted its first sxith-grade class in fall 2007 and, in fall 2009, it became a full-service early-college 6-12 school. The Class of 2007 was STAR's first graduating class, and 98 percent of its members met or exceeded the assessment and state standards for graduation.

STAR currently enrolls 495 students, grades 6-I2, who have achieved a 100 percent promotion rate and an attendance rate of 96 percent. Starting in the ninth grade, students have the opportunity to accrue college credits, first through dual credited courses offered at Brooklyn College and culminating in junior- and senior-year experiences where students are enrolled in a variety of freshman college courses at Brooklyn College. By the end of their senior year, STAR students will have earned up to 30 college credits. STAR students also gain real-world experiences through special field investigation trips, summer internships, college tours, and science-oriented projects provided through the Gateway Institute for PreCollege Education.

Bridges to Computing Program. Bridges to Computing is a project funded by the National Science Foundation through their Broadening Participation in Computing program. Bridges focuses on the transition years from high school to college, working to better inform students about and prepare them for careers in computing fields. Bridges involves academic and social components geared toward advanced high school students and early and advanced college students. This includes "flavored" versions of our undergraduate introductory computer science courses (CISC IIIO and CISC $3110)$ as well as a high school course offered in partnership with College Now. To apply or for more information, visit the Bridges website.

## Institute for Retirees in Pursuit of Education

The Brooklyn College Institute for Retirees in Pursuit of Education (IRPE) is for retired people who wish to continue their education, develop creative talents, share life experiences, and foster social and interpersonal relationships. Courses vary in duration and subject matter; they may include traditional disciplines, current events, trips, concerts and workshops. Information may be obtained by visiting the IRPE website or contacting the office, 3160 Boylan Hall, 7I8.95I.5647.

## Tuition and Fees

Tuition and fees 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. Please visit the Bursar Office page of the college website for current fees.

If tuition or fees are increased, payments already made are counted as partial payments. Students are notified of the additional amount due and of the payment deadline. The latest information about tuition and fees is available in the Bursar Office section of the college website and on the Brooklyn College WebCentral portal.

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 and CUNY Consolidated Services Fee. The Student Activity Fee is determined by enrollment as a day student in the College of Liberal Arts and Sciences (CLAS) or as an evening student in the School of General Studies (SGS). The technology fee is determined by full-time 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.

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 <br> New York State residents <br> Full-time <br> $\$ 2,715$ per semester <br> Part-time <br> $\$ 230$ per credit

Nonresidents and international students

| Full-time | $\$ 485$ per credit (no limit) |
| :--- | :--- |
| Part-time | $\$ 485$ per credit |

## Undergraduate tuition for nondegree students <br> New York State residents <br> \$340 per credit (no limit)

## Nonresidents and international students

$\$ 720$ 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 as 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 in the Registrar's Office in the West Quad Center. Applicants for residency who are under 18 years of age must submit certified copies of a parent's or guardian's federal and city 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 residence form.

Additional information and requirements are contained on the City University residency form.

An applicant for residency who does not provide the required information or documentation may be classified as an out-ofstate resident.

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.

## Day students

Student Activity Fee:

## Student Center <br> \$ 32.50

Athletics and Recreation 18.60
Early Childhood Center 5.00
Student Government 6.80
Academic Club Association 3.50
Central Depository $\quad 18.30$
Health Clinic 20.00
Study Abroad Scholarship Association $\quad 1.50$
NYPIRG (New York Public Interest Research Group)
University Student Senate
Total Student Activity Fee
CUNY Consolidated Services Fee: $\$ 15$
Technology Fee: $\$ 100$ per term, full-time students;
\$50 per term, part-time students

## Evening and weekend students

| Student Activity Fee: |  |
| :--- | ---: |
| Student Center | $\$ 3.50$ |
| Athletics and Recreation | 5.00 |
| Early Childhood Center | 5.00 |
| Student Government | 3.74 |
| Central Depository | 2.26 |
| Health Clinic | 10.00 |
| NYPIRG (New York Public | 2.00 |
| Interest Research Group) | 0.85 |
| University Student Senate | $\$ 61.35$ |

CUNY Consolidated Services Fee: $\$ 15$
Technology Fee: $\$ 100$ per term, full-time students; $\$ 50$ per term, part-time students

## Summer sessions

Student Activity Fee:
Student Center
$\$ 32.50$
Athletics and Recreation $\quad 10.00$
Early Childhood Center 5.00
NYPIRG 5.00
Central Depository $\quad 1.00$
Health Clinic 20.00
Study Abroad Scholarship Association I.50
Student Government 2.50
University Student Senate 0.85
Total Student Activity Fee $\$ 78.35$
CUNY Consolidated Services Fee: $\$ 15$
Technology Fee: \$50 per term

## Evening students

Student Activity Fee:
Student Center $\$ 32.50$
Athletics and Recreation $\quad 10.00$
Early Childhood Center 5.00
Central Depository I.00
Health Clinic $\quad 10.00$
Student Government 2.50
University Student Senate 0.85
Total Student Activity Fee \$61.85
CUNY Consolidated Services Fee: \$15
Technology Fee: $\$ 50$ per term

## Compensatory and Developmental Courses

Compensatory and developmental courses are courses that carry contact hours above the number of degree (or academic) credits. Degree credit is given only for the collegelevel instruction in the course.

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, 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.

## Compensatory Courses

Chemistry 1050 and 2050
Mathematics 1011, I021, 1026 and 103।
Physics 1112

## Developmental Courses

ESLR I004, I005, I006, I007, and IO08

## Special fees

Accelerated study
This fee will be eliminated pending
CUNY Board approval Application

Readmission Fee
Duplicate diploma
Late registration
Library fines
Material fees

Program change


Reprocessing
Special examination
Speech and Hearing Center
$\$ 100$ for 18.5 to 20 credits;
$\$ 230$ for 20.5 to 22 credits;
$\$ 460$ for 22.5 to 24 credits;
$\$ 690$ for 24.5 or more credits.
$\$ 65$ for undergraduate nondegree students $\$ 70$ for first-year and transfer students $\$ 125$ for graduate degree and nondegree students $\$ 65$ for visiting students (non-CUNY students only)
$\$ 10$ (due upon registration)
$\$ 15$
$\$ 25$
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. \$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.
Evening (SGS) students: $\$ 13.60$
Graduate students: $\$ 18.60$
Summer session: $\$ 10$
\$5
$\$ 15$ for a check returned by bank as uncollectible.
$\$ 25$ plus $\$ 5$ for each additional examination.
$\$ 200$ for speech-language diagnostic evaluation; \$175 for audiological evaluations; \$770

Transcript
for 1445 -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. $\$ 7$, waived for transcripts sent to the admissions offices of other units of the City University.
***Note: Some of these fees will change pending approval of the new tuition and fee manual.

## 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 Office page of the college website.

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

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 nondegree students. Exemption from payment of tuition does not include exemption from payment of noninstructional fees. Information and applications may be obtained in the Personnel Office, I219 Boylan Hall.

## 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.

## Payment of Tuition and Fees and Payment Plans

## Bills

Each time that students register, a bill is generated. The bill contains their name, address, an extract of their Social Security number and information about their student status (e.g., undergraduate or graduate, matriculated or nonmatriculated, residency status). It also lists all of the courses for which they are registered, the total amount of tuition and fees for the courses that they are taking, and the balance due. Please note that bills are not mailed by the college and can be obtained online via WebSIMS or at the Enrollment Services Center in the lobby of the West Quad Center. The bill lists any financial aid or third-party payments a student may have applied for and may be eligible to receive. Financial aid listed on a bill is an estimate and is subject to change. Any balance resulting from the loss of financial aid is the student's responsibility. If any expected financial aid or other tuition support is not on the bill, students should contact the Financial Aid Office immediately. Students who register online may view and print their bill from WebSIMS, which provides the most current view of the amount owed for the semester's tuition.

## Payment deadlines

Each semester, payment deadlines are posted on the Bursar Office page of the college website. If the account is not properly settled by the specified due date, students' registration will be subject to cancellation.

## Payment options

Tuition may be paid online, by mail, in person or under the terms and conditions of the Sallie Mae TuitionPay Monthly Payment Plan. Brooklyn College does not accept telephone or faxed payments.

Online. Bills may be paid in full online via the WebCentral portal with a Mastercard, Discover or American Express credit card. VISA card is not accepted. There is a nonrefundable 2.65 percent convenience fee associated with the use of all credit and debit cards.

Mail. Bills that are printed from WebSIMS may be returned 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, last four digits of their student ID number and the semester they are paying for on all checks or money orders. Please do not mail cash.

In person. Bills are payable 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 complete their enrollment and enroll in a payment plan as soon as a plan is available. There is no payment plan for the January intersession. The enrollment fee is $\$ 16.75$ per semester. Interest is not charged, but late payment fees do apply. For more information about this plan, call 866.267.CUNY or visit the Tuition Payment Plan website.

## 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 official opening date of the fall or spring term;
- 75 percent refund for dropped courses within one week after the scheduled opening date of classes of the fall or spring term;
- 50 percent refund for dropped courses during the second week after the scheduled opening date of classes of the fall or spring term;
- 25 percent refund for dropped courses during the third week after the scheduled opening date of classes of the fall or spring term.

No refund is given if a student drops courses later than the third week after the scheduled start date of classes. Tuition 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 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 a two-week refund period set by the organization.

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 opening date of the term;
- 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 summer session.

## Financing Your Education

## Office of Financial Aid

Financial Aid @ the Enrollment Services Center

Lobby, West Quad Center

2910 Bedford Avenue
Brooklyn, NY 11210
Telephone: 718.95I.505।
Fax: 718.95I.4778
finaid@brooklyn.cuny.edu
Grants, loans, college work-study, scholarships and internships are among the opportunities that are available to assist students in financing their education. Several programs and the offices that administer them are described below. Detailed information on programs and how to apply is available on the Financial Aid Web page. International students should contact the Office of International Student Services, 7I 8.95I.4477. Information regarding the Brooklyn College scholarship application and opportunities, please contact the Office of Scholarships, 7I8.95I.4796.

## Office of Financial Aid

The Office of Financial Aid offers a variety of federal and state financial aid options designed to assist undergraduate students in financing their education. For most programs, a student is required to:

- be matriculated;
- enroll for at least 6 credits;
- be a U.S. citizen or permanent resident; and
- maintain satisfactory academic progress.

Applications and additional comprehensive information regarding application procedures, eligibility requirements, and rights and responsibilities of recipients may be obtained from the Office of Financial Aid Web page.

In order to apply for federal or state financial aid, students must complete an online Free Application for Federal Student Aid (FAFSA). Students are urged to complete the FAFSA and submit any loan applications at least five months before the start of the semester for which assistance is desired. This will allow sufficient time for processing by the federal, state, college and accounting operations.

The following estimates of costs for academic year 2012-13 may help students determine if they need assistance. The estimates are based on full-time study ( 12 credits) for New York State residents while attending school for a nine-month budgeted year. Please note that a student's budget can increase or decrease based on semester (summer, fall, winter and spring) enrollment status.

## Students Living at Home

Books and Supplies \$1,248
Transportation (MetroCard)
Lunch
$\$ 986$
$\$ 1,105$
Personal Expenses $\$ 1,780$
Room and Board \$1,685
Total Variable Costs
$\$ 6,804$ + tuition
and fees
Students Living Away From Home
Books and Supplies $\$ 1,248$
Transportation (MetroCard) \$986
Lunch \$1,105
Food at Home \$1,977
Personal Expenses \$3,954
Housing \$8,820
Total Variable Costs
$\$ 18,090$ + tuition and fees

Adjustments to a student's budget are possible by submitting to the Office of Financial Aid a request for a budget adjustment accompanied by a detailed personal budget of the student within reason.

## Federal programs

## Federal PELL Grant

The Federal Pell Grant Program provides assistance to undergraduate students who demonstrate financial need according to economic criteria and program requirements established by the federal government. To be eligible, you must enroll in a degree program and be matriculated for your first bachelor's degree. (You are not eligible if you have already completed a bachelor's degree.) An estimated award will be listed in your award package if we think you will be eligible. Your Student Aid Report (SAR) contains the official evaluation of your eligibility from the U.S. Department of Education.

Beginning with the 2012-13 award year, you can only receive a Pell Grant for up to a maximum of 12 semesters or the equivalent. Find out more information about the aggregate Pell Grant limit.

## How much can I get?

There are limits on the maximum amount you are eligible to receive each academic year and in total (aggregate Pell Grant limit). The maximum Pell Grant award amounts for the 2012-13 award year (July I, 2012 to June 30, 2013) is $\$ 5,550$. You may receive less than the maximum award depending not only on your financial need, but also on your costs to attend school, your status as a full-time or part-time student, and your plans to attend school for a full academic year or less.

## Federal Supplemental Education Opportunity Grants (FSEOG)

FSEOG is a federal, campus-based program. If you demonstrate exceptional financial need, CUNY could award you funds from the limited FSEOG fund. Preference is given to students who receive a Pell Grant. In addition to exceptional need, CUNY requires that you demonstrate a willingness to assist in financing your education through part-time employment or federal loans. To receive FSEOG you must be registered for at least 6 credits and have not completed a bachelor's degree.

## Federal Work-Study Program

The Federal Work-Study Program is an employment program that pays eligible students in good academic standing an hourly wage for work done at approved sites at the college, public or other nonprofit agencies. A student may work up to 20 hours a week while enrolled with a minimum of 6 credits in their division of matriculation. Information on this program can be found on the Brooklyn College Financial Aid FWS webpage.

## Federal TEACH Grant

Through the College Cost Reduction and Access Act of 2007, Congress created the Teacher Education Assistance for College and Higher Education (TEACH) Grant Program that provides grants of up to $\$ 4,000$ per year to students who intend to teach in a public or private elementary or secondary school that serves students from low-income families. Grants are available only to graduate students at the City University of New York.

## Federal William D. Ford Direct Loan Programs

Many undergraduate students at Brooklyn College fund their education through Federal Ford Direct Loan Programs. The loans allow eligible students to borrow money directly from the federal government at terms that are lower than typical consumer rates. Both subsidized and unsubsidized loans are covered. Undergraduate students should visit the Enrollment Services Center in order to apply for such loans; loan
applications can also be found online and may be submitted via fax. There may be an interest-free grace period before repayment begins. Some loans may be deferred or repaid if the student works in a particular program or government job after graduation.

Subsidized Stafford Loan

| Sponsor: | U.S. Department of Education, 800.8480979 |
| :--- | :--- |
| Amount: | Up to $\$ 3,500$ for freshmen, $\$ 4,500$ for <br> sophomores, and $\$ 5,500$ for juniors and seniors |
| Interest: | 3.40 percent for $2011-12 ; 6.80$ percent for <br> $20 I 2-13$ |
| Term: | 10 years |
| Fees: | An origination fee of 0.50 percent (origination <br> fee I.0 percent effective July I, 20I2) will be <br> deducted from each disbursement. |
| Eligibility: | Student must maintain at least half-time <br> enrollment status in each enrolled semester and <br> meet basic eligibility requirements. |
| Deferral: | Principal and interest.* Repayment begins six <br> months after graduation or when the student <br> falls below half-time status. <br> *effective July I, 20I2, for new Subsidized <br> Stafford Loans, the interest subsidy during the <br> six-month grace period has been eliminated <br> for students who fall below half-time status. |

A Federal Direct Subsidized Stafford Loan is a low-interest need-based loan made to students enrolled at least halftime who have completed the FAFSA for the appropriate academic year. The federal government pays loan interest while the student is in school, and loan repayment begins six months after the student graduates or drops below half-time enrollment. Eligible students are automatically considered also for the Federal Direct Unsubsidized Stafford Loan (described below).

Notice: The U.S. Congress has enacted a number of legislative changes during the past year that will affect the federal loan programs beginning summer semester 2012. The Budget Control Act of 2011 , signed into federal law in August 201I, includes the following:

Elimination of Loan Fees Rebate: Currently, there is a I percent origination fee on the Stafford loan, but a portion of the fee ( 0.5 percent) is refunded to the borrower at the time of disbursement. Effective July I, 20I2, the rebate will be eliminated and the full fee will be charged to students.

Elimination of Grace Period Interest Subsidy: Effective July I, 2012, for new Subsidized Stafford Loans, the interest subsidy during the six-month grace period has been eliminated for students who fall below half-time status.

Unsubsidized Stafford Loan

| Sponsor: | U.S. Department of Education, 800.848 .0979 |
| :--- | :--- |
| Amount: | Up to $\$ 5,500$ for freshmen, $\$ 6,500$ for <br> sophomores, and $\$ 7,500$ for juniors and seniors. <br> (All amounts minus any subsidized Stafford <br> loan.) Additional unsubsidized amounts available: <br> see below. |
| Interest: | 6.80 percent |
| Term: | 10 years |
| Fees: | An origination fee of 0.50 percent (origination <br> fee I.0 percent effective July I, 20I2) will be <br> deducted from each disbursement. |
| Eligibility: | Student must maintain at least half-time <br> enrollment status in each enrolled semester and <br> meet basic eligibility requirements. |
| Deferral: | Principal only. Interest may be capitalized. <br> Repayment begins six months after graduation <br> or when the student falls below half-time status. |

Eligible students who have completed the FAFSA for the appropriate academic year are automatically evaluated for the Unsubsidized Stafford Loan.

If you are a dependent student whose parent was denied a Parent PLUS Loan (described below), you may be eligible for additional unsubsidized loan amounts. For freshmen and sophomores, the additional unsubsidized Stafford Loan is $\$ 4,000$. For juniors and seniors, the additional unsubsidized Stafford Loan is $\$ 5,000$. Please contact the Office of Financial Aid so we may suggest these amounts. Documentation of denied PLUS Loan may be required.

## Aggregate Stafford Loan Limits (Subsidized and Unsubsidized):

- Undergraduate Dependent Students: \$3I,000 (no more than \$23,000 of which can be subsidized).
- Undergraduate Independent Students: \$57,500 (no more than $\$ 23,000$ of which can be subsidized).

Notice: The U.S. Congress has enacted a number of legislative changes during the past year that will affect the federal loan programs beginning summer semester 2012. The Budget Control Act of 2011, signed into federal law in August 2011 , includes the following:

Elimination of Loan Fees Rebate: Currently, there is a I percent origination fee on the Stafford loan, but a portion of the fee ( 0.5 percent) is refunded to the borrower at the time of disbursement. Effective July I, 2012, the rebate will be eliminated and the full fee will be charged to students.

Direct PLUS Loan

| Sponsor: | U.S. Department of Education, 800.848.0979 |
| :--- | :--- |
| Amount: | Up to the full cost of education, minus other <br> financial aid received |
| Interest: | 7.90 percent |
| Term: | 10 years |
| Fees: | An origination fee of 2.50 percent (origination <br> fee 4.0 percent effective July I, 20 I 2) will be <br> deducted from each disbursement. |
| Eligibility: | Student must maintain at least half-time <br> enrollment status in each enrolled semester and <br> meet basic eligibility requirements. |
| Deferral: | Principal only. Interest may be capitalized. To <br> apply for an in-school deferment, Direct Parent <br> PLUS borrowers should call Direct Lending at <br> 800.848 .0979. |

The Federal Direct PLUS Loan is available to parents of dependent undergraduate students and to qualifying graduate and professional students who have completed the FAFSA for the appropriate academic year. PLUS Loans help pay for education expenses up to the cost of attendance minus all other financial aid received. Interest is charged during all periods. The U.S. Department of Education will evaluate the borrower's credit history to determine eligibility.

Notice: The U.S. Congress has enacted a number of legislative changes during the past year that will affect the federal loan programs beginning summer semester 2012 . The Budget Control Act of 2011 , signed into federal law in August 2011, includes the following:

Elimination of Loan Fees Rebate: Currently, there is a 4.0 percent origination fee on the PLUS loan, but a portion of the fee ( 1.5 percent) is refunded to the borrower at the time of disbursement. Effective July I, 2012, the rebate will be eliminated and the full fee will be charged to parents and students.

Missing or No Financial Aid Awards - In order to check your eligibility for federal and/or state aid for the 2012-13 academic year, please file an online Free Application for Federal Student Aid (FAFSA) , and apply for TAP online. You must first file a FAFSA application before filing a TAP application,
otherwise the latter application will not be made available to you. Any student who exceeds statutory income limits is not eligible for any need-based federal or state grants. However, these students are still eligible for Unsubsidized, PLUS, Parent PLUS and Alternative loan.

## Federal Perkins Loan Program

The Federal Perkins Loan Program is a campus-based aid program designed to provide additional assistance to the neediest students. Students who are in good standing and enrolled for at least 6 credits will automatically be considered for a Perkins Loan based on the timely completion of the Free Application for Federal Student Aid (FAFSA). Eligible students may borrow up to a total of $\$ 30,000$, including undergraduate Perkins Loans. Awards are based on the availability of funds and the financial need of the applicant. The average Perkins Loan awarded at Brooklyn College is $\$ 1,500$ per year.

Repayment and accrual of interest on the unpaid balance do not begin until six months after a student ceases to be enrolled at least half time ( 6 credits). Interest on the loan is 5 percent, and repayment may be extended over 10 years, depending on the size of the loan. Borrowers who enter certain fields of teaching or specified military duty may qualify for partial or full cancellation of the loan. For more details on repayment, deferment or cancellation options, contact the Office of Financial Aid.

## Alternative Student Loan Program Eligibility

Typically students with, but not limited to, the following statuses find use within the Alternative or Private Education Loan program:

- Nonmatriculated student status.
- International students.
- Students attending less than half-time (6 credits), contingent upon lender approval.
- Students who have reached their federal aggregate or annual loan limits.

Alternative loans are credit-based, 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 higher interest rate because they are based upon individual credit score. In accordance with the Higher Education Opportunity Act, sec IO2I, Private Education Loan Disclosure and Limitations states that the borrower:

- may qualify for federal financial assistance through a program under title IV of the Higher Education Act of I965 (20 U.S.C. 1070 et seq.), in lieu of, or in addition to, a loan from a nonfederal source, and
- may obtain additional information concerning such assistance from their institution of higher education.

To apply for federal title IV grants and loans, complete the Free Application for Federal Student Aid (FAFSA).

Loans are funds borrowed now but must be paid back later. We advise all undergraduate and graduate students to consider borrowing alternatively, only after they have fully exhausted the use of title IV grants and loan allowances. Financial planning is essential when determining how to pay for your education and can help to keep educational debt manageable.

The City University of New York, of which Brooklyn College belongs, does not participate in Preferred Lender Agreements. Students are free to select any lender of choice when deciding on an alternative loan lender staying in line with the CUNY Financial Aid Model Code of Conduct.

## Veterans Administration educational assistance

Information about Veterans Administration education benefits under the Gl Bill and for post-Vietnam-era veterans may be obtained from any Veterans Administration office and from the Brooklyn College Veterans Affairs and Counseling Center, 0303 James Hall, 7I 8.95I.5I05. Educational benefits are described in VA pamphlet 20-67-I which may be obtained from the Veterans Administration, 810 Vermont Avenue NW, Washington, D.C. 20420.

## New York State Programs Tuition Assistance Program (TAP)

The New York State Tuition Assistance Program (TAP) helps undergraduate eligible New York residents pay tuition at approved schools in New York State. Depending on the academic year in which you begin study, an annual TAP award can be up to $\$ 5,000$. Because TAP is a grant, it does not have to be paid back.

Effective for the 2007-08 academic year and thereafter, TAP is available for students attending SUNY, CUNY and not-for-profit independent degree-granting colleges on a parttime basis. To be eligible for part-time TAP, you must have been a first-time freshman in the 2006-07 academic year or thereafter, have earned 12 credits or more in each of two consecutive semesters, and maintain a C average.

## Who Is Eligible?

To be eligible for TAP, you must:

- be a U.S. citizen or eligible noncitizen;
- be a legal resident of New York State;
- study at an approved postsecondary institution in New York State;
- have graduated from high school in the United States, earned 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 full-time student taking 12 or more credits (applicable toward your degree program) per semester;
- be matriculated in an approved program of study;
- have declared a major no later than within 30 days from end of the add/drop period:
- in the first term of your sophomore year in an approved two-year program, or
- in the first term of your junior year in an approved four-year program;
- meet academic standing requirements;
- be charged at least $\$ 200$ tuition per year;
- not be in default on any state or federal student loan or on any repayment of state awards; and
- meet income eligibility limitations.


## What Determines the Amount of the Award?

The award amount is determined by:

- the academic year in which the first payment of TAP or any state award is received;
- the type of postsecondary institution and the tuition charge;
- combined family New York State taxable income; federal, state or local pension income; and private pension and annuity income, if applicable;
- financial status (dependent or independent); and
- other family members enrolled in college.


## Aid for Part-Time Study (APTS)

The Aid for Part-Time Study (APTS) program provides grant assistance for eligible part-time students enrolled in approved undergraduate studies.

## Amount

Awards provide up to \$2,000 per year for part-time undergraduate study at participating institutions in New York State. An APTS award cannot exceed tuition charges.

## 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 Dec. 3I 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 Dec. 31 of the previous calendar year.


## Study Requirements

For this program, part-time study means being enrolled for at least:

- three but fewer than 12 semester hours per semester, or
- four but fewer than eight credit hours per trimester.


## Eligibility

To be considered for an APTS award, you must:

- be a U.S. citizen or eligible noncitizen;
- be a legal resident of New York State;
- have graduated from a high school in the United States, earned 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;
- meet academic standing requirements;
- be charged at least $\$ 100$ tuition per year;
- not have exhausted Tuition Assistance Program (TAP) eligibility;
- not be in default on any federal or state student loan or on any repayment of state awards; and
- meet income eligibility limitations.


## Selection for an APTS Award

The New York State Higher Education Services Corporation (HESC) distributes APTS funds to participating colleges in New York State. College financial aid administrators select potential recipients from eligible students and decide who will receive APTS awards based on the funds they have available and students' needs.

## How to Apply

If you plan to attend Brooklyn College as a part-time student, you may be eligible for a New York State Aid to Part-Time Study (APTS) award. After completing your New York State TAP application, you will need to complete a CUNY supplement form to be considered for this award. Log on to the CUNY Portal to access the Admissions/Financial Aid Center and complete your "eSupp" (CUNY Supplement) application.

## Part-time TAP Program

Part-time TAP allows for partial TAP payments for undergraduate students taking 6 to $\|$ credits. To be eligible for part-time TAP, students must have earned 12 credits or more in each of two consecutive semesters, prior to dropping to part-time ( $6-1 \mid$ credits). In addition, students must maintain a $C$ average.

## City University Programs

## Search for Education, Elevation and Knowledge (SEEK)

SEEK stands for Search for Education, Elevation and Knowledge - and that's just what the program provides undergraduate students by making sure you get the support and guidance you need. From your first day on campus to your graduation march, counselors and advisers will keep you on track with special academic training, financial aid and individual guidance assistance. SEEK will ensure you even build a terrific résumé through internships and job counseling. Additional information on how to apply can be found on the Percy Ellis Sutton SEEK program Web page.

## Internships

Internships are opportunities to learn valuable skills, make professional contacts, and gain real-world work experience. Increasingly, internships lead directly to employment. Brooklyn College provides stipends to support students during their internships. Students may meet with an internship counselor to discuss appropriate internship placements. For more information, contact the Magner Center for Career Development and Internships, I 303 James Hall, 718.951.5774, or visit the WebCentral portal.

## Regulations

## Federal Satisfactory Academic Progress

Standards for Title IV Financial Aid

## Policy Summary

Brooklyn College students must satisfy the following qualitative and quantitative federal financial aid 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. §CFR668.34

Federal aid programs governed by these regulations are:

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Work-Study
- Federal Perkins Loan
- Federal Direct Subsidized Stafford Loan
- Federal Direct Unsubsidized Stafford Loan
- Federal Direct Parent Loan for Undergraduate Students (PLUS)
- Federal Teach Grant
- TAP (Note: While failing to meet federal financial aid satisfactory academic progress can impact your eligibility for TAP, New York State has developed its own guidelines for New York State satisfactory academic progress.)


## Definitions

Our definition of SAP has three components:

## Qualitative Standard

Undergraduate students must achieve the following grade point averages:

- 0-12 credits: 1.50
- |3-24 credits: 1.75
- 25+ credits: 2.00


## Maximum Time Frame

Undergraduate students may not attempt more than 150 percent of the credits normally required for completion of the degree. All students must meet this minimum requirement.

## Quantitative Standard (credits earned versus credits attempted)

Undergraduate students who have attempted less than 150 percent of the total program credits must have their accumulated (or earned) credits be equal to or greater than two-thirds the cumulative credits attempted at the institution or meet the CUNY conditional standard. *See the chart below for examples.

All students much complete two-thirds or at least the CUNY conditional standard (undergraduates only) of their courses during each term with a grade of $A+A, A-, B+B, B-, C+, C$, C-, D+, D, D-, P or CR.

## * Title IV Progress Chart

| Credit Accumulation | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Required Cumulative Credits | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| Conditional Standard | 0 | 5 | 16 | 27 | 39 | 50 | 61 | 72 | 84 | 95 | 106 | 120 |

## Determination of Cumulative Attempted Credits and Cumulative Earned Credits

## Withdrawals

Courses that are dropped during the add/drop period will not be counted 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 a student's capability to meet the appropriate standard.

## 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.

## Repeated Courses

Successfully completed courses can generally be accepted toward degree requirements once (cumulative earned credits).
Repeated courses, regardless of the prior grade, reduce a student's capacity to meet the required credit accumulation standard.

## Transfer Students

Transfer students shall have their status initialized for the purpose of measuring satisfactory academic progress 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 Degree

If a student changes his or her objective and begins pursuing a different degree, he or she will be subject to the maximum time frame for the new objective without regard to time spent pursuing the previous degree.

## SAP Changes Effective July I, 201 I

The following changes are required by the U.S. Department of Education and are to be implemented for the 2011-12 academic year:

No automatic periods of SAP warning are permitted. Students found to be unsatisfactory due to failing one or more components of SAP at the annual review are ineligible for financial aid. No tolerance is permitted.

First-year students must earn a 1.50 GPA within their first 12 credits and a 1.75 by their 24th. Continuing students at $24+$ credits must earn a 2.00 GPA.

Students 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. A student who is ineligible has the right to appeal if there are extreme extenuating circumstances that contributed to the deficiency.

Appeals are approved for documented extreme situations only. Students who appeal will be approved only for the following federally defined reasons:

- Serious physical or mental illness of the student
- Serious physical or mental illness of the student's immediate family member
- Death of the student's immediate family member
- Other 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 who have approved appeals are granted one term of financial aid probation. For continued eligibility, students must resolve all SAP deficiencies during the period of probation. Students who cannot mathematically resolve all deficiencies in one term will once again become ineligible for federal financial aid.

Students are permitted one appeal per academic career. There is no secondary or director level appeal process. Students may appeal once as an undergraduate and once as a graduate student. Students may not appeal a denial by the SAP committee.

## Reinstatement

A student whose appeal has been denied or who has lost eligibility by not meeting the standard without appeal may regain eligibility by leaving the institution for at least one year. Upon re-admittance, the student will receive assistance for the terms in the academic year of re-admittance and will be subject to evaluation of eligibility at the end of that year against the appropriate standard for the degree program in which the student is enrolled.

## Satisfactory Academic Progress Appeal

The Office of Financial Aid has established an appeal process for suspension of financial aid related to satisfactory academic progress.

In order to submit an appeal, you must complete the Satisfactory Academic Progress Appeal Form (pdf). Any student who wishes to appeal the suspension of financial aid should read and complete the attached materials.

## Procedure

I. Complete the Satisfactory Academic Progress Appeal form. Please be sure to attach documentation to support your appeal. Appeals submitted without supporting documentation will not be reviewed.
2. Submit your appeal to the Enrollment Services Center (Financial Aid Inquires) counter.

## 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.
- Print legibly and sign the Satisfactory Academic Progress Appeal Form (pdf).


## Withdrawing and Financial Aid Eligibility

Circumstances may necessitate withdrawal 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 received. However, in all cases, your financial aid must be recalculated.

## Official Withdrawal

Depending upon the date of withdrawal, one of the following situations will apply:

- If the semester has not yet begun, and you drop or cancel your registration, no financial aid will transmit to your account. 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 charges.
- If you drop all classes prior to the first day to officially withdrawal (college calendar), you will be billed for tuition charges for that semester.
- If you officially process a withdrawal form 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 Formula. You will be responsible for any balance due to the college.
- If you officially process a withdrawal form after the 60 percent point of the semester, you may be required to return any Title IV Aid you received for the semester up to the point of withdrawal

Stafford Loans will be subject to a return to Title IV calculation for the current semester. However, if funds have not yet disbursed for current and future semesters within the same academic year, your loan will be cancelled by the college if, by withdrawing from some or all classes, your student enrollment status drops to less than half-time (six credits).

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 at the end of each spring semester. You could be denied future aid if you do not meet our Standards of Academic Progress.

If you have an outstanding balance on a Perkins and/or Stafford Loan, the date 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 after. 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 Stafford student loan, which will go into repayment six months after you are less than half-time.

## Unofficial Withdrawal

If you stop attending classes and do not initiate an official withdrawal, it is unlikely that you will receive passing grades for the semester and 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.

Stafford Loans will be subject to a return to Title IV calculation for the current semester. However, if funds have not yet disbursed for current and future semesters within the same academic year, your loan be cancelled by the college if, by withdrawing from some or all classes, your student enrollment status drops to less than half-time (six credits).

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 our Standards of Academic Progress.

If you have an outstanding balance on a Perkins and/or Stafford Loan, the date 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 after. Please let your lender(s) know when you drop to less than half-time.

## 32 Financing Your Education

If you withdraw or drop to less than half-time, you must complete an Exit Counseling for your Stafford student loan, which will go into repayment six months after you are less than half time.

## Withdrawal Never Attended

A WN grade is given to students who never began attendance in a course. The student will be considered not to have earned any Title IV aid for the course. Students will be liable for the tuition.

## Return of Title IV Formula

Title IV Financial Aid 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 four 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 funds 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. Payment for these charges is due on demand. Please pay Brooklyn College 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.

## Title IV Funds

Funds governed under Title IV of the Higher Education Act include:

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Work-Study
- 8 Federal Perkins Loan
- Federal Direct Subsidized Stafford Loan
- Federal Direct Unsubsidized Stafford Loan
- Federal Direct Parent Loan for Undergraduate Students (PLUS)


## Federal Teach Grant

TAP (Note: While withdrawing may not affect your TAP eligibility for the semester in question, withdrawing can impact your future semester eligibility for TAP, New York State has developed its own guidelines for New York State satisfactory academic progress).

For purposes of complete withdrawal and the Return of Title IV Formula, Federal Work-Study is not considered. However, in all total withdrawal cases, you cannot continue to work under the Federal Work-Study Program after your date of withdrawal. Also, any student whose enrollment falls below six credits because they drop/withdraw (officially or unofficially) or stop attending classes must stop working immediately. Students are responsible to notify their site supervisor regarding changes in class schedule/enrollment and the FWS staff at the Office of Financial Aid. If you have further questions contact, contact the FWS staff at 718.95I.5I78 or .5816 , or via e-mail.

## Point of Contact to Initiate Withdrawal

- Complete a paper withdrawal form: Enrollment Services Center, West Quad Center (Registrar's Office).
- Online: Log on to WebSIMS on the BC WebCentral Portal.


## Federal Direct Loan Proration

Generally, a dependent or independent undergraduate may borrow up to the annual limit applicable to the student's year in school. However, the maximum amount an undergraduate student may borrow must be prorated, in certain situations.

There are two situations where you must prorate the annual limit for subsidized and unsubsidized Stafford Loans:

- when a borrower is enrolled in a program that is shorter than a full academic year, and
- when a borrower 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.

If a student drops or adds a course after you have originated a prorated loan, you may readjust the loan amount, but you are not required to do so. Of course, a student who drops courses must still be enrolled at least half time to be eligible for any loan amount.

Please bear in mind that proration does not necessarily affect the amount of the loan. For instance, if a student's prorated loan limit is $\$ 2,100$, but the student was only eligible for a $\$ 2,000$ subsidized Stafford Loan based on costs, EFC and other aid, then the proration would not affect the amount of the subsidized Stafford Loan.

Prorating loans for programs of study shorter than a full academic year

When a student is enrolled in an academic program that is shorter than a full academic year in length, you must use a proportional proration that is based on the lesser of -

Number of semester, trimester, quarter or clock hours enrolled

Number of semester, trimester, quarter or clock hours
in the academic year
OR
Number of weeks enrolled
Number of weeks in the academic year
You may express the resulting fraction as a decimal to see more easily which is less or to calculate the prorated limit. The smaller fraction is then multiplied by the appropriate annual loan limit. The result is the prorated loan limit for the student.

## 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.

## Scholarships Office

213 West Quad Center, 718.95I.4796
http://scholarships.brooklyn.cuny.edu
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 Scholarships 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 BC WebCentral portal. Applications are available beginning in September for the following fall semester.

Accepted students should apply through the BCWebCentral 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 Bursar's Office. Some types of financial aid may need to be adjusted prior to refunds being distributed. Students whose checks from external organizations require a signature will be contacted by the Scholarships Office.

In order for funds to be disbursed, students must have completed all the following requirements of the aid receipt process. The student must:
receive an award letter from the Scholarships Office. Resolve any existing financial obligations;
be enrolled in a degree program and in good academic standing, with a minimum GPA of 2.00 for undergraduates;
be registered for the required credit hours on which the scholarship was based and
submit a thank-you letter to the Scholarships 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 Scholarships Office. 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 collegewide requirements and assess their academic strengths and weaknesses. The Office of Academic Standing, 3219 Boylan Hall, receives student requests for modifications of college procedures and regulations. Major advisement is provided by department undergraduate advisers.

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

## Office of the Registrar

 306 West Quad Center, 718.951 .5000 , ext. 8150The registrar prepares the Schedule of Classes, facilitates registration for continuing students through the Web, 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. Students should consult the ESC regarding any questions about transcripts and applications as outlined in this chapter and in the chapter "Admission." 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 Student Services Center

## 1600 James Hall, 718.951 .5263

The Transfer Student Services Center is responsible for evaluating all transfer credits from prior colleges for new undergraduate students, both freshmen and transfers. This includes international credentials, Advanced Placement (AP), International Baccalaureate (IB), College Level Exam Program (CLEP), yeshiva/seminary credits and college courses taken while still in high school

## 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.

## Change of name/address

A change of name/address must be filed at the Enrollment Services Center. Change-of-name requests must be substantiated with a marriage certificate or court order. Students may access a Change of Address Form on the BC WebCentral portal Degree requirements

To earn a bachelor's degree, a student must complete a set of general education requirements set by the college and fulfill major requirements in an academic department or program. Students must meet the 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 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.

Students who are readmitted to the college after a term or more of absence must meet the requirements for degrees in effect at the time of readmission. Students in good standing who must interrupt their studies for one or more full semesters, up to a cumulative maximum of two years, may apply in advance to the Enrollment Services Center for an official leave of absence. Such students, upon their return, may fulfill the requirements that were in effect while they were in residence.

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 recommendation of the department chairperson or program director. Petitions must be filed in the Center for Academic Advisement and

## Student Success.

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 a student's responsibility to be certain that he or she follows a program of study that satisfies all requirements. Degrees are awarded to students who have completed all degree requirements provided that they have fulfilled all financial obligations to Brooklyn College.

## 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 2.00 GPA 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 not earned a grade of $C$ 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.

## Collegewide requirements

All students must satisfy the following general education requirements:
I. The Academic Foundations requirements in mathematics, reading, English composition, library research (fulfilled by satisfying English 1010 and $10 \mid 2$ ), writing intensive requirement, foreign language proficiency and speech screening as stated in the "Academic Foundations requirements" section of this chapter.
2. The Core Curriculum courses as stated in the chapter "The Core Curriculum" in this Bulletin.

## Requirements for a major

All degree-seeking students must declare a major no later than the semester in which the combination of credits earned and credits for which they currently are registered total 61 or greater. Students declare a major by completing a Declaration of Major Form. For some majors, the form is available through the BC WebCentral portal. For others, it is available in department or program offices and in the Enrollment Services Center. Some departments require the form to be signed by a departmental or program adviser. Students with double or
dual majors may need to complete a separate Declaration of Major Form for each major.

For students who approach the 61-credit point and remain undecided about their choice of major, there are a number of avenues of assistance. 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 Center for Career Development and Internships 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 61-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 pagel. Specified introductory courses in the major department or program and in other departments or programs.

## 2. Either (a) or (b):

(a) 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) No fewer than 21 credits in advanced courses that are approved as part of an interdisciplinary program, each completed with a grade of C- or higher; at least 12 of these credits must be in a single department or program.
3. Additional requirements for a B.S. degree in specified major fields are noted below.
4. 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 $\left({ }^{*}\right)$ 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.

## 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 B.S. degree

Candidates for a B.S. degree with a major in biology, chemistry, computer (including computational mathematics), 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 and Archaeology $2201,3199,3230,3240,3250,3260,3440$ and 4665; Core Studies 5, 5.I, 5.2, 7.I, 7.2, 8.I and 8.2; Core Curriculum 1300 through 1399 and 3301 through 3399; Economics 3400, 3410, 4410 and 4422; Philosophy 3203, 3204 and 3601; Physical Education and Exercise Science 3023, 327I, 3275, 4229 and 425I; 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:
I. The last 18 credits taken toward the degree.
2. Either (a) or (b):
(a) 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) No fewer than 21 credits in advanced courses that are approved as part of an interdisciplinary program, each completed with a grade of C- or higher; at least 12 of these credits must be in a single department or program.
3. Two upper-tier Core Curriculum courses, as described in the chapter "The Core Curriculum" in this Bulletin. However, students admitted to Brooklyn College before fall 2006 with an A.A., A.S. or bachelor's degree from another
U.S. institution are required to complete only a single upper-tier course. This exemption from a second upper-tier course does not apply to students who readmitted in fall 2006 or thereafter.
4. 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 6 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 Office of the Registrar processes transfer evaluations for courses completed at other institutions and, where possible, indicates equivalent Brooklyn College courses. On recommendation of the relevant academic department, there may be assignment of elective credit for courses satisfactorily completed at other institutions that may not have precise Brooklyn College equivalents.

Students who transfer to Brooklyn College with an A.A., A.S. or bachelor's degree from another school in the United States are exempt from the lower-tier Core requirement but need to complete one or two upper-tier Core courses at Brooklyn College, as described in the chapter "The Core Curriculum" in this Bulletin.

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

## 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. Such students are required to obtain readmission to the college if there has been a hiatus in enrollment.

Students with an undergraduate degree from Brooklyn College who wish to earn an undergraduate degree from the same department as the first degree must complete the requirements for the second degree and obtain approval from the chairperson of the department. Such students are required to obtain readmission to the college. Second-degree students and students with 90 transfer credits may not take courses on 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 exams or courses. The tests include those that must be taken prior to enrollment (CUNY Assessment Tests) as well as those taken 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, the writing intensive requirement, speech screening and foreign language proficiency.

## I. Pre-matriculation testing requirements

 and outcomesGeneral requirements. With the exceptions listed below, all entering students who plan to matriculate at Brooklyn College must take and pass the CUNY Assessment Tests (CAT) in Reading, Writing and Mathematics before they will be allowed to register for any course at Brooklyn College. Scores on the CUNY Assessment Tests (whether taken at Brooklyn College or at other units of CUNY) shall be noted on students' transcripts. Students who achieve a passing score on the CUNY Assessment Tests in Reading and Writing take English 1010 (or English 1012 if they achieve a score of 12). Student-initiated appeals of results on the CUNY Skills Assessment Tests can be based only on illness or accident during the examination. Such appeals may be filed in the Office of Testing.

## Exemptions from the CUNY Assessment Tests

The following students are exempt from the CUNY Assessment Tests:

1. Students who are admitted to Brooklyn College with a Scholastic Aptitude Test (SAT) Verbal Test score of 480 and above, an American College Test (ACT) English Test score of 20 and above, or a New York State Regents

English Examination minimum test score of 75 and above will be exempt from the CUNY Assessment Tests in Reading and Writing.
2. Students with an SAT Mathematics score of 510 and above, an ACT Mathematics score of 21 and above, or a New York State Regents Examination* minimum test score of 75 on any of the following: Sequential Math II or Sequential Math III, or Math A/or Math B Regents Examination are exempt from Parts I and II of the CUNY Assessment Test in Mathematics, as described in section "CUNY Assessment Test in Mathematics: Procedures and passing scores" below.

* Applicants for freshman admission for fall 2011 or spring 2012 only may demonstrate proficiency in mathematics by scoring a 75 or higher on the New York State Regents examinations in Integrated Algebra or Geometry; or Algebra 2 \& Trigonometry and by successfully completing each course in the three course Regents sequence: Integrated Algebra, Geometry, and Algebra 2 \& Trigonometry.
* Applicants for freshman and transfer admissions for fall 2012 and thereafter may demonstrate proficiency in mathematics by passing at least one of the three New York State Regents examinations in mathematics (Integrated Algebra, Geometry, Algebra 2 \& Trigonometry) with a score of 80 and above and successfully complete Algebra 2 \& Trigonometry or a higher-level course.

3. Students who already have a bachelor's degree or higher from an accredited program are exempt from taking the CUNY Assessment Tests, except as noted in point 6 below.
4. Transfer students who have earned a grade of $C$ or higher in a 3-credit college level mathematics course are exempt from the CUNY Assessment Test in Mathematics.
5. Transfer students who have earned a grade of $C$ or higher in a 3-credit freshman composition course or higher from an accredited college are exempt from the CUNY Assessment Tests in Reading and Writing.
6. Transfer students who have an exemption from the CUNY Assessment Tests in Reading and Writing but who are considered ESL by the university's standards may be asked by the college to take a placement test in these areas to assess their English language skills and must take the appropriate ESL courses if they do not pass these exams. They may also be required to take English 1010 and 1012 at Brooklyn College.
7. Exemptions from the CUNY Assessment Tests for students who initially matriculated at CUNY prior to September I, 1978, are no longer in force. All students are required to fulfill the university's skills proficiency requirements by showing proof of an exemption from the test or by taking and passing the CUNY Assessment Tests.

## Rules for Students with Exemptions

Students with SAT, ACT or Regents' Examination test scores exempting them from CUNY Assessment Tests must provide the college with proof of those scores. All exemptions from the CUNY Assessment Tests are used to determine whether students meet the university's proficiency requirement and are not used to exempt students from courses.

## Exceptions: Students Who May Enroll Without Passing the Assessment Tests

I. SEEK students who do not pass the CUNY Assessment Tests and do not have scores on SAT, ACT or New York State Regents Examinations exempting them from CUNY Assessment Tests may register for courses at Brooklyn College.
2. ESL students who do not pass the CUNY Assessment Tests in Reading and Writing may register for classes if they are proficient in Mathematics.

## CUNY Assessment Test in Writing: Procedures and passing scores. The CUNY Assessment Test in

 Writing is a 90-minute paper-and-pencil test designed for the purposes of placement into freshman composition, ESL and compensatory courses. Students will be asked to read a short passage (250-300 words) on an academic topic and write an essay responding to the passage. The test is scored independently by two trained faculty raters with both raters assigning scores in five categories. Scores may range from one to six points in each category. The highest possible combined score is 96 .The minimum passing score is a combined rating of at least 56 by two readers

No student may be placed in English 1010 without a 56 or higher on the CUNY Assessment Test in Writing and a score of 70 or better on the CUNY Assessment Test in Reading.

## CUNY Assessment Test in Mathematics: Procedures and passing scores. The CUNY

Assessment Test in Mathematics is an untimed, computerbased, multiple-choice test. The test consists of Numerical Skills/Pre-Algebra, Algebra, College Algebra, and Trigonometry. Pre-Algebra and Algebra constitute the Basic Skills portion of the assessment test that all students must pass before registering at the college. The College Algebra and Trigonometry section covers more advanced topics and does not affect admissions to Brooklyn College. Results from this portion of the test are used to place students into more advanced mathematics course.

The passing score on the Pre-Algebra and Algebra section based on CUNY's standards for Brooklyn College is 45 or more. Students who meet the minimum passing score for this portion of the test are permitted to register for precalculus.

The passing score on the College Algebra and Trigonometry section is 45 , as determined by the Department of Mathematics. Students who meet the minimum passing score for this portion of the test are exempt from precalculus.

## CUNY Assessment Test in Reading: Procedures and passing scores. The CUNY Assessment Test in

 Reading is an untimed, computer-based, multiple-choice test. The minimum passing score for the test is a scaled score of 70 , in a range of 19 to 99.Requirements for SEEK and ESL students. Prior to their initial registration, incoming SEEK and ESL students must attend all assigned summer or 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 on the verbal section of the SAT or 20 on the English section of the ACT or 75 on the New York State English Language Arts Regents Examination 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 the relevant department chairperson.

Requirements for SEEK students. SEEK students are required to pass the CUNY Assessment Tests in Reading and Writing within one year of their initial enrollment and pass the test in Mathematics within two years of their initial enrollment.

SEEK students who score below 56 on the CUNY Assessment Test in Writing shall be placed in the appropriate writing workshop attached to a SEEK compensatory course. Those who score 56 on the writing exam but score below 70 on the reading shall be placed in an appropriate reading class or workshop.

SEEK students who score below 45 on the basic skills portion of the CUNY Assessment Test in Mathematics will be placed in an appropriate workshop or compensatory math course and must meet the college's proficiency requirement in mathematics within two years of initial enrollment.

SEEK students who fail the CUNY Assessment Test in Reading and/or Writing will be placed in a block program of courses emphasizing critical inquiry for no more than two semesters, in addition to summer and intersession instruction.

Requirements for ESL students. Students admitted to the ESL program must continue to enroll in ESL courses or workshops each semester until they pass the CUNY Assessment Tests in both Reading and Writing. They may take courses for two semesters and, if necessary in their second year of study, enroll in the appropriate workshop(s): reading, or writing, or both. ESL students must pass the CUNY Assessment Tests in Reading and Writing within two years of initial enrollment.

Students selected for the ESL program on the basis of the CUNY Assessment Test in Writing shall be placed in ESLR I004, 1006, 1007, or 1008. ESL students who fail the CUNY Assessment Test in Reading will be placed in ESLR I004, 1006 or 1008. The placement based on the two tests is as follows:

Combined Score
Course
24-39, even with a passing score in reading ESLR 1004
40-55 and a failing score on
the reading exam
ESLR IOO6
40-55 and a passing score on
the reading exam (70+) ESLR 1007
56 and a failing score on the reading exam

ESLR 1008
Students in ESLR I004 or IO05 take the Brooklyn College Post-Test for Second Language Learners as an exit test. The level of achievement on this test determines placement in ESLR 1006, 1007 or 1008 . Students in ESLR 1006, 1007 or 1008 take the appropriate CUNY Assessment Test as an exit test from the ESL program at the end of the semester.

ESL students who are not proficient may enroll in a CUNY CLIP (intensive language institute) where they can prepare for and pass the reading and/or writing tests. After passing the tests, they may re-enroll at Brooklyn College.

Students whose combined score is 56 or above on the CUNY Assessment Test in Writing and who achieve 70 or better on the CUNY Assessment Test in Reading are placed in English IOIO; others remain in ESL writing courses for a maximum of two semesters.

Those students who have not yet passed the CUNY Assessment Tests after a year of ESL courses may no longer enroll in ESL courses, but they may continue to take regular courses in other subjects and receive ESL support and tutorial
services for an additional year. They may register for the tutorial sections ESLR IOOI, Reading Workshop, and ESLR I003, Writing Workshop. Students who have passed the CUNY Writing Test but not the Reading Test may take the Reading Workshop (ESLR IOOI), and students who have passed the CUNY Reading Test but not the Writing Test may take the Writing Workshop (ESLR IO03). After the additional year, students will be tested again using the CUNY Assessment Tests in Reading and Writing. A student who does not pass at this point may be dismissed from the college.

## II. Other Academic Foundations Requirements English composition requirement. In order to

 receive a Brooklyn College degree, all students must pass English 1010 and 1012 unless they are exempt from English 1010 or, as transfer students, have received advanced standing credit for two semesters of composition.Transfer students who have received a grade of C- or better from their former college for Composition I will receive credit for the course and may register for English 1012 .
Transfer students who have received a C- or better for both Composition I and Composition 2 are exempt from the composition sequence at Brooklyn College. This placement or exemption shall be noted on students' transcripts.

Students in English 1010 take a pass/fail exit test at the end of the semester (during the final examination period). This test is prepared by the Department of English and is administered during the final examination period. Students who fail this test will receive a grade of NC or F in English 1010. Students who fail the test but have done all the course work will receive a grade of NC; students who have not completed the course work and who fail the test will receive a grade of $F$. The grade in English 1010 for students who pass this test will be based solely upon the quality of their work during the semester and may be A+, A, A-, B+, B, B-, C+, C, C-, NC or F. Students who do not pass English 1010 must repeat it the following semester. However, the course may not be taken more than three times, and students who receive three grades of F, NC and/or WU may be dismissed from the college. Students who receive an $A+$, $A$ or $A$ - in English 1010 are eligible for exemption from English 1012 based on an evaluation of their performance on the English 1010 exit test by an exemptions committee. Additionally, students must be recommended by their instructors and show that they have completed a research paper in another course that is acceptable to the deputy for composition. Such exemption shall be noted on the students' transcripts.

Students who pass English 1010 and who are not exempted from English 1012 must register for English 1012 within two semesters after completing English 1010 . Students in English 1012 who take the final examination will receive a grade of A+, A, A-, B+, B, B-, C+, C, C-, NC or F. Students who do not pass English 1012 must repeat it the following semester. However, the course may not be taken more than two times, and students who receive two grades of F, NC and/or WU 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 really 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 the print and electronic resources of the library.

All sections of English 1012 shall visit the Brooklyn College Library for at least one class session of advanced instruction on the nature, access, and efficient and ethical use of the 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.

Writing-intensive requirement. All students must satisfy the college writing-intensive requirement by either a) completing one or more writing-intensive 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 IOI2.

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 have 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) submit to the registrar a transcript or course description from another college verifying that they have taken a designated writing-intensive course (most of which will be identified automatically within the normal transfer evaluation process); or d) demonstrate that they have had such a course by submitting an acceptable portfolio of previous college writing to the head of the program in the discipline of the course.

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 $W$ course will be granted. If that course is the sole W course available in a student's major, the student will receive a waiver from the writing-intensive requirement. If there is another $W$ course available in the student's major, the student must take it to fulfill the department's requirement.

Whereas an A.A. or A.S. degree from CUNY satisfies the Brooklyn College W requirement, no associate's degree automatically satisfies the writing-intensive requirement in the major and hence those degrees would not exempt the student from a writing-intensive course required for that student's major.

Speech screening requirement. All students (except those selected for ESL) who plan to matriculate or rematriculate at Brooklyn College must be screened for speech proficiency before they have completed 60 credits. Transfer students must be screened immediately after
transferring. Students selected for ESL shall be screened for speech proficiency when they exit the ESL program and before they will be allowed to register for additional courses.

This screening will be performed by members of the Speech Communication Arts and Sciences faculty to determine the students' ability to communicate orally and to place them in an appropriate course in speech or to grant them exemption according to the following general criteria. Exemption is granted to those students with the ability to express themselves fluently, clearly, and with appropriate control of voice and diction.

## Speech Course Criteria

| $10 \mid$ - Students whose clinical problems in speech and hearing significantly inhibit their ability to express and understand spoken English or to be understood by others.

1103 - Students whose oral communication skills either seriously inhibit understanding by others or seriously inhibit their ability to express themselves.

I I 04 - Students whose command of oral communication skills and spoken English has not equaled or surpassed their command of their spoken heritage language and who need further, more consistent, practice in spoken English.

I I I 0 - Students whose marked or extreme regional dialect of American English inhibits understanding by speakers of other dialects.

II\| - Students whose native language is not English and whose communication skills may be otherwise acceptable but whose spoken English is still difficult for American English speakers to understand, and who need further, more consistent, practice in spoken English.

The results of the speech screening(s) shall be noted on the student's transcript.

Students initially placed in Speech IIOI (Speech Clinic) are advised to register for it immediately upon placement and should continue to enroll in it each semester until they successfully complete the course. At that time, they will be screened again and, if assigned to another speech course, must register for it immediately. Students initially placed in any other speech course must pass that course before they register beyond 6 I credits. For students (e.g., transfer, readmit, etc.) who have 32 credits at the time of their initial screening, the 61 -credit limit is extended to 96 credits.

Students who fail to pass an assigned speech course in any semester must register for that course the following semester.

## 42 Academic Regulations and Procedures

Students shall not be permitted at any time to drop an assigned speech course without permission of the Center for Academic Advisement and Student Success, which shall consult the Department of Speech Communication Arts and Sciences.

In order to receive a Brooklyn College degree, students must pass the speech course(s) into which they were placed.

## Foreign language requirement.

I. All baccalaureate students are required to complete one course in a foreign language 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.
2. Admission to Level 3 presupposes two years of secondary school language study. Students who offer only one year of foreign language study (or none at all) are required to take one or two semesters of college study (Levels I and/or 2) before they can take Level 3. A student who has studied a language in high school for at least two years, or who has completed Levels I and 2 of a foreign language at the college level and wants to study a different language at the college level may do so, but this student must complete a minimum of two terms of the new language at the college level to fulfill the requirement.
3. Students who have successfully completed three years of one language in high school and have passed the Regents Level 3 are exempted from the language requirement.
4. Students whose native language is not English may be exempted from this requirement by passing one of the proficiency examinations administered by the Department of Modern Languages and Literatures. A student can be exempted from the foreign language requirement by demonstrating proficiency (which includes the ability to read and write the language) in a natural language, ancient or modern. If the language presented is not taught at the college, external certified documentation may be required. The college does not accept proficiency in American Sign Language as sufficient for exemption from the language requirement. Students who offer Hebrew or Yiddish will be sent to the Department of Judaic Studies for proficiency testing.
5.The Classics Department does proficiency testing for Latin and Classical Greek.
6. Neither blanket nor equivalent credits will be given for introductory courses in a foreign language from which a student has been exempted by examination, whether given by a department at Brooklyn College or an approved outside institution. Students who have completed part of the
language requirement in high school or at another college or university are strongly advised to continue further language study in their first semester at Brooklyn College.

## Withdrawal from Academic Foundations courses

Students shall not be permitted at any time to delete, drop, or withdraw from an assigned foundations course without obtaining permission of the department involved and then 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:
I. The student must be registered for the term during which the exemption examination is to be taken.
2. 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.
3. The student may offer for credit toward the baccalaureate degree a maximum of six courses taken by Brooklyn College exemption examinations.
4. The student may take no more than two exemption examinations in any one term.
5. The student may not take exemption examinations in courses in which he or she was previously registered, whether or not the course was completed.
6. The student may not take an exemption examination in a course after auditing that course.
7. The student may not repeat an exemption examination in a course.
8. Departments will designate those courses in which credit may be earned through an exemption examination.
9. Students apply for an exemption examination at the Enrollment Services Center. A record of courses attempted by the student through exemption examinations is kept by the Office of the Registrar.
10. Grades and credits: (a) 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; (b) A grade of $\mathrm{C}+$ 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; (c) No honors credit may be earned for courses completed by exemption examination.

## Credits for military service

A veteran may receive up to 6 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, 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

Continuing degree-seeking students and all nondegreeseeking students register via the Web through the Brooklyn College WebCentral portal. Some academic departments or programs may require students to obtain permission for certain classes or departmental advisement before being allowed to register.

Students receive e-mail notification when registration appointments are assigned. Registration appointments are assigned on the basis of class status, with undergraduate upper seniors and all graduate students receiving the first registration appointments.

Degree-seeking first- and second-semester freshmen and first-semester transfer students must register in person by appointment only; they select their own appointment through the Self-Managed Appointment Registration Tool (SMART) accessible through the Brooklyn College WebCentral portal. Incoming Student Registration is a comprehensive program that includes a success workshop, advisement, program
planning and course registration. SEEK students register in person and will receive their appointments from the SEEK office.

A Schedule of Classes, the Final Examination Schedule, an academic calendar, and course registration information are available online each term. Students should plan more than one program, as some classes may be filled by the time they register.

## Course restrictions

Exclusion clauses, prerequisites and corequisites that restrict a student's enrollment in some courses appear online when clicking on the course number in the Online Course Search system.

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 corequisite 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 corequisites 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 continuing student or new transfer student has completed initial registration, program changes may be made by adding a course, dropping a course, dropping all courses, or changing from one course section to another. Deadlines, fees and other information regarding program changes are posted online each semester. Students whose programs require an adviser's approval prior to registration must obtain an adviser's approval for any program changes.

Adding a course. The last day for adding a course without special permission is indicated in the academic calendar. After this deadline, a "late add" form is needed for the addition of a course. This form can be obtained in the Enrollment Services Center or through the WebCentral portal under the "Student Transactions" tab.

Each application must include permission of the course instructor and the department chairperson. The final deadline for adding a course with instructor and department approval is posted on the academic calendar; absolutely no course additions will be allowed after this deadline.

Dropping a course. During the first three weeks 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.

## Withdrawing from a course with or without

penalty. After the end of the three-week "program-change" period described above, a student may request a withdrawal from a course. 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:
I. Fourth through IOth weeks. The nonpenalty grade of W will be assigned after the end of the "program-change" period but prior to the end of the IOth week of classes. Students should apply for the withdrawal through the Enrollment Services Center. 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 ).
2. After the IOth week. Beginning with the I Ith week of the fall or spring semester, all students must apply for withdrawal through CAASS. The nonpenalty grade of W will be assigned only in unusual circumstances. Reasons for the withdrawal request will be very carefully evaluated. In addition, the instructor's report must indicate that the student is passing the course or that there is insufficient basis for grading the student. The penalty grade of WF, withdrew failing, will be assigned under two conditions: (a) the reason for the withdrawal request is not approved by CAASS and (b) the reason may be approved by CAASS, but the instructor's report indicates that the student is failing the course at the time of the withdrawal request.
3. 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

Veterans claiming benefits must complete application forms in the Veterans Affairs and Counseling Center, 1407 James Hall, each term during registration.

## 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 Enrollment Services Center. Students who want to take one or more courses at another CUNY college must submit an e-permit on the CUNY website. After the completion of 60 credits, however, no credit will be given toward the baccalaureate degree for work completed at a two-year college. Second-degree students and students with 90 transfer credits may not take courses on permit.

In addition, residency requirements apply (see the "Residence requirement" section). All seniors who wish to take a course at another college must obtain permission from the Center for Academic Advisement and Student Success.

## Admission of seniors to graduate courses

Matriculated undergraduate seniors and some others with senior status who have earned a GPA of 3.00 or higher may apply for permission to take graduate classes. An appropriate academic justification and recommendation of the chairperson or his or her designee and permission of the instructor are required. Graduate courses may be applied to the requirements of the undergraduate degree or may be taken for graduate credit. This must be specified at the time of application for permission. 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 the interested student to increase his or her 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 chairperson, and official registration as an auditor. Unofficial auditing is not permitted. Students who receive permission to audit a course may register in the Enrollment Services Center beginning on the first day of
classes up until the deadline for adding courses. Senior citizens who wish to audit undergraduate classes require all the above permissions, but they register in the Office of the Registrar, 306 West Quad Center, and must present proof of their senior citizen status. Information about the fee for auditing is in the chapter "Tuition and Fees" in this Bulletin.

If, for any reason, students later take courses that they have already audited, they will be governed by the regulations for repetition of courses, which are described in this Bulletin.

Students may not receive credit for courses taken by exemption examinations if they have already audited the courses.

Courses audited are so designated on the student's transcript with the grade of AUD.

## 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 are 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 physical education activities courses, with the exceptions noted below. All students, except majors in physical education, may also take four courses in physical education activities (Physical Education and Exercise Science 100I through I025).

The following courses may not be taken for a pass or fail grade:
I. Collegewide requirements, including Core Curriculum courses for students who are subject to the Core Curriculum as well as courses accepted by the college as substitutes for Core Curriculum courses. Students should be aware, however, of the retroactive pass option for Core Curriculum courses, as described in the chapter "The Core Curriculum" in this Bulletin.
2. All courses in the student's major.
3. Courses outside the major department that are required to complete the major.
4. 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 physical education activities (Physical Education and Exercise Science 1001 through 1025) for a pass or fail grade. Summer application should be made in the Enrollment Services Center (ESC) by the third day of the term.

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 or at the ESC after a student registers. Students should keep a copy of the application. The application must be filed no later than two weeks after classes begin. 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.

## Interdivisional transfer

Students in attendance who want to change their status from DAY to EVE or EVE to DAY must file an application for status change in the Enrollment Services Center.

## Course load

A full term's work is at least 12 credits. 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:

I. Entering first-year students may take a maximum of 16 credits.
2. Upper first-year students who have at least a B average (3.00) may take a maximum of 17 credits; eligible upper first-year students may petition a CAASS adviser to take 18 credits.
3. 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.
4. Students whose cumulative GPA is below 2.00 are subject to the probation policy; they may not take more than 6 credits and must see an academic adviser.

Students should bear in mind that typically at least three hours of work a week (classwork plus homework) are assumed for every credit. Thus, a student carrying 15 credits should plan on 45 hours a 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 work load by 3 credits.
- Employed 16 to 25 hours: reduce work load by 4 to 6 credits.
- Employed 26 to 35 hours: reduce work load by 7 to 9 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 class standing is determined by the number of credits earned, as follows:

- Lower freshman: 0 to 14.9 credits
- Upper freshman: 15.0 to 29.9 credits
- Lower sophomore: 30.0 to 44.9 credits
- Upper sophomore: 45.0 to 59.9 credits
- Lower junior: 60.0 to 74.9 credits
- Upper junior: 75.0 to 89.9 credits
- Lower senior: 90.0 to 104.9 credits
- Upper senior: I 05.0 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 late add period are assigned an administrative nonpenalty withdrawal grade of $* \mathrm{WN}$.

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.

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 a course is specifically exempted by the Faculty Council, a final examination is required to be given in the I5th week of every course. 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.

## Absence from final examination

A student who has been fulfilling course requirements but is absent from the final examination may be given the grade ABS by the instructor in Webgrade. Due to new CUNY rules, this grade will no longer appear on student transcripts or in the CUNY SIMS. It will be converted to an INC (incomplete) grade on the transcript, but Brooklyn College internal systems, such as the WebCentral portal "My Schedule and Grades" channel and the eGrades e-mail notification, will show the ABS until it is resolved. Unresolved grades that were missed for missed final examinations will turn into FIN (failing) grades according to the deadlines published online in the academic calendar.

A makeup examination may be taken only by authorization of the Center for Academic Advisement and Student Success (CAASS) on presentation of written evidence that the student was physically unable to be present at the regularly scheduled examination.

Application for a makeup examination must be made by the end of the second week of classes of the following term. In order for the exam to be scheduled, the student is required to pay the applicable fee and to contact the appropriate department. The makeup examination must be taken during the term following enrollment in the course, not including summer session. If the makeup examination is not authorized or not completed, the grade FIN is assigned.

## 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 chairperson, to take a reexamination 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 ABS or 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.

At the end of each term, grades are available through the BC WebCentral portal. Students should report immediately a discrepancy (other than one between an ABS on the portal transcript and an INC on a transcript generated from WebSIMS) between a grade received from an instructor and a grade on the transcript to the Office of the Registrar. The following grading system is used:

| Grade | Definition |
| :--- | :--- |
| 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 (nonpunitive grade for |
|  | failure to satisfy immunization requirements; no |
| WF | academic penalty) |
| Withdrew failing, counts as failure |  |
| WU | Never attended, nonpunitive grade |
| Withdrew unofficially (student attended at least |  |
| W | one class), counts as failure |

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, \#WU), see the section "F-grade replacement" below.

## F-grade replacement

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 better 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 2-credit course.

In order for the grade of C- or better 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.

## Unresolved grades

A grade of Incomplete (INC) may be given at the discretion of the instructor when I) a student has satisfactorily completed most, but not all, course requirements, and 2) a student 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. See the section "Absence from Final Examination" regarding grading in that scenario.

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.

## Protest 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 grade penalty 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 chairperson or designee. When the department chairperson or designee receives a formal grade appeal following the student's informal appeal to the instructor, the chairperson or designee may attempt mediation and upon failure of mediation, the chairperson or designee shall convene a Grade Appeals Committee to investigate the appeal and to render a decision. To assure that all departmental committees conform to the principles of due process, the following procedures apply:
I. 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 chairperson.
4. The department chairperson will notify the instructor that a formal grade appeal has been initiated, and the instructor shall provide the grade distribution break down 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 Sept. 30.

Time limits for appeal. A student who wishes to appeal a grade must initiate the process in 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. Students must submit their written appeal to the Committee on Course and Standing through CAASS. The decision of the Committee on Course and Standing will be final.Record keeping and retention. The chairperson of the department should maintain the student grade appeal files in a designated location. Each member of the committee may keep their 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 I. 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 |
| C+ | $=$ | 2.30 |
| C | $=$ | 2.00 |
| C- | $=$ | 1.70 |
| D+ | 1.30 |  |
| D | $=$ | 1.00 |
| D- | $=$ | 0.70 |
| F, FIN,WF andWU | $=$ | 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 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 section "Repeating a course" in this chapter.

Step 3. To calculate the GPA, the total number earned (sum from step I) 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 | $\times$ | 3 | $=$ | 12.0 |
| A | 4.00 | $\times$ | 12 | $=$ | 48.0 |
| B+ | 3.30 | $\times$ | 10 | $=$ | 33.0 |
| B- | 2.70 | $\times$ | 5 | $=$ | 13.5 |
| C | 2.00 | $\times$ | 17 | $=$ | 34.0 |
| D- | 0.70 | $\times$ | 3 | $=$ | 2.1 |
| F, FIN, |  |  |  |  |  |
| WF,WU | 0.00 | $\times$ | 5 | $=$ | 0.0 |
| Total |  |  |  |  |  |
| $l$ |  |  |  |  |  |

In this example, the GPA is $142.6 \div 55=2.592$.

## 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 Academic Integrity Policy and the Brooklyn College 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, WU 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 nonmajors in the Department of Physical Education and 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 and dismissal

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:
I. Their cumulative GPA falls below 2.00 ; or
2. They have two consecutive academic semesters in which their semester GPAs fall 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.
I. Students placed on academic probation for condition I (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.
2. 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 2.00 GPA 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, the SEEK proctor of students 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.

## 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 one full term, excluding summer session, 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:
I. 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 2.50 GPA at a community college;
- those who have acquired 60 credits of course work at another accredited institution of higher education with a minimum 2.50 GPA; 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 better 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-time 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 degreebearing status through the Office of Admissions on the basis of having achieved one of the following:
I. A GPA of 2.50 for the first 7 to 14 credits or more earned at Brooklyn College in a well-balanced academic program of liberal arts and Core Curriculum courses.
2. A GPA of 2.00 for the first 24 credits or more earned at Brooklyn College in a well-balanced academic program of liberal arts and Core Curriculum courses.
3. 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 for status change are available in the Office of Admissions. Deadlines for filing applications for status change are Jan. 3 for the spring semester and July I for the fall semester.
4. Applicants are required to pass all three University Skills Assessment Tests in reading, writing, and mathematics. Additional information regarding these examinations may |be found in the "Academic Foundations requirements" section of the chapter.

## Readmission

After a term or more of absence, students who want to be readmitted to the college must apply online prior to the deadlines. Students must have copies of their records sent directly to the Office of Transfer Student Services by any institution attended since they last attended Brooklyn College.

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 fill out an Honors Credit in Regular Courses Form obtained from the Enrollment Services Center and ask the instructor to sign it after discussing thoroughly the nature of work to be done.

At the end of the semester, the form should be returned to the instructor along with the completed honors project work. The instructor will submit the form with the grade roster for the course if the project has been satisfactorily completed. Honors credit will be allowed when the final grade in the course is $A, B$ or $P$. Honors credit is indicated on transcripts in a transcript note.

## Dean's Honor Lists

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, WF or WU, 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, CUNY B.A. and post-baccalaureate students are not eligible). Students cease being 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 part-time 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.

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. 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 3 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 chairperson or with the department's honors committee chairperson. 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 chairperson.

## Application for graduation

Students should request a degree audit after attaining 90 credits. Students who expect to graduate in June should file an application for graduation by the preceding March 15. Students who expect to graduate in February should file an application for graduation by the preceding Oct. 15. Students who expect to graduate in September should file an application by the preceding June 15. Applications for graduation may be filed in the Enrollment Services Center or through the BC WebCentral portal. Applications on file by the proper date will be processed in time for graduation. 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 at the Enrollment Services Center. All work must be completed by the end of the term in which a student expects to graduate.

# 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 concerning standards of behavior for the college community 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 CUNY website; click on the tab "Faculty/Staff," then "Regulations for the Maintenance of Public Order" under "Policies and Procedures."

## Nondiscrimination and equal opportunity

The City University of New York, located in a historically diverse municipality, is committed to values and policies that enhance respect for individuals and their cultures. The university believes that, in order to benefit from this diversity, it must foster tolerance, sensitivity and mutual respect among all members of its community. Efforts to promote diversity and to combat bigotry are an inextricable part of the educational mission of the university. The university does not condone and will not tolerate discrimination in employment or in its educational programs and activities. It continues to recognize the importance of maintaining at each campus equal access and opportunity for qualified students, faculty, and staff. More information about the university's nondiscrimination policy may be found on the CUNY website; click on the tab "Faculty/ Staff," then "CUNY Nondiscrimination Policy" under "Policies and Procedures."

To this end, it is Brooklyn College's policy that its educational and employment programs will be administered without regard to age, carrier status, citizenship status, color, disability, gender, genetic predisposition, marital status, military status, national origin, race, religion, Sabbath observance, sexual orientation, transgender, veteran status, victim of domestic violence, or other factors irrelevant to productive participation in the programs of the college. Further, in keeping with local, state and federal mandates and recognizing the many benefits that accrue from a community of diverse experience and cultural heritage, the college pledges to act affirmatively in providing employment opportunities for qualified women, racial and ethnic minorities, Vietnam-era veterans and individuals with disabilities. All Brooklyn College employees - administrators, members of the faculty and staff - and students are expected to cooperate fully in meeting these legal and ethical mandates.

CUNY policy and New York State and federal law require that the college provide qualified individuals with disabilities the opportunity to participate in programs, activities and employment. CUNY's statement on "Disability Accommodation Procedures" may be found on the CUNY website; click on the tab "Faculty/Staff," then the relevant section under "Personnel Policies and Procedures." More information on college services for students with disabilities appears in the chapter "Additional Campus Services and Facilities" of this Bulletin.

Inquiries or complaint-related matters pursuant to any of the equal opportunity laws, including Executive Order II 246, Title VII of the Civil Rights Act, the Rehabilitation Act of 1973, the Vietnam Era Veterans' Readjustment Act of I974, the Americans with Disabilities Act, Title IX of the Education Amendments, and others, may be addressed to the Office of Diversity and Equity Programs, 2147 Boylan Hall, 718.95I.4I28. Students with disabilities may wish, in the first instance, to contact the director of the Center for Student Disability Services, I 38 Roosevelt Hall, 7I8.95I.5538.

## 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 may file a complaint in the Office of the Vice President for Student Affairs, 2113 Boylan Hall, or in the Office of Campus and Community Safety Services, 0202 Ingersoll Hall.

The full text of the policy is available in both of these offices and on the CUNY website; click on the tab "Faculty/Staff," then "Workplace Violence Prevention" under "Policies and Procedures."

## Sexual harassment

It is the policy of CUNY to promote a cooperative work and academic environment in which there exists mutual respect for all university students, faculty and staff. Harassment of employees or students based upon gender is inconsistent with this objective and contrary to the university's nondiscrimination policy. Sexual harassment is illegal under federal, state and city laws, and will not be tolerated within the university. The complete text of the CUNY sexual harassment policy may be found on the CUNY website; click on the tab "Faculty/Staff," then "Policy against Sexual Harassment" under "Policies and Procedures."

The university's policy against sexual harassment is carried out at Brooklyn College through the Sexual Harassment Awareness and Intake Committee, which consists of students and members of the faculty, administration and staff who review all complaints of sexual harassment and undertake to resolve complaints, using both formal and informal means. Any student or other member of the college community may report allegations of sexual harassment on an informal, confidential basis to any member of this committee. Information on the college's procedures for dealing with complaints about sexual harassment is available online under the "Campus Info" tab on the WebCentral portal. Specific information on the college's procedures and the names and contact information for the panel members may be found at the link for "Policies and Procedures against Sexual Harassment at Brooklyn College."

## 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 WebCentral portal.

## Smoke-free policy

Effective no later than Sept. 4, 2012, the use of tobacco shall be 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, 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, 7I8.95I.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 under the "Campus Info" tab on the WebCentral portal.

## 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, 718.951.31।8. 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 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

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; click on the tab "Faculty/Staff," then "Student Complaint Procedures" in the section "Policies and Procedures."

## 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; click on the tab "Faculty/Staff," then "Academic Integrity" in the section "Policies and Procedures." Brooklyn College's procedures for implementing the CUNY policy and other explanatory material may be found online under the "Campus Info" tab on the 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; click on "Faculty/Staff," then "Computer Use Policy" in the section "Policy and Procedures-General."

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. Everyone is 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 file-sharing 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 money damages and even 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, I 38 Roosevelt Hall, 7I8.95I.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 coordinator 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 procedure for proving immunity is in the chapter "Admission" in this Bulletin. Information on the New York State Department of Health immunization requirements may be found on the Brooklyn College website. Questions may be referred to the Health Programs/Immunization Requirements Office, 0710 James Hall, 718.951 .4505 or .4266 , or via e-mail.

## Medical withdrawal and reentry

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 <br> Access to student records (FERPA procedures)

The college abides by provisions of the Federal Education Rights and Privacy Act of 1974, a federal law regarding 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 without 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, and 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 Web page. 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 Trustee 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 2I3-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 help with processing an informal complaint or in filing a petition of complaint in the Office of the Vice President for Student Affairs, 2113 Boylan Hall.

# Cocurricular <br> Programs and Activities 

## Campus events and club activities

During common hours (Tuesday, $12: 15-2: 15$ p.m.; Flexible Common Hours, Thursday, 12:15-2:15 p.m.) when classes generally are not in session, students may participate in various clubs and activities as well as academically related out-of-classroom projects recommended by faculty or advisers. Special lectures, concerts and other events, including cultural awareness programs, are also presented during common hours. There are about 140 chartered student clubs on the Brooklyn College campus. These organizations present academic and social events; sponsor ethnic, cultural and religious programs; furnish forums for political and societal concerns; provide service to the campus and the wider community; stage performances and exhibitions; and arrange activities for students with special interests. All chartered student groups may be contacted through Student Activities Central, 302 Student Center, or through the appropriate student government, located on the third floor of the Student Center. For information about the use of the Quad for student events or posting banners and flyers and sponsoring large-scale events around the campus, contact the director of the Student Center on the first floor of the Student Center.

Several common hours are usually scheduled each term for evening students. The dates, which change each term, are listed on the calendar on the Course Schedules and Bulletins Web page. On common hour evenings, classes may meet for shorter periods than usual.

## Brooklyn College Student Center

The Brooklyn College Student Center, as part of the Division of Student Affairs, contributes to students' educational experiences at the college through cocurricular programs, student governance, civic engagement and leadership. The Student Center offers meeting and conference rooms, a computer corner, game room and an archival room filled with memorabilia; private study rooms are based on availability upon request. The Student Center is the hub of student life, housing the Student Center Student Advisory Board, three student government offices (CLAS, SGS and GSO), the InterGreek Council office and the Academic Club Association. It is also home to Student Activities Central, where club members can book rooms for events and gain advise
when programming. The Students Engaged in Responsible Volunteer Action (SERVA) reception area, as well as the Office of Central Depository (the processing center for student activity monies allocated to student club organizations) and the Programming, Assessment and Training Office, is also available for student usage to help further enhance student leadership skills for lifelong learning.

The Brooklyn College Conference Center houses a state-of-the-art meeting complex open to students, faculty and staff that is located on two newly renovated floors at the top of the Student Center. It also offers various meeting spaces capable of accommodating presentations, large or small assemblies, lectures, movie screenings, award ceremonies and much more.

## Student governance and leadership opportunities

The student governments for the College of Liberal Arts and Sciences, the School of General Studies and the Division of Graduate Studies are located in 311, 312 and 309 Student Center, respectively. Qualified students may seek office during the annual elections held in the spring. Student government meetings are open to all students. Students may serve on a variety of committees including Faculty Council, Policy Council and other governance bodies throughout the college. In addition, students may participate in a variety of leadership and civic engagement opportunities, including CUNY leadership activities and voter education initiatives as well as volunteering as peer advisers during orientation. For additional information, visit the Civic Engagement and Orientation Office, Boylan Hall.

## Graduate Student Organization

The Graduate Student Organization (GSO), 308-309 Student Center, is the student government of the Division of Graduate Studies. Each Brooklyn College graduate student contributes to the graduate student government, which is funded by part of the Student Activity Fee students pay each time they register. GSO elections are held annually; any matriculated graduate student in good standing may seek office. Meetings of the organization are open to all students.

The GSO polls members, reports their opinions, and represents them on issues that concern them. It holds colloquia and other meetings on subjects of professional and social interest to the academic community. It sponsors and allocates funds to associations of graduate students in individual academic departments. It publishes a newsletter during the year. Further information may be obtained from the GSO office, 7I8.95I.5503.

## Student honor societies

Students are nominated each year for selection to the Dean's Honor List. Each graduate department or program is asked to submit names according to strict criteria available in the office of the dean of the respective school.

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 collegelevel foreign language study beyond the Core Curriculum requirement. Candidates are expected to show evidence of elective study beyond the Core Curriculum requirements and outside their major in at least two of the three broad areas of the humanities, the social sciences and the sciences. All eligible students are considered by the Committee on Admissions; candidates do not apply to Phi Beta Kappa.

## Student service and volunteer opportunities

Student Engaged in Responsible Volunteer Action (SERVA)
The Students Engaged in Responsible Volunteer Action (SERVA) program, Brooklyn College's volunteer registry, provides recognition for students who provide volunteer
service in the community and on campus. Among the on-campus programs are the Brooklyn College Emergency Medical Squad, the Health Programs/Immunization Requirements Office, the Student Center, and service with new-student orientations, campuswide committees, disaster relief, blood drives and work with those in need as well as through the Athletics programs at the College. For more information, students should e-mail the SERVA office..

## New York Public Interest Research Group, Inc. (NYPIRG)

The New York Public Interest Research Group, Inc. (NYPIRG) is a nonprofit, nonpartisan research and advocacy organization established, directed and supported by New York State college students. NYPIRG provides the structure through which concerned students may work for social change in such areas as consumer protection, environmental quality, fiscal responsibility, political reform, equal opportunity and social justice while gaining experience in areas of research, government, and citizenship.

Academic credit may be received for NYPIRG internship work through urban fieldwork courses (Political Science 3610 and 36 II) or through internships arranged with the permission of individual course instructors.

With chapters on 19 campuses throughout the state, NYPIRG is directed and funded by students through their Student Activity Fee. There is a two-week refund period each term for students who do not want to contribute to the organization; refunds may be requested in Central Depository, 302 Student Center, or in the NYPIRG office, 0302 James Hall, 718.859.7।77.

## Recreational activities

Recreational activities are open and unstructured; appropriate facilities are available. Schedules for activities are made available at the beginning of each semester. The recreational facilities include a fitness center, swimming pool, basketball courts and tennis courts. To use the facilities, students must present a valid Brooklyn College identification card in the Recreation Center, West Quad Center, 7I8.95I.5366.

## Intercollegiate athletics

The intercollegiate sports program offers a schedule of athletics competition in Division III of the National Collegiate Athletic Association (NCAA). All students are encouraged to take part in the program, which includes men's soccer, women's softball, and men's and women's basketball, crosscountry, swimming, tennis and volleyball. Students who are interested in joining a team should visit the Recreation Center, West Quad Center, 718.95I.5366.

It is the mission of the intercollegiate athletics program to enhance the educational experience by providing opportunities for students to achieve their athletic potential while representing Brooklyn College. The program fosters friendship and sportsmanship; winning and losing are only important as they support the process of learning. Brooklyn College strongly supports a policy of gender equity.

Recognizing that the most important priority for student athletics is academic performance, the Athletics Division supports this goal by limiting the length of the season, number of contests, length of practices and extent of travel. In accord with NCAA Division III regulations, Brooklyn College does not offer athletic scholarships. There are no revenue-producing sports, and admission to all games is free. Outstanding coaches, trainers and physicians are assigned to all teams. Facilities and equipment are properly maintained for safety and cleanliness.

## Intramural sports

Intramurals provide structured tournaments in a variety of sports for men, women and coed teams. The program welcomes all students and faculty and staff members regardless of their athletic abilities. Information may be obtained in the Office of Recreation, Intramurals and Intercollegiate Athletics, 426 West Quad Center, 718.95I.5366.

## The Office of Student Assistance and Referral (SAR)

The Office of Student Assistance and Referral (SAR) helps students find the right information, discuss options, and make referrals to resources on and off campus.

SAR also provides oversight for selected student emergency loans and grant funds administered by the Division of Student Affairs.

The Student Ombudsperson seeks to ensure the responsiveness of the college to individual student's concerns and, as such, has oversight for the Office of Student Assistance and Referral. The ombudsperson working with SAR's staff assists students in gaining access to college services and programs for which they are eligible. The ombudsperson functions both for the individual student and for the college in serving its primary constituent, the student.

For further information or to make an appointment (evenings are available), e-mail SAR or go to 2 II 3 Boylan Hall.

## Academic Resources

## Libraries

## Brooklyn College Library

The Brooklyn College Library provides integrated information support for instructional and research programs. The library is 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, social sciences, and 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, 7 I8.95 I. 4672

 http://ait.brooklyn.cuny.edu/librarycafeThe 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 and books about music and dance (classical, popular, world), many of which circulate for home use; sound and video recordings; and journals and other serials, including an important collection of composers' complete works editions and monumental editions. The collection is complemented by that of the H. Wiley Hitchcock Institute for Studies in American Music, 4I5 Whitehead Hall.

## Costas Memorial Classics Library 2405 Boylan Hall

The library contains a noncirculating collection of more than I,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 a beautiful suite of rooms in the Art Department, the library contains art books, periodicals and digital materials, as well as computers with Internet access, which may be used for reading, study, reference, research, review of course materials, gathering current information about the art world, looking at pictures or just browsing. 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 many famous people drawn from the New York art world. The library is named for the painter who established the Meier Bernstein Foundation for the promotion of fine-arts education, from which it receives most of its funding; additional support comes from the Art Department, its faculty and alumni, and other sources.

## S. Eugene Scalia Memorial Library

## 1212 Boylan Hall

The library, located in the Center for Italian American Studies, is a reference library of more than 900 volumes.

## Centers and institutes

## Africana Research Center

3103 James Hall, 718.951 .5597
The center promotes research in Africana studies and in political, economic and cultural issues of interest to scholars and the African, Caribbean and African American communities.

## Applied Sciences Institute 3228 Boylan Hall, 718.95I. 5252

The Applied Sciences Institute (ASI) comprises seven research institutes at the college: Applied Vision, Aquatic Research and Environmental Assessment, Electrochemistry, Feeding Behavior and Nutrition, Neural and Intelligent Systems, Semiconductor, and Surfactant Research. Its purpose is to promote significant funded research in a broad range of applied sciences, to promote economic development through interaction with local and regional industry, and to create educational opportunities - including those for women and minorities that help to increase the technological and scientific workforce needed for the economic health of the city. The ASI seeks to promote and encourage applied research at the college in such fields as applied biomedicine, aquaculture, health and nutrition, information systems, and computational science, and others. Directors of the institutes are scientists of international stature who have demonstrated records of attracting substantial grants and contracts from both government and industrial sources. The institutes draw on the skills and efforts of faculty and postdoctoral research associates as well as graduate and undergraduate students at the college.

## 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.

## Center for Child and Adult Development

## 1205 James Hall, 718.95 I. 5876

The center is sponsored by the School Psychologist Graduate Program of the School of Education. It serves the community and professionals in the fields of education and psychology by providing, through conferences and symposia, information on 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 as well as research projects. 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. The center includes a 15 -seat technology lab, an advanced project lab and a recording studio. Software support includes Pro Tools, Max/MSP/Jitter, Ableton Live, Peak, Melodyne, Spear, Sibelius and more. Since 1990, the BC-CCM has hosted an International Electroacoustic Music Festival, with performances of music, video, film and live electronic works by artists from around the world. More information is available at the BC-CCM website.

## Center for Diversity and Multicultural Studies 3309 James Hall, 718.95 I. 5766

http://depthome.brooklyn.cuny.edu/diversity/
The center promotes a campuswide multicultural academic environment. It is active in strategic planning and diversity policy initiatives, faculty development, public forums, publications, internships, community service and student clubs to facilitate the multicultural objectives of the college. It works with the university's Office of Faculty-Staff Relations and the Office of Diversity and Equity Programs. The center administers CUNY's New York City Council funded Black Male Initiative (BMI)/ ERIS Program (Empowering, Recruiting, Investing, Supporting), and it houses the Urban Community Teachers Program.

## Center for Italian American Studies

## I2I2 Boylan Hall, 7I8.95I.5070, extension 6264

The Center for Italian American Studies, established in the 1970s, works closely with the Presidential Advisory Committee on Italian American Affairs. The center seeks to stimulate interest in Italian American life and to explore the social, political and cultural attitudes and behavior patterns of Italian Americans. It serves the students, faculty and staff of Brooklyn College, as well as the greater New York Community, by organizing conferences, lectures and seminars. The center conducts and sponsors research on the Italian American population It supports a minor in Italian American studies, which is offered through the Department of Modern Languages. The Center administers the Senator Martin J. Golden Awards, which are given to undergraduate students each year. The center's director serves as adviser to the Italian Culture Club, which has meeting space within the center. The center houses the S. Eugene Scalia Memorial Library, the Bernard Toscani Library (books in Italian) and the James Periconi Library (an extensive collection of Italian American books in English). Library books and other materials are for use only within the center.

## Center for Nuclear Theory

3438 Ingersoll Hall, 718.951 .5418
Research in theoretical nuclear physics is supported by the center, whose members serve as mentors for graduate students in the area of nuclear theory.

## Center for the Study of Brooklyn

## 1209 Ingersoll Hall, 718.95I. 5852

http://www.brooklyn.cuny.edu/web/academics/centers/csb.php
The Center for the Study of Brooklyn is a public policy research center that puts Brooklyn issues first. It promotes the college's strategic goal of being a model citizen of Brooklyn and aims to serve Brooklyn's community, business, nonprofit, educational and government leaders through timely research and public forums.

## Center for the Study of Religion in Society and Culture <br> \section*{3413 James Hall, 718.95I. 5306}

The Center for the Study of Religion in Society and Culture (RISC) fosters study and research of religion and its social impact with a particular emphasis on the impact of religious institutions in Brooklyn. It houses the archives of the Program for Analysis of Religion Among Latinas/os, a nationwide survey of Latino leadership in parishes and congregations conducted with funding from the Lilly Endowment and the Ford Foundation. In collaboration with the Program for Studies in Religion, RISC cosponsors events and lectures addressing religious topics.

## Center for the Study of World Television

## 304 Whitehead Hall, 7I8.95I. 5555

The center is affiliated with the Department of Television and Radio. Its goal is twofold: to develop a better understanding of the use of national and international policy for the constructive application of television and related media to the social, cultural, political and economic needs of various countries and regions; and to develop a better understanding of how the diverse global trajectories of television programming are part of the formation of social and cultural identities and practices. The center has conducted and published research, sponsored lectures, developed databases on aspects of international television, and conducted various symposia at theUnited Nations and at City University campuses.

## Children's Studies Center for Research, Policy and Public Service

3104 James Hall, 718.951 .3192
Established in 1997, the mission of the Children's Studies Center is to promote a human rights approach to, and participate in, local, national and international research and policy efforts on behalf of children and youth. The center concentrates on pedagogy, research and public service to the community. 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 young people.

## Ethyle R. Wolfe Institute for the Humanities

 223I Boylan Hall, 718.951 .5847The Ethyle R. Wolfe Institute for the Humanities supports research, writing, teaching and public discussion in the humanities and human sciences at Brooklyn College. It seeks to promote faculty initiatives and to ensure excellence in scholarship in these areas. Toward that end, it presents public lectures, symposia and conferences as well as interdisciplinary faculty study and discussion groups; offers full-year research fellowships in the humanities to Brooklyn College faculty; collaborates with several undergraduate honors programs; and brings leading scholars to campus.

## H. Wiley Hitchcock Institute for

 Studies in American Music415 Whitehead Hall, 7I8.95I.5655
http://www.brooklyn.cuny.edu/web/academics/centers/ hitchcock.php
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.

## Infant Study Center

4311 James Hall, 718.951 .5171 or .5610
The center conducts grant-supported research studies on visual and perceptual development in infants and young children. Aspects of both normal and abnormal development are studied. A major interest is the development of new methods of assessing visual functioning in infants and young children. Graduate and undergraduate students assist in research.

## The María E. Sánchez Center for Latino Studies 1204 Boylan Hall, 718.95I.556I

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 Latino affairs. It sponsors conferences, workshops, lectures, seminars, internships and noncredit courses. It encourages curricular development and research on topics related to the Latino experience and fosters educational exhibits as well as artistic and cultural expression. It maintains a facility for special collections, publications, and research.

# Additional Campus Services and Facilities 

## Art Gallery at Brooklyn College

The gallery, affiliated with the Art Department, mounts several shows of national and international art each year as well as exhibitions of folk art and local history and lore. These exhibitions benefit the Brooklyn College community and draw visitors from the borough and beyond. Pending construction of a new space, the gallery has been using the library's exhibition area as well as off-campus venues. Its major sources of support are the James, '68, and Anna Fantaci Art Fund and the Donald E., '40, and Edith Peiser Fund.

## ATM banking

An automated teller machine (ATM), installed by HSBC Bank, is located adjacent to the Information Booth, II 39A Boylan Hall. Open 24 hours a day, the ATM performs all transactions except deposits. The service is free-of-charge to users with HSBC accounts, but fees are charged to those who have accounts at other banks and whose own bank charges for ATM use.

## Bookstore

0400 Boylan Hall, 718.95I.5I50
brooklyn@bkstore.com
The bookstore stocks new and used required and recommended books, computer software and supplies, greeting cards and magazines, school and art supplies, Brooklyn College memorabilia and snacks.

## Brooklyn Center for the Performing Arts at Brooklyn College (BCBC)

 718.95I. 4600www.brooklyncenter.com
www.brooklyncenteronline.org
Brooklyn Center ( BCBC ) is a world-class performing arts center that is a resource for both the campus and the wider community. The center includes Walt Whitman Hall (capacity, 2,400 ) and the New Workshop Theater (capacity, I00), a studio facility.

Each year, $B C B C$ presents a professional season of international music, dance and theater events reflecting the multicultural diversity of Brooklyn. In addition, more than 300 music, dance and theater events are presented by students and faculty members, including recitals, concerts
by the Conservatory Orchestra and the Conservatory Wind Ensemble, mainstage and thesis productions by the Department of Theater, and fully staged productions by the Brooklyn College Opera Theater.

BCBC's box office is in Whitman Hall. Free or highly discounted tickets for most performances are available with a valid student ID. Program information may be obtained by calling the box office, 718.95I.4500, or by visiting the website.

## Campus and Community Safety Services

0202 Ingersoll Hall
Office, 718.95I.55II
Emergencies, 718.951 .5444
The Brooklyn College Safety Services staff seeks to ensure that the rights of every member of the campus community are respected and that the campus enjoys a safe and secure atmosphere conducive to the pursuit of educational objectives. Public safety personnel are on-duty 24 hours a day, seven days a week. Criminal actions or other emergencies on campus should be reported immediately, in person or by telephone, to Safety Services or to any public safety officer on patrol. Reports of crimes may also be made in writing. The college maintains a close working relationship with the New York Police Department and has in place an Emergency Response Plan for dealing with emergencies on campus.

## Emergency medical service hotline

Emergency medical assistance is offered by the Student Volunteer Emergency Medical Squad, 021 Ingersoll Hall Extension, 718.951.5858. The squad also provides an ambulance response. A number of public safety officers are certified as EMTs and respond to medical emergencies 24 hours a day.

## Anonymous reporting hotline

A reporting hotline, 718.951 .4628 , is available for use by anyone wishing to report suspicious activity anonymously.

## Security escort service

Escorts will be provided by public safety personnel to campus parking lots and nearby public transportation (bus and subway) for students, faculty and staff members who request them. Requests should be made about 20 or 30 minutes before an escort is needed.

A security shuttle service operates on Campus Road when the campus is open, providing transportation to and from local bus stops and subway stations. A van is available for students and staff members with disabilities.

## Bicycle rack

The Office of Campus and Community Safety Services maintains bicycle racks at Campus Road and East 27 Street and at the West Gate during the hours the campus is open. The enclosure may be used by students, faculty, and staff members upon presentation of a valid Brooklyn College photo identification card. There are also two racks outside Ingersoll Hall on Bedford Avenue, but this location is not staffed by security personnel. Bicycles must be properly secured to the rack with sturdy chains or locks. Overnight storage of bicycles is not permitted.

## Photo identification cards

All students and members of the faculty and staff are required to carry a Brooklyn College photo identification card on campus and should wear it on campus when the college is closed. The card must be displayed in order to gain access to the campus, the library, and the Student Center. Photo ID card services are located in the Enrollment Services Center, West Quad Center.

Students who wish to enter or remain on campus after hours must obtain written permission from the Office of the Vice President for Student Affairs or have a 24 -hour photo identification card.

## Annual security guide

The Office of Campus and Community Safety Services is in compliance with the Jeanne Clery Act (formerly the Campus Security Act of 1990) and publishes an annual security guide each fall. The guide, available on the office website, includes campus crime statistics. A campus log of reported crimes is open to the public in the office.

## Center for Student Disability Services

 I38 Roosevelt Hall, 718.95I. 5538http://www.brooklyn.cuny.edu/web/about/offices/disability.php
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. All 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, preregistration assistance and advising, testing accommodations and arrangements, and auxiliary aids (readers, scribes, laboratory assistants); alternate print format; advocacy; and direct liaison with offices providing college services.

In addition, through the center, students have access to the Frank and Mamie Goldstein Resource Center, a special resource center where a wide variety of equipment is available, including a Dragon dictate speech-recognition system, a scanner with screen-access software, a text-to-speech synthesizer, magnification systems, CCTV systems, Braille and large-print keyboards, and a Braille printer. Similar equipment is also available at the Brooklyn College Library, the Atrium Computer Lab and the Topfer Library Café.

## Commencement information

At the above website, consult the Commencement Roadmap for baccalaureate graduates and candidates. The Roadmap outlines the necessary steps for participation in the annual ceremonies held in late May or early June. Because commencement is a ceremonial recognition of graduation, all candidates seeking to participate must successfully complete a graduation review (senior check) to determine their eligibility. After a review of the Roadmap, if you have any further questions about the ceremonies, you may send an e-mail.

## Computer Language Instruction Center (CLIC)

$43 \mathrm{II}, 43 \mathrm{I} 5$ and 43 I 6 Boylan Hall, 718.95 I .523 I
The Computer Language Instruction Center (CLIC) is an integral part of the Department of Modern Languages and Literatures. It houses well-developed collections of foreign films and videos, educational software, and audio cassettes.

The main lab room, 4316 Boylan Hall, is equipped with 24 Internet-connected computers running the Windows operating system. Students may access specialized, foreign-language instruction software stored on the center's main server.

The Teaching Lab, 43II Boylan Hall, is used for classroom instruction. It is equipped with 12 Internet-connected computers, a large screen, a projector, and multistandard DVD and VCR players.

## Department of English

English-as-a-Second-Language Program
14I4 Ingersoll Hall, 718.95I.5928
This program is for students whose native language is not English. Students are assigned to the program on the basis of the University Skills Assessment Tests in reading and writing. Course descriptions may be found on the ESL website.

## ESL Reading and Writing Laboratory <br> 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, 718.95I.5I86

The center staff consists of licensed and certified speechlanguage pathologists and audiologists who provide and supervise quality clinical services on a fee basis. Clients with speech, language, voice, fluency and hearing concerns are seen for evaluations and remediation, including the dispensing of hearing aids. Students majoring in speech-language pathology and audiology receive supervised clinical experience in conjunction with their academic preparation. Facilities include a complex of sound-treated rooms, audio and video recording equipment, and soundproof audiometric booths containing the latest instrumentation for testing and research.

## Drug and alcohol abuse counseling and information

0203 James Hall, 718.95I. 5363
Professional help is provided through counseling and referral at Personal Counseling. Free and confidential services are available to students, staff and faculty members as well as their families.

## Early Childhood Center

I604 James Hall, 718.95I.543I
http://depthome.brooklyn.cuny.edu/schooled/ECC/

## ECC-index.htm

The Early Childhood Center (ECC) is the Lab School for the School of Education and provides nationally recognized highquality early education and care programs primarily for the children of Brooklyn College students, ranging in age from four months through 12 years. The ECC provides on-site and virtual field experiences for teacher education candidates, students in allied professional fields, and students in the liberal arts and sciences.

The ECC consists of a diverse community. The Program for Infants and Toddlers and the Program for Young Children address early education and care for infants, toddlers, and young children, offering day and afterschool programs. The Afterschool/Evening Programs for School-age Children provide a stimulating and nurturing environment where children can choose from a variety of activities and offer homework assistance. A partnership with the NYC Department of Education allows for the provision of a free UPREK program for four-year-old children. Summer programs for infants, toddlers, and young children provide continuity of care for children already enrolled in the ECC. An Occasional Care Program for School-age Children is also offered during the fall and spring semesters. A lactation room is also available on-site.

## Enrollment Services Center

West Quad Center, 718.758.8I50
Designed to provide students with "one-stop shopping," the Enrollment Services Center (ESC), first floor, West Quad Center, enables students to accomplish routine tasks quickly and efficiently. The ESC is the home of the registrar's information counter, tuition and fees payment processing, photo ID services, check distribution functions, general financial aid information and recreational passes functions. For hours of operation or other information about the ESC, call 718.758 .8150 or e-mail the center.

## Food services

College dining facilities are located on the lower level of Boylan Hall. They include cafeteria service, a kosher dairy bar, a gourmet coffee bar and a buffet service dining room. The main cafeteria offers bagels, salads, sandwiches, vegetarian and vegan offerings, and expanded vending machine snack choices.

The cafeteria is open from morning until evening. Catering is available for receptions and other special events. Vending machines are located in several buildings throughout the campus, and sandwiches and snacks are available in the lobby of the West Quad Center.

Starbucks, in the Library Café, serves hot beverages as well as cold drinks, baked goods and snacks.

## General information line <br> 718.951.5000

The campus switchboard is in operation Monday through Thursday, 8 a.m. to 7 p.m., and Friday, until 5:30 p.m. During off-hours, an auto attendant guides callers to individual departments. Specific information, including a directory of telephone numbers, may be accessed from menus.

## Health Clinic

## II4 Roosevelt Hall, 718.95I.5580

http://www.brooklyn.cuny.edu/web/about/offices/ studentaffairs/programs/health/clinic.php
Services at the Brooklyn College Health Clinic include the diagnosis and treatment of a variety of acute and chronic illnesses. Health education, prevention and wellness are emphasized, along with early screening and detection of disease. Gynecological care, including family planning options, is offered. Medication and laboratory testing are available for free or at greatly reduced prices. All services are strictly confidential.

## Health Information and Wellness Services and Programs

The Health Programs/Immunization Requirements Office, 0710 James Hall, 718.95 I.4505, provides information on student health and wellness issues, student immunization requirements and health insurance. Emergency medical services are provided by a trained volunteer student squad and are available in 021 Ingersoll Hall Extension, 718.95I.5858.

## Student Housing

02I9 Student Center, 718.95I.5000 ext. 6534
Residence hall and off-campus husing referrals and information are provided. Listings are also available on the WebCentral portal. Additional information regarding the college's new residence hall may be found on the residence hall website.

## Information Booth

## I I39A Boylan Hall, 718.95I.4748

The Information Booth/SERVA staff provides students with information on campus activities and services.

## Information Technology Services

ITS Entrance, Brooklyn College Library ITS, 718.951 .5861
ITS Public Computing, 718.95I. 5787
Brooklyn College's computing infrastructure is one of the most advanced in CUNY. These systems support applications in all disciplines and are used by students and faculty to access critical administrative data. Information Technology Services provides support to students, faculty, and administration through the Help Desk and on site.

All students may use the college's public-access computer labs, extensive Web and distance learning systems, and network of BCLink digital information kiosks. Every registered student is provided with an advanced Microsoft Exchange e-mail account that may be accessed on- or off-campus via the Internet.

Brooklyn College maintains several large-scale public-access computing facilities, supplemented by departmental disciplinespecific labs and electronic classrooms. Overall, more than I,000 computers are available to students. Facilities include the ITS Public Computing Labs in the West End Building, the New Media Center and lower-level labs in the library, the 24/7 Morton and Angela Topfer Library Café in Whitehead Hall, and the Learning Center off the Boylan Hall lobby. The ITS Public Computing Labs, which are open seven days a week, have more than 250 PCs, MACs and SUN Unix workstations; lounge areas; and food service. The library labs have more than 300 PCs and MACs; the Library Café more than 80 PCs and MACs. All campus labs have shared network printing
linked to free black-and-white printing quotas, high-speed Internet access, group-study rooms, express printing and helpful support staff.

The college supports various computing platforms, including Windows, Apple MAC and SUN Unix systems. All of these are available at public-access facilities and are used in various instructional contexts.

The college also maintains a sophisticated videoconferencing and multimedia facility that is used in many courses for distance learning and facilitates interaction with students from other CUNY colleges.

An extensive inventory of adaptive computer equipment enables students with disabilities to utilize the computer resources. These facilities and associated technical support are concentrated in the ITS Public Computing Labs, the library and the Mamie and Frank Goldstein Resource Center in the Center for Student Disability Services.

## BC WebCentral portal

https://portal.brooklyn.edu_
Brooklyn College students may use the BC WebCentral portal to transact a wide range of academic business via the Web, including registering for courses, paying tuition, viewing their progress toward their degree, applying for scholarships, applying for graduate school, withdrawing from courses, applying for pass-fail, declaring their major, applying for absentee final exams, projecting their GPA based on current grades, signing up to receive grades via e-mail and much more. WebCentral users have access to WebMail, private calendars, to-do lists, Web favorites, news feeds and other useful tools. The portal provides information and services customized to each user. A single WebCentral sign-on allows users to access all authenticated services without having to re-enter his or her credentials.

## Brooklyn College website

www.brooklyn.cuny.edu
The Brooklyn College website provides a wealth of useful information about the college and its programs for prospective and current students, prospective employees, visitors and guests.

## E-mail services

The college provides every registered student with a Brooklyn College Microsoft Exchange e-mail address, accessible via the Web, POP, IMAP and Outlook. The e-mail account is protected against viruses and allows students to create their own folder structure. Students can create a custom alias for their account and are encouraged to submit private e-mail
addresses via the BC WebCentral portal, if they prefer to receive college mail at that address. Accounts for entering students are created within the first week of the term. The ITS network support line, 718.677 .6180 , assists students with using their e-mail.

## Wireless network access

Wireless network access (WIFI) is available at many locations on campus, including the Boylan Hall Cafeteria, library, Library Café, Learning Center, Student Center, ITS Public Computing Labs, Honors Academy, West Quad Center and art labs as well as at the Lily Pond and on the Quadrangles. It can be accessed with appropriately configured laptops or PDAs by students with Brooklyn College e-mail accounts. Access requires an 802 . I $\times$-compliant secure client and a Brooklyn College e-mail address. Further information and setup instructions are available on the technology tab on the BC WebCentral portal.

## International students

## 235 West Quad Center, 718.95I.4477

email: iss@brooklyn.cuny.edu
The Office of International Student Services assists international students with visa and immigration processes and compliance; provides referrals to both on- and off-campus resources; and serves as an advocate for international students.

International Student Services, part of the Division of Enrollment Management, is committed to guiding the international student at Brooklyn College. The office aspires to provide high-quality service and support that will help the international student achieve academic and personal success. From welcoming the student on campus to congratulating the student at the graduation ceremony, our staff members help support the international student experience at Brooklyn College. Students are encouraged to visit us in our office. on our website, or on our Facebook page.

## Lay Advocate Program (legal counseling)

## I 39 Ingersoll Hall Extension, 718.95I. 5360

The program offers members of the Brooklyn College community basic legal information, counseling by an attorney, and referral to legal-service agencies. Information on college rules and student rights is given by trained undergraduate volunteers supervised by an attorney. Academic credit may be received for lay advocate internship work through urban fieldwork courses (Political Science 3610 and 361I).

## Learning Center

I300 Boylan Hall, 718.95I.582I

The Learning Center offers Brooklyn College students academic support for courses across the curriculum. Trained peer tutors work with students on assignments in writing, mathematics, science, and most Core and gateway courses. Help is available in the mechanics of writing, outlining, revising and developing a format for essays, term papers and laboratory reports. Tutors help students understand lectures and texts, assist in doing research and suggest methods for studying. Tutors regularly schedule group reviews before midterms and final examinations. The Learning Center also coordinates Supplemental Instruction (SI) workshops in many introductory courses to the major. The Learning Center is open every weekday, on the weekends, and on some evenings. Students may schedule appointments for regular weekly meetings to work on their writing skills or may drop in to work with a tutor on subjects other than writing.

## Magner Center for Career Development and Internships

I 303 James Hall, 718.95 I. 5696
http://www.brooklyn.cuny.edu/web/academics/centers/ magner.php
A wide range of free career programs are available to Brooklyn College undergraduates, graduate students and alumni. Services include career counseling and assessment, internship preparation and placement, job search, professional skills training, networking and eRecruiting. Workshops on résumé writing, interview practice, job search skills, dressing for success and finding the right internship are available. In addition, the center provides up-to-date information on fulland part-time jobs, alumni mentors, and pre-law internships. Job and internship fairs are held each semester along with numerous corporate sponsored workshops and company visits

## Newspapers and literary magazines

Newspapers written and edited by Brooklyn College students are available in the lobbies of campus buildings. Brooklyn Review, a literary-arts magazine, is published by students in the M.F.A. programs in creative writing and fine arts. The Zine is published by the undergraduate English majors' office for counseling.

## Office of Communications and Marketing

## 2118 Boylan Hall, 718.95I.5882

The Office of Communications and Marketing provides overall leadership for the college's efforts to increase its visibility and elevate its reputation. It is responsible for integrating marketing activities across all units; maintaining high standards of quality
for all college communications; generating press coverage and responding to media inquiries; promoting the accomplishments of students, faculty, researchers and alumni; and producing the college's official website. It also serves as a resource for the college community for information on effective marketing and communication strategies and for assistance with producing collateral materials. The office consists of staff with expertise in marketing strategy and operations, brand management, public relations, copywriting, graphic design, digital communications, photography and journalism.

## Office of Research and Sponsored Programs

2158 Boylan Hall, 718.95I. 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.

## Performing arts facilities

Events in music and theater presented by student performers are open, inexpensively, to Brooklyn College students. Information on performances is published in the calendar of the college's Arts Council and may be found on the online college calendar. Rehearsal and practice studios for the Conservatory of Music, theater workshops and classrooms for the Department of Theater, and performance spaces for both are in the Brooklyn Center for the Performing Arts at Brooklyn College, currently housed in Whitman and Roosevelt halls. A dance studio is located on the second floor of the West Quad Center. By fall 2014, Brooklyn College will complete construction of the new Leonard and Claire Tow Center for the Performing Arts that will serve the rehearsal and performance needs of both the Conservatory of Music and the Department of Theater. In addition to a fully equipped 220-seat, multipurpose performance space, two large music rehearsal spaces, a theater rehearsal space and scene shop, the Tow Center will include numerous music teaching studios, chamber-music rehearsal spaces, practice rooms, a recording studio and a sound lab for the programs of the Center for Computer Music and PIMA.

The Conservatory of Music also maintains a select library of books and scores; playback facilities for records, tapes, compact discs and CD-ROMs; and a large collection of musical instruments for instructional use. The Theater Department has access to two stages, three acting studios, a directing studio, dressing rooms, lighting and carpentry areas, a costume construction workshop, instructional audiovisual equipment and a design lab. It also offers a special library and reading room for theater majors.

The Brooklyn College Preparatory Center for the Performing Arts is the precollege component of the Conservatory of Music and the Department of Theater. It offers community programs in music, theater and dance for children three to 18 years of age and for adults. Its Suzuki Program for violin and cello is among the largest and most successful of New York City's Suzuki schools. Student and faculty recitals are held regularly in Studio 312 in Roosevelt Hall Extension. It is open to all who seek high-quality training by professional artist teachers, from beginners to those preparing for college-level work. Information on admission and tuition is available by calling 718.951.4111.

## Personal Counseling

0203 James Hall, 718.95 I. 5363
http://www.brooklyn.cuny.edu/web/about/offices/ studentaffairs/programs/health/counseling.php
Personal counseling offers individual, couples, family and group counseling; short-term therapy; crisis intervention; referrals to off-campus services; and a range of life-skills workshops for test anxiety, stress management, etc. All services are free and confidential.

## Television Center

018Whitehead Hall, 7I8.95I. 5585
The Television Center provides television production and post-production facilities and technical support to the Department of Television and Radio. Students enrolled in the department's graduate programs may be employed by the center as part-time production assistants and have the opportunity to participate in various aspects of television production. The center's facilities include a multicamera studio with live switching capabilities, digital editing facilities, audio production suites, professional field-production equipment and the state-of-the-art student radio station, BCR.

## Testing Office

245 West End Building, 718.95I.5916
http://www.brooklyn.cuny.edu/web/about/offices/testing.php
The Office of Testing is responsible for administering evaluative tests and assessments in accordance with the City

University's Testing Program. The Testing Office 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, and Castleworld Wide Testing. The following tests are administered: the CUNY Assessment Tests for incoming students; the Collegiate Learning Assessment Tests for incoming freshmen and seniors; Calculus Placement Test; College Level Examination Program (CLEP), SAT and Distance Education Exams. The office may be reached by telephone, fax (718.95I.472I) or e-mail.

## Veterans Affairs and Counseling Center

 1407 James Hall, 718.95I.5I05The center provides orientation counseling; assistance with admission procedures, academic planning and tutoring; and 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 help veterans file applications for the GI bill, VA Work Study and other educational benefits.

## Women's Center

227 Ingersoll Hall Extension, 718.95I.5777
http://depthome.brooklyn.cuny.edu/womens/center
The center sponsors noncredit programs, workshops and lectures on a broad variety of women's issues. It offers referrals to therapists, lawyers, social service and counseling agencies as well as information about new career opportunities, professional women's networks, scholarships and grants. Services are available to students, faculty and staff members, and community residents.

## Programs of Study

## The Core Curriculum

Brooklyn College's collegewide Core Curriculum must be completed by all candidates for a baccalaureate degree. The Core Curriculum consists of interrelated courses. Brooklyn College students must complete II Core Curriculum courses, as outlined in the chart and in the descriptions of the Core Curriculum courses which follow.

Transfer students may be exempted from some of the Core Curriculum requirements. Check under the heading "Transfer students" in this chapter.

Students who began at Brooklyn College prior to fall 2006 and who successfully completed Core Studies courses under the core curriculum that was then in place must complete the current Core Curriculum, but will have earned credit toward the current Core Curriculum based on their completion of Core Studies courses. See the section "Students who enrolled at Brooklyn College before fall 2006" in this chapter.

The courses of the Core Curriculum are arranged in two tiers (lower tier and upper tier) and three groups (Arts and Literatures, Philosophical and Social Inquiry, and Scientific Inquiry), as illustrated in the chart that follows.

The faculty has established the courses in the Core Curriculum according to the following criteria: Core Curriculum courses aim to broaden awareness, cultivate the intellect, and stimulate the imagination, rather than to provide specific career preparation. They are intended to develop mental skills, rather than vocational skills. In these respects, they constitute the best long-term preparation for any career. They offer both substantive knowledge and insight as to the way knowledge is acquired. Emphasis varies - some courses stress the different approaches to knowledge, others concentrate more on what are taken to be definitive human achievements.

The purpose of each Core course is to give the student a perspective, an overall view of a subject or branch of learning and a substantial amount of information, which together with other Core Curriculum courses will provide a broad background in the liberal arts and sciences.

Core Curriculum courses are less concerned with the breadth of coverage than with an examination of selected topics in some depth to reveal the nature of each discipline to a general undergraduate audience.

The Lower Tier is composed of foundation courses for nonspecialists, suitable for nonmajors in the course disciplines. Each is planned so as to introduce material of fundamental and lasting significance. Brooklyn College students must complete nine Lower Tier courses ( 27 credits), one from each of the boxes in the section of the following chart marked Lower Tier. Certain transfer students are exempt from the entire Lower Tier. (See the section "Transfer students" in this chapter.)

Upper Tier courses are planned to allow students to do more in-depth study and to refine critical thinking, writing and interpretive skills. No specific disciplinary background is required for these courses, but an Upper Tier course in a particular group requires both at least junior standing (minimum of 60 credits) and satisfaction of the requirements of any three Lower Tier courses. Each box in the Upper Tier section of the following chart represents an entire category of courses in one of the three groups of the Core Curriculum. Brooklyn College students, including all transfer students, must complete two Upper Tier courses from two of the three groups (6 credits).

|  | Arts and Literatures $\begin{gathered}\text { Philosophical and } \\ \text { Social Inquiry }\end{gathered}$ |  | Scientific Inquiry |
| :---: | :---: | :---: | :---: |
| Lower Tier <br> (9 courses; one from each box) | I I 10: Classical Cultures | 1210: Knowledge, Reality, and Values | I3 I I:Thinking Mathematically or <br> 1312: Computing: Nature, Power, and Limits |
|  | I 120: Introduction to Art | 1220: Shaping of the Modern World | I32I: Biology forToday's World or <br> I322: Science In Modern Life: Chemistry |
|  | I I30: Music: Its Language, History, and Culture | 1230: People, Power, and Politics | 1331: Physics:The Simple Laws That Govern the Universe or <br> 1332: Geology:The Science of OurWorld |
| Upper Tier <br> (2 courses; each from a different box) | 3101 through 3III: <br> Exploring Literature | 3201 through 3212: <br> Exploring Global Connections* | 3301 through 3312 <br> Exploring Science |

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## Core Curriculum courses: Lower Tier Arts and literatures I I IO 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 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. (Not open to students who have completed Core Studies I, I.I, or I.2.)

## II 20 Introduction to Art

## 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. (Not open to students who are enrolled in or have completed Art I.I, I 050, 2.3 or 2.4, or Core Studies 2.I.)

## I I 30 Music: Its Language, History, and Culture

 3 hours; 3 creditsIntroduction 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. (Not open to students who have completed Core Studies 2.2 or Music 3247.)

## Philosophical and social inquiry

## I210 Knowledge, Reality, and Values

## 3 hours; 3 credits

Philosophy's distinctive ways of understanding and thinking about perennial human questions: "What can I know?" "What is real?" "What is the basis of moral judgments?" Contemporary and traditional examples of philosophical analysis and criticism. (Not open to students who are enrolled in or have completed Philosophy 2101 or Core Studies 10 .)

## I 220 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. (Not open to students who have completed Core Studies 4).

## I 230 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 Studies 3.)

## Scientific inquiry

## I3II 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 and public key cryptography. Integers, rational numbers, real numbers and the sizes of various infinite sets. Additional topic chosen from: geometry, elementary topology, chaos and fractals, probability. (Not open to students who are enrolled in or have completed Core Studies 5 or 5.2 or Mathematics I00I or any mathematics course numbered 1201 or higher.)

## 1312 Computing: Nature, Power, and Limits

 3 hours; 3 creditsThe nature, power, and limits of the computer and computing. The components of the computer. Information representation. Computer networks, the Internet, and the World Wide Web. The nature of algorithms, problem-solving, and computer programming. Feasibility and computability. Computer and network security and privacy. (Not open to students who are enrolled in, or have completed, any course in computer and information science, other than CIS I050, numbered 1000 or higher with a grade of C or higher, or who have completed Core Studies 5 or 5.I.)

## I32I Biology for Today's World

4 hours; 3 credits
Life, biology, and science in today's world. Role of science. Physical structure, properties, and principles that apply to all living things. Integration of biological science into daily events. Where life started and why it is what it is. (Not open to students who are enrolled in or have completed any course in biology or who have completed Core Studies 8.I).

## I 322 Science in Modern Life-Chemistry <br> 4 hours; 3 credits

Study of basic concepts in chemistry and their implications in modern life. (Not open to students who are enrolled in or have completed Integrated Science 2 , Core Studies 7.1 , or any college course in chemistry, except Chemistry 0.7 or 1050 .)

## I33I Physics-The Simple Laws That Govern the Universe

4 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. (Not open to students who are enrolled in or have completed Physics 0.1 or 1100 or 1112 or I I 50 or I.6, Integrated Science I or Core Studies 7.2.)

## I 332 Geology: The Science of Our World

4 hours; 3 credits
Study of five fundamental themes that underlie geology and their implications for important issues in modern life: Earth as a dynamic planet, Earth materials, geologic time, geology, and the human environment, and the scientific method as applied to geology. (Not open to students who are enrolled in, or who have completed, Geology II 00 or 1200, or who have completed Core Studies 8.2.)

## Core Curriculum courses: Upper Tier

Note: New Upper Tier courses may be created each semester and existing Upper Tier courses may be temporarily or permanently withdrawn. Consult the Schedule of Classes each semester for the Upper Tier courses offered that semester.

## Exploring literature

Perspectives on literature. Critical analysis and interpretation of structure, content, context of world literature, literary genres, literature, and other fields. Fiction, nonfiction, poetry, drama.

## 310I 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3102 Ideas of Character in the Western Literary Tradition

3 hours; 3 credits
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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3103 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.

Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3104 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. Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3105 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3106 Text/Context: Special Topics

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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3107 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three Lower Tier courses.

## 3108 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3109 The Self and Society

3 hours; 3 credits
Critical examination of issues of the self and society in works by such authors as Thoreau, Kafka, Duerrenmatt, Orwell,
Dostoyevsky, Sartre, Camus, Ellison. Topics include reflections on the self and personal integrity, justice and responsibility, alienation.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3110 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three Lower Tier courses.

## 3111 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## Exploring global connections

Peoples of Africa, Asia/Pacific Islands, the Caribbean, Latin America, and/or the Middle East. Culture, customs, social structure, government. Global diasporas, transnationalism, migrations. From ancient times to the contemporary world.

## 3201 Art and Archaeology of Late Period Egypt, 1070 BC-AD 642

3 hours; 3 credits
Art and architecture of Egypt from the end of the New Kingdom to the Arab conquest. Use of archaeological evidence to analyze Egypt's global connections with Africa, the Near East, and the Mediterranean. Application of recent interdisciplinary approaches such as postcolonialism and gender theory to the archaeology of a central non-Western culture of the ancient world.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3202 Classical Philosophies of India and China

3 hours; 3 credits
Comparative study of the classical philosophies of China and India. Such philosophical issues as the nature of reality, the self, knowledge, ethics, society, the good life, and enlightenment in writings associated with Confucius, Lao-tzu, Chuang-tzu, the Hindu sages who composed the Vedas and Upanishads, the Buddha, and others.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3203 Latin@ Diasporas in the United States

3 hours; 3 credits
Formation of Latin@ 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 Upper Tier 3204)
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3204 The Global Spanish-Speaking Community: From Imperial Conquests to Latino Diasporas

3 hours; 3 credits

Examination of the history and present-day realities of the diverse cultures comprising the global Spanish-speaking community: Spain, Latin America, and the Caribbean, Spanishspeaking Africa, and the US Latino 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 Upper Tier 3203.)
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3205 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3206 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3207 The Caribbeanization of North America

 3 hours; 3 creditsThe 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3208 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3209 After Alexander: A Confluence of Cultures

3 hours; 3 credits
Cultural and sociopolitical 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 crossregional developments.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier core courses.

## 3210 Islamic Perspectives on Science, Politics, and Modernity

3 hours; 3 credits
The inter-relation of secular and religious views in Islamic cultures. Islamic views on ideas and norms that are sometimes deemed to be of Western origin. Medieval, Renaissance, and Modern sources. Such topics as the relation of science and philosophy to the revealed truths of the Qur'an; the role of religion in politics; the compatibility of Islam with capitalism, humanism, feminism, and democracy.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier core courses.

## 32 I I 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier core courses.

## 3212 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. (This course is the same as Core Curriculum 3312.)
Prerequisite: Junior standing and satisfaction of the requirements of any three Lower Tier core courses.

## Exploring science

The development and nature of theories about the natural world; scientific methodology, concepts, controversies. Analysis and experimentation. Theoretical and practical approaches.

## 3301 Cosmology

3 hours; 3 credits
Organization and evolution of the universe. Methods of inquiry over large cosmological distances. The structure of space and time. Life cycle of stars. The origin of chemical elements. Are we alone in the universe?
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3302 Energy Use and Climate Change

## 3 hours lecture; 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 are enrolled in or have completed Core Curriculum Upper Tier 3309.)
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3303 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 multiweek 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3304 Exploring the Earth System

3 hours; 3 credits
Earth system science. Origin and evolution of the Earth. Time scales of environmental and geologic 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 and ozone depletion. Environmental pressures on natural resource utilization (petroleum and water). Public policy and the global environment.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3305 Exploring Scientific Issues: Methodology, Theory, and Ethics in the Sciences

3 hours; 3 credits
A critical examination of three fundamental sorts of scientific issues, methodological, theoretical, and moral. Exploration of the nature of scientific inquiry, scientific knowledge, pseudoscience. Examination of controversial theories, and of ethical issues relating to scientific research.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3306 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3307 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3308 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 twentieth 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3309 Climate Change: Torn Between Myth and Fact

3 hours; 3 credits
Myths and facts of climate change with emphasis on 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. (Not open to students who are enrolled in or have completed Core Curriculum Upper Tier 3302.)
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier courses.

## 3310 Paradoxes and the Limits of Knowledge

## 3 hours; 3 credits

Paradoxes and limitations arising in computer science, the physical sciences, and mathematics. Paradoxes created by using reason alone. Linguistic and philosophical paradoxes like, "This sentence is false." Limitations of reason, logic and computers. Reasoning about infinity. The inability to prove everything that is true. Problems that cannot be solved by computers in a reasonable amount of time. Unsolvable problems. The boundary between what can and cannot be known.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier core courses.

## 33 II 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier core courses.

## 3312 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. (This course is the same as Core Curriculum 32I2.)
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier core courses.

## 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.
Prerequisite: Junior standing and satisfaction of the requirements of any three LowerTier core courses.

## Core sequence: Planning a program

Students must complete nine lower-tier courses ( 27 credits), one from each lower-tier box in the chart. Lower Tier courses may be taken at any time, although students are strongly encouraged to complete them in their first two years. Students must complete two Upper Tier courses from two of the three Core Curriculum groups (6 credits). Enrollment in Upper Tier courses requires junior standing ( 60 credits), and satisfaction of the requirements of any three Lower Tier courses.

## Substitutions for Core Curriculum courses

The Core Curriculum is a common-experience core. Students are excused from Core Curriculum courses only by virtue of completing a stipulated, more comprehensive or more advanced course or set of courses in the same area, or by having completed certain Core Studies courses at Brooklyn College before fall 2006. Substitutions for certain Core courses for nontransfer students are permitted only as follows:

Core Curriculum IIIO: Any two courses from Classics 4032, 3200, 40I0, 4020, 3220, 322I, 3222, 3224, 3230, 323I, 3233.

Core Curriculum II30: Music 3247
Core Curriculum 1210: One course from Philosophy 311I, $3||2,3| 13,3| 14,3|2|, 3|22,3| 23$ or $3 \mid 24$; and one course from Philosophy 3305, 3306, 3320, 340I, 34I0, 3420, 350 I, 3703, 3704 or 3805 ; or completion of a major in philosophy.

Core Curriculum 1311 or 1312: Mathematics 1001 or 1011 or 1026 or any Mathematics course numbered 3 or higher; or Computer and Information Science 1000 or 1110 .

Core Curriculum 1321 or 1322: Chemistry IIO0 or 1040 or 2050 or Biology I00I or 1002 or 1080 or I08I or 2073.

Core Curriculum I331 or 1332: Physics 1100 or 1112 or I I50 or 1190 or Geology II00 or 1200.

An additional set of equivalents applies to transfer students. These will be found in the section "Transfer students" in this chapter.

Students registered in Brooklyn College international education programs (see the "International Education" section in the chapter "Special Programs and Opportunities" in this Bulletin) may have up to 7 credits earned in such programs applied to their Core Curriculum requirements according to the "General guidelines on Core equivalents for transfer students only" and "readmitted students."

## Students who enrolled at Brooklyn College before fall 2006

Students who enrolled at Brooklyn College prior to fall 2006 may substitute Core Studies courses, completed at Brooklyn College and required at that time, for current Core Curriculum courses, as follows. (Such students should also be aware that they may also substitute certain non-Core courses completed before fall 2006 for Core Curriculum courses, as specified in the section "Substitutions for Core Curriculum courses.") Transfer students who enrolled at Brooklyn College before 2006 should also see the section "Transfer students" in this chapter.

For Core Curriculum IIOO: Core Studies I, or both Core Studies I.I and Core Studies 1.2.

For Core Curriculum II20: Core Studies 2.I.
For Core Curriculum II30: Core Studies 2.2.
For Core Curriculum I210: Core Studies 10.
For Core Curriculum I220: Core Studies 4.
For Core Curriculum 1230: Core Studies 3.
For Core Curriculum 1311 or 1312: Core Studies 5, or either Core Studies 5.I or Core Studies 5.2.

For Core Curriculum 132I or I322: Core Studies 7.I or Core Studies 8.I.

For Core Curriculum I33I or I332: Core Studies 7.2 or Core Studies 8.2.

For Core Curriculum 310I through 3III: Core Studies 6.
For Core Curriculum 3201 through 3212: Core Studies 9.
For Core Curriculum 3301 through 3312: All of the following: Core Studies 7.I, 7.2, 8.I and 8.2.

If a student completed a course prior to fall 2006, whether at Brooklyn College or at another college from which the student transferred prior to fall 2006, and that course substituted or exempted from a second course, and that second course substitutes for a Core Curriculum course after summer 2006, the student is exempt from that Core Curriculum course and has satisfied any requirement that the Core Curriculum course satisfies.

A student in the Small College program prior to fall 2006 may substitute both English 1.7 and English 2.7, completed before fall 2008, for an Upper Tier course in Arts and Literatures.

## Retroactive pass option

A student may elect to have grades in any two previously passed Core Curriculum or Core Studies courses changed from an ordinary passing grade ( $D$ - through $A+$ ) to a grade of pass (P). This option must be exercised no later than the IOth week of the semester following that in which students complete their 96th sixth credit. Once this option has been utilized it may not be rescinded, nor may the courses to which the grade of $P$ has been assigned be changed.

Students may elect the retroactive pass option online via the BC WebCentral portal, or in person at the Enrollment Services Center, West Quad Center.

Courses deemed to be substituted for, or equivalent to Core Curriculum or Core Studies courses are not eligible for the retroactive pass option.

## Special Baccalaureate Degree Program

Students in the Special Baccalaureate Degree Program for Adults, a program that has its own structured core curriculum, continue to fulfill the curricular requirements of that program and are exempt from the Core Curriculum. Students in the program must satisfy the language requirement of the college (see the section "Academic Foundations requirement" in this Bulletin). Students must also satisfy any additional requirement stipulated by the department of their major.

## William E. Macaulay Honors College students

Students who have completed the four seminars of the Honors College may substitute them, with advising by either the Honors College adviser or the director, for four Core Curriculum courses. Three of the seminars can substitute for Lower Tier Core Curriculum courses, with the qualification that no more than one seminar can substitute for a Lower Tier course in any one Core Curriculum group, i.e., Arts and Literatures, Philosophical and Social Inquiry, and Scientific Inquiry. The fourth seminar can substitute for one required Upper Tier Core Curriculum course.

## Readmitted students

Students who take a leave of absence and are then readmitted to the college must complete the Core Curriculum/Core equivalency 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 the Core, 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 Core Curriculum or the degree requirements stated in the 1979-1981 Undergraduate Bulletin.

## Transfer students

The college has established equivalencies regarding the fulfillment of Core requirements by transfer students as listed here. These equivalencies refer only to courses completed at another college before entering Brooklyn College.

Senior college transfer students may be exempt from the Lower Tier Core Curriculum after examination of their transcript. When a senior college transfer student from the United States transfers 60 or more total credits, at least 30 of which are traditional liberal arts credits, from a broad range of departments, he or she is assumed to have fulfilled the Lower Tier Core Curriculum requirements. Such students must fulfill the Upper Tier Core Curriculum requirements at Brooklyn College.

A student who transfers to Brooklyn College with an A.A. or A.S. or bachelor's degree from another school in the United States is exempt from the Lower Tier Core Curriculum requirement but must fulfill the 6-credit Upper Tier Core Curriculum requirement at Brooklyn College. This policy does not apply to students with an A.A.S. degree.

As per university policy, any other transfer students may be exempted from specific lower-division requirements based on evaluation of their individual transcripts.

Transfer students who enrolled at Brooklyn College prior to fall 2006 and who are exempt from Lower Tier Core Curriculum course requirements are also exempt from one of the two Upper Tier Core Curriculum courses. They need only complete one Upper Tier Core Curriculum course at Brooklyn College to meet the Core Curriculum course requirement.

## General guidelines on Core equivalents for transfer students only

Core Curriculum IIIO: A course of at least 3 credits based on a substantial variety of readings of translated literary texts from Greece, Rome or other ancient cultures. The same 3 credits may not be offered in fulfillment of the Core course in philosophy.

Core Curriculum II20: An introductory art history course.
Core Curriculum II30: A course of at least 3 credits in music history or music literature or introduction to music.

Core Curriculum 1210: A philosophy course of at least 3 credits that includes at least two of the following three areas: epistemology, metaphysics, ethics.

Core Curriculum 1220: A broad survey course of at least 3 credits in world history since 1700 or the history of Western civilization beginning between 1500 and 1800 .

Core Curriculum 1230: A course in sociology and a course in political science totaling at least 4 credits; or at least 2 credits in political science and a Brooklyn College course in sociology; or at least 2 credits in sociology and a Brooklyn College course in political science.

Core Curriculum 1311 or 1312: 3 transfer credits in mathematics, or 3 transfer credits in computer and information science that includes study of the Internet and/or study of programming, or a course of at least 3 credits that combines study of mathematics and computing.

Core Curriculum 132I or 1322: At least 3 credits in chemistry, at least I credit of which is for laboratory work, or at least 3 credits in biology that includes a survey of basic principles, at least I credit of which is for laboratory work.

Core Curriculum I33I or I332: At least 3 credits in physics, at least I credit of which is for laboratory work, or at least 3 credits in geology, at least I credit of which is for laboratory work.

All students who transfer in or after fall 2006, or who are not exempt from Lower Tier requirements, must fulfill the Upper Tier Core Curriculum requirement by taking two Upper Tier courses from two different groups at Brooklyn College. Students who transfer a course judged equivalent to a particular Upper Tier course may nevertheless not use the transferred credit in fulfilling the Upper Tier requirement.

## For additional information

Students who have questions about the Core Curriculum should consult a counselor in the Center for Academic Advisement and Student Success (CAASS), 3207 Boylan Hall.

The 20I2-20I3 Graduate Bulletin represents the academic policies, services, and course and program offerings of Brooklyn College that are in effect through August 2013. 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.

## Accounting

Department office: 202 Whitehead Hall
Phone: 718.951.5152

## Full-time Faculty

Professor: Solomon
Associate Professors: Giladi, Kass-Shraibman, McTague, Testa, Widman, Zelcer
Assistant Professors: Gerstein, Lachman
Lecturers: Langer, Lefkowitz, Sauber

The student-centered accounting program places emphasis on the importance of analytic and communication skills and professional ethics in today's business environment.

There are two tracks in accounting: one 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. Students who complete this B.S. program with an overall 3.00 GPA may apply to the 30 -credit master's degree program in accounting.

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, and 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 (public accountancy) HEGIS code 0502; SED program code 01990

New York State CPA candidates may be eligible to take the Uniform CPA Examination prior to completing their degree but after having completed 120 credits, including certain accounting and business courses. Students may seek advisement regarding the Uniform CPA Examination from an Accounting Program advisor or by contacting the New York State Board of Public Accountancy.
Generally, to become licensed as a Certified Pubic Accountant in New York State a candidate must have (a) earned a bachelor's degree, (b) completed 150 credit hours of study that includes a particular accounting curriculum, (c) passed the Uniform CPA examination and (d) completed one year of work experience under a licensed CPA. Students who expect to become CPA candidates in other jurisdictions are advised to consult the Board of Accountancy in that jurisdiction.

Department requirements (69-71 credits)
All of the following: Accounting 200I, 300I, 30II, 302I, 304I, 305I, 3I0I, 320I, 400I, 40II, 4I0I, 450I or 450 IW ;; Economics 2100 or Business 2100 ; Economics 2200 or Business 2200; Business 3400 or Economics 3400 or Mathematics 250 I or Mathematics 350 I;
Computer and Information Science 1050 or 253I or Business 3430.
Students with proficiency in spreadsheet analysis for business (e.g., MS Excel) should take Business 3430 or Computer and Information Science 2531 rather than Computer and Information Science I050. Since Operations Management is on the CPA exam, all accounting students who plan on taking the exam, even those taking CIS 1050, should make every effort to take Business 3430 or the cross-listed Computer and Information Science 2531.

Three of the following: Economics 3320 or Business 3320; Business 3310 or Economics 3332; Business 3330; Business 2300.
Two of the following: Business 2010 ; Business 3240; Business 3200; Business 3100 ; Business 3260; Business 3340; Business 3350; Business 4200W; Business 4300W.

One of the following: Philosophy 3314 or Speech 2623.
Students majoring in accounting must achieve a grade of $C$ or better in all required 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.

[^1]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

Department requirements (49-53 credits)
All of the following: Economics 2100 or Business 2100; Economics 2200 or Business 2200; Economics 3400 or Business 3400 or Mathematics 250 I or Mathematics 3501; Computer and Information Science 1050; or Accounting 253I or Business 3430.

Students with proficiency in spreadsheet analysis for business (e.g., MS Excel) should take Business 3430 or Computer and Information Science 253 I rather than Computer and Information Science 1050.

All of the following with a grade of C or better: Accounting 200I, 300I, 30II, 302I, 305I, 3I0I, 320I, 450 IW.
Two of the following: Economics 3320 or Business 3320; Business 3310 or Economics 3332; Business 3330 .
One of the following: Philosophy 3314 or Speech 2623.
Students majoring in internal 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).

Residence requirement
Students must complete a minimum of 30 credits at Brooklyn College, all with a grade of $C$ or higher. The work of the senior year must be completed at Brooklyn College.

## B.S. degree program in public accountancy and business, management and finance HEGIS code 0502; SED program code 35423

New York State CPA candidates are now eligible to take the Uniform CPA Examination prior to completing their degree but after having completed certain courses and at least 120 credits. Students may seek advisement regarding these changes from an Accounting Program advisor or by contacting the New York State Board of Public Accountancy. Generally, to become licensed as a Certified Public Accountant in New York State a candidate must have (a) earned a bachelor's degree, (b) completed 150 credit hours of study that includes a particular accounting curriculum, (c) passed the Uniform CPA examination and (d) completed one year of work experience under a licensed CPA. Students who expect to become CPA candidates in other jurisdictions are advised to consult the Board of Accountancy in that jurisdiction. The program outlined below draws upon and combines required courses in the existing Business, Management, and Finance major (HEGIS code 0506; SED program code 85067) and the Public Accounting major (HEGIS code 0502; SED program code 01990 ). Thus, students successfully completing this program will graduate with a single B.S. degree tantamount to a double major, as indicated in the title of the program, and totalling 150 credits including the College's general education requirements. The two existing programs are not being discontinued. They will serve students not interested in pursuing the 150 credit five-year program.

Program requirements (85-86 credits)

All of the following: Accounting 200I; 300I; 30II; 302I; 304I; 305I; 3IOI; 320I; 400I; 40II; 4I0I; 420I; 450IW; Business 3I 00; 3200; 3240 or Psychology 3I72; Business 33I0; Business 3400 or Economics 3400 or Mathematics 250 I or 350 I; Business 3430 or Computer and Information Science 2531 ; Business 4200W or 4300W; Business 2100 or Economics 2100; Business 2200 or Economics 2200; Business 3410 or Economics 3410 or Mathematics I20I; Computer and Information Science I050.

Two of the following: Business 2300; Business 3320 or Economics 3320; Business 3330 .
One of the following: Philosophy 3314 or Speech 2623.
Additional courses to complete the 150 -credit requirement.
Highly recommended elective: Accounting 3360 or Business 3360.
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 $\operatorname{INC}, \mathrm{W}, \mathrm{WN}$,

## Accounting 84

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 (W) course.

## Certificate of achievement in accounting HEGIS code 0502; SED program code 82572

Admission requirements are described under the heading "Certificate programs" in the chapter "Admission" in the Undergraduate Bulletin.

Program requirements (26-28 credits)
The certificate of achievement in accounting program consists of eight courses: Economics or Business 2100; Business 3200; Business 3310 or Economics 3332; Accounting 200I, 300I, 30II, 304I; and one course chosen from Accounting 305I, 310I, 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, and 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 200I, 305I, 3370, 337I; Computer and Information Science I050; Business 2000, 3270.
Student must complete one of the following three-credit courses:
Accounting 320I; Business 3430, 3240, 3220, 32I0, 3230, 3010; Computer and Information Science 2820W; Philosophy 3314.

## Departmental Minor(s)

## Minor in Accounting

## Department Requirements

Students majoring in economics and in business, management, and finance are eligible for this minor.
A minimum of 12 credits as follows:
All of the following: Accounting 300I, 3101, and 320I.
One of the following: Accounting 30II, 304I, 305I, 420I.
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 .) Fall and spring terms.

Prerequisite: Accounting 2001 [I], or Economics 71.01 or 71.1.

## ACCT 30 I I 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 and the Accounting Principles Board. (Not open to students who have completed Economics 71.03 or 71.3 .) Fall and spring terms.

Prerequisite: Accounting 300 I [2], or Economics 71.02 or 71.2 .

## ACCT 302 I 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. .

Prerequisite: Accounting 301 I [3], or Economics 7I.03.

## 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 300 I [2], or Economics 71.02 or 71.2 .

## 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 304I Cost and Managerial Accounting for Strategic Decision Making

4 hours; 4 credits
Strategies for cost accumulation with emphasis on control, planning, and decision making. Quantitative methods and analytical tools for capital budgeting and inventory control, including linear programming. Management decision making under uncertainty. (Not open to students who have completed Accounting 3038 [4] or I2.)

Prerequisite: Economics 3400 [30.2]; Computer and Information Science *I 050 [5.2]; and Accounting 300। [2] or Economics 7I.02.

## ACCT 3370 Issues in Accounting and Auditing for Non-Profits 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 non-profit organization. Also included are modules about the audit and attestation functions as they relate to non-profits.

Prerequisite: Accounting 305 I [21].

## ACCT 337 I Issues in Accounting and Auditing for

Non-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 305 I [2I] and 3370 [5I].

## 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 301 I [3], or Economics 71.03 or 71.3 .

## ACCT 400 I 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 401 I 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 450 IW 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 I3.)

Prerequisite: English 1012 [2]; Economics 3400 [30.2] or Business 3400 [30.2]; and Accounting 3021 [5] or Economics 71.05 and Accounting 305I [2I].

## Information systems and control

## ACCT 305 I Accounting Information Systems

2 hours; 2 credits
Purposes and uses of accounting information systems; design, implementation, and evaluation. Interrelationship of accounting and managerial information systems. Emphasis on computer applications. (Not open to students who have completed Economics 79.2.)

Prerequisite: Computer and Information Science *I 050 [5.2] and Accounting 300 [2].

## Taxation

## ACCT 310I 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 200I [I], 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 [72].)

Prerequisite: Sophomore status.

## ACCT 420I 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 320 I [40] or Economics 50.5.

## 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 501। [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 501 I 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.I] is not open to students who have completed Economics 93.6.
Accounting 501। [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 502I 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.

## Africana Studies

Department office: 3105 James Hall
Phone: 718.95I.5597

## Full-time Faculty

Professors: Cunningham, Latortue, Thomas
Associate Professor: Day
Assistant Professors: Byam, Cumberbatch, Green

The Africana Studies Department offers a multidisciplinary curriculum devoted to the study of blacks in Africa, the Caribbean, and the United States. The wide range of courses focuses on the histories, cultures, politics, and societies of Africa and its diaspora. In addition to its own distinguished core faculty, the department draws on the expertise of its affiliates in the Departments of Political Science, English, and Modern Languages and Literatures, as well as the Conservatory of Music. The multidisciplinary nature of Africana studies exposes students to the theoretical approaches and basic content of many of the traditional liberal arts disciplines, including history, literature, and sociology.

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. The department also offers minors in three areas: African American studies; African studies; and the literature of the African diaspora. Each minor requires the completion of 15 credits of courses given by the Department of Africana Studies and other Brooklyn College departments.

The department also offers a 6-credit study-abroad seminar during the summer, 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.

## Core curriculum

The Department of Africana Studies participates in the College's core curriculum through the upper tier courses:
Exploring Literature and Exploring Global Connections.

## 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 22 II; SED program code 02112

## Department requirements (45 credits)

Two courses chosen from Africana Studies 1001 through 1099.
Four courses 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.

Two courses from groups other than the one chosen above.
One seminar or independent study course chosen from Africana Studies 4405 through 5404.
Eighteen credits of advanced courses in any department or program plus any prerequisite of the courses.

## 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 2201.0I; SED program code 26754

Adolescence education (grades $7-12$ ) and special subject programs are writing intensive.
Program requirements
Students who wish to pursue a bachelor of arts degree in adolescence 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.

The following pedagogical courses in the Department of Secondary Education: SEED 200I, 2002, 340 I, 3402, 4402, 4408, 3456 (total of 24 credits):
This four-term sequence may be started in the lower-sophomore term or upper-sophomore term.
SEED 200I, 2002, 340I, 3402 (I2 credits).
The appropriate 5 -credit course in student teaching:
SEED 4402 Seminar on Methods of Teaching Social Studies, Student Teaching I
The appropriate 4-credit course in student teaching:
SEED 4408 Advanced Seminar on Methods of Teaching Social Studies, Student Teaching II
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department.
Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking Education 3454.

Students, except music education majors, must complete 24 credits in the School of Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take SEED 200 I, 2002, 340I or 3402; an average of 2.75 in SEED 200 I and 2002 is required to continue to SEED 3401 and/or 3402; to take SEED 4413 or 440 I-4406, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take SEED 4407-4406, students must earn a B- or higher in SEED 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes SEED 4407-44I2 prior to SEED 4401-4406 must earn a B- or better grade in SEED 4407-44I2 to take SEED 440I-4406.

## 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 I and 2 below.
I. Africana Studies 3120 or 3121 or 3130 ..
2. Twelve additional credits selected from Africana Studies $3120,3|2 I, 3| 38,3130,3230,3210,3260$; Africana Studies 3125 or Political Science 3I5I; Africana Studies 3220 or English 3160; Africana Studies 322 I or English 3I6I; Africana Studies 3236 or Music 210I; Africana Studies 3237, Africana Studies 3233; Africana Studies 3225 or Theater 250I; Africana Studies 3228 or American Studies 3306; Africana Studies 3265, 3337,

3324, 3330, 333I, 3320, 3344, 3360, 3367, 3335; Economics 3222; History 3430; Music 20.4; Political Science 3I50; Sociology 3204, 22I0, 2200, 2601.

## 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 I and 2 below.
I. Africana Studies 3102 or History 356 I.
2. Twelve credits chosen from the following: Africana Studies 3101 or History 3560; Africana Studies $3105,3107,3110$; Africana Studies 3112 or Political Science 3306; Africana Studies 32I0, 320I, 3205, 3290; Anthropology 3535; Art I 6.02.

## Minor in Literatures of the African Diaspora

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 1,2 , and 3 below.

1. Africana Studies 322 I or English 316 I.
2. One of the following: Africana Studies 3230, 3210, 3201.
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 3225 or Theater 2502; Africana Studies 24.7; Africana Studies 3205 or Comparative Literature 3619; Africana Studies 3228 or American Studies 3306; Africana Studies 3260 or English 3162; Africana Studies 3245 or English 3194 or Comparative Literature 3627; Africana Studies 3240 or Comparative Literature 3623 or Puerto Rican and Latino Studies 3315; French 48.1; Spanish 49.

## 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 330I, [76.1], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 3140, 3170, 3185 ; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 334।; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's 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 Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Division of Graduate Studies

The Africana Studies Department offers graduate courses for students in other fields. For information, students should consult the department chairperson. A Graduate Bulletin may be obtained in the Office of Admissions.

## Courses

Recommendations for prospective graduate students
Prospective graduate students in linguistics should develop reading fluency in one foreign language and competency in the linguistic structure of another.
*Courses marked with an asterisk $\left({ }^{*}\right)$ are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in this department.

## 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.I.)

## 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 Culture

## 3 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 $\times$, 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 I7.)

## History \& political science

## AFST 3101 States, Kingdoms and Trade: Africa to $\mathbf{1 8 0 0}$

3 hours; 3 credits
Themes in the history of Africa south of the Sahara from earliest times
to I800. 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 [55. I].

Prerequisite: one of the following: Africana Studies I00I, Core Studies 4 or 9 , Core Curriculum 1220, 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 [55.2].

Prerequisite: one of the following: Africana Studies I00 I, Core Studies 4 or 9 , Core Curriculum 1220, 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 I00| [0.12], I 020
[0.2]; Core Studies I or 9; Core Curriculum II IO [I.I] or I220 [2.2].

## 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 I 220 [2.2].

## 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 3 IIO (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 [49.2].

Prerequisite: one of the following: Political Science 1.5, 1, 5, Core Studies 3 or Core Curriculum I230 [2.3], Africana Studies 0.I, 0.1 I , or |00| (0.12).

## AFST 3120 African American History to 1865

3 hours; 3 credits
African Americans from the era of the Atlantic slave trade to the beginning of the Civil War. Topics include the African origins of African Americans, defining African Americans, the slave trade, free Blacks in antebellum America, origins of the Black church, slavery, and abolitionism.

Prerequisite: Core Studies 4 or 9 or Core Curriculum 1220 [2.2] or 20. XX , or permission of the chairperson.

## AFST 3 I2I 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.)

Prerequisite: Core Studies 4 or 9 or Core Curriculum 1220 [2.2] or 20.XX, or permission of the chairperson.

## AFST 3l25 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 3|51 [32.1].

Prerequisite: Core Studies 3 or 4 or Core Curriculum 1220 [2.2] or 1230 [2.3]

## AFST 3 l30 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: one of the following: Core Studies 3, 4, 9, or Core Curriculum 1220 [2.2], 1630 [2.3], 20.XX, or Sociology *||0| [5], Political Science I or 1.5, or Social Science I or 2, or Africana Studies |00| [0.12] or 1020 [0.2].

## 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 21 st 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.

Core Curriculum 1220 [2.2]

## 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 [49.8].

Prerequisite: one of the following: Core Studies 3, 9 or Core Curriculum 1230 [2.3], 20.XX, Africana Studies 17, 3140 [I7.3], Political Science 1.5.

## 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, $3 \mid 40$ [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 3205 African Literature

3 hours; 3 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 Comparative Literature 3619 [32.2].

Prerequisite: English 1010 [I] 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
Course Description: 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.

## AFST 3220 African American Literature to 1930

3 hours; 3 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 [64.2].

Prerequisite: one of the following: English 1010 [I] or I.7.

## AFST 322 I Modern African American Literature

3 hours; 3 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 316। [64.3].

Prerequisite: English 1010 [I] or I.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 Theater 2502 [41.4].

## AFST 3228 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 American Studies 3306 [20.2].

## AFST $\mathbf{3 2 3 0}$ 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 [24.5].

Prerequisite: English 1010 [1] or I.7.

## 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 $\mathbf{3 2 3 6}$ 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 $210 \mid$ [IO.I].

## AFST $\mathbf{3 2 3 7}$ 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 [I0.4] and 20.4.

Prerequisite: Core Studies 2.2 or Core Curriculum II 30 [1.3] or permission of the chairperson.

## AFST $\mathbf{3 2 4 0}$ Caribbean Literature

3 hours; 3 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 3315 [38] and Comparative Literature 3623 [38.3]. (Not open to students who have completed Puerto Rican and Latino Studies 54.)

Prerequisite: English 1010 [I].

## AFST 3245 Introduction to Postcolonial Literature and Theory

3 hours; 3 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 [50.13] and Comparative Literature 3627 [50. I 3].

Prerequisite: English 1012 [2] or 2.7 .

## AFST $\mathbf{3 2 6 0}$ Black Women's Fiction

3 hours; 3 credits
Black women novelists, short story writers, and essayists. Cross-cultural comparisons with African and Caribbean novelists. Readings of selected essays in feminist criticism. This course is the same as English 3162 [64.4] and Women's Studies 31 I7 [46].

Prerequisite: English 1010 [1] or I.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.

Prerequisite: English 1010 [1] or I.7.

## AFST 3290 Special Topics in Literature, Culture, and the Arts

3 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 $\mathbf{3 3 2 0}$ 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: one of the following: Africana Studies $0.11,1001$ [0.12], or 1020 [0.2] Core Studies 3 or Core Curriculum 1230 [2.3].

## 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: two of the following: Core Studies 3, 4, and 9 or Core Curriculum 1220 [2.2], I 230 [2.3], 20.XX or their equivalents.

## 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: one of the following: Africana Studies 1020 [0.2], Political Science I.5, Core Studies 3, 4, and 9 or Core Curriculum 1220 [2.2], 1230 [2.3], 20.XX, or an equivalent course.

## AFST 333 I 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 [5I.4I].

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: one of the following: Africana Studies 0.1 I , I 020 [0.2], 1030 [0.4], or Core Studies 3 or Core Curriculum 1230 [2.3].

## 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.

## 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 Studies 3446 [44].

Prerequisite: Africana Studies 1020 [0.2] or 3260 [27], Core Studies 3 or 9 or Core Curriculum 1230 [2.3] or 20.XX, Women's Studies 100 । [12], or permission of chairperson.

## 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 [78.35] and Women's Studies 3447 [49].

Prerequisite: Core Studies 3 or 9 or Core Curriculum 1230 [2.3] or 20.1-20.99, or Political Science *100 [ [1.5 I] or 1.7, or Africana Studies I00| [0.12], or Women's Studies 10.7 or 100 I [12], or permission of chairperson.

## 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: Core Studies 3 or 4 or Core Curriculum 1220 [2.2] or 1230 [2.3.]

## 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

6 hours; 6 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 host-country 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 0.1 I, 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 3201
AFST 3340
AFST 3370

African Oral Literatures
Caribbean Economics
Foundations of Africana Research Methods

## American Studies

Department office: 3149 Boylan Hall
Phone: 718.951.5784
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 I-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.
Five of the following: American Studies 3302, 3206, 3212, 3306, 3307,3I02, 3702, 3704, 3104, 3706, 3902, 3404, $3106,3108,3402,3304,3406,4002$, 5003.

Two of the following: History 3323, 3420, 3430, 3440, 344I, 3442, 34I8, 3455, 34I0, 3475, 3478, 3479, 3480, 3485, 4200.
Two of the following: English $3|66,3| 5|, 3| 52,3|53,3| 54,3|63,4| 05,4 \mid 07$.
Either a) or b):
a) American Arts and Letters: three of the following:

Africana Studies 32I5, 3220, 322 I, 3230; Art 3I64; English 2402, 3164; Film 2124; Music 2I0I, 2104, 4940, 494I; Television and Radio II65; Puerto Rican and Latino Studies 4640; Theater 3504, 2502; Women's Studies 3120; or other courses consistent with this track approved by the program director.
b) American Society: three of the following:

Africana Studies 3120, 3I2I, 3125 ; Anthropology 3130, 3135 ; Judaic Studies 3047, 3485; Political Science $3121,3142,3150,3153,3154,3155,3404$, 3440; Puerto Rican and Latino Studies IOOI, 32 I5, 3220, 3320W, 3325, 4645; Sociology II 02, 260I, 2602, 3206, 3607; Women's 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) and special subject programs are writing intensive.

## Program requirements

Students who wish to pursue a bachelor of arts degree in adolescence 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.

## American Studies

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.

The following pedagogical courses in the Department of Secondary Education: SEED 200I, 2002, 340I, 3402, 4402, 4408, 3456 (total of 24 credits):
This four-term sequence may be started in the lower-sophomore term or upper-sophomore term.
SEED 200I, 2002, 340I, 3402 (I2 credits).
The appropriate 5 -credit course in student teaching:
SEED 4402 Seminar on Methods of Teaching Social Studies, Student Teaching I
The appropriate 4-credit course in student teaching:
SEED 4408 Advanced Seminar on Methods of Teaching Social Studies, Student Teaching II
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department.
Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking Education 3454.

Students, except music education majors, must complete 24 credits in the School of Education as specified above.

Admission requirements and academic standing
Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take SEED 2001, 2002, 340 I or 3402; an average of 2.75 in SEED 200 I and 2002 is required to continue to SEED 340 I and/or 3402; to take SEED 44 I 3 or $440 \mathrm{I}-4406$, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take SEED 4407-4406, students must earn a B- or higher in SEED 440 - 4406 , a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes SEED 4407-44I2 prior to SEED 4401-4406 must earn a B- or better grade in SEED 4407-44I2 to take SEED 440I-4406.

## 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 I001.
Four of the following: American Studies 3702/Music 2103, American Studies 3704/Music 2102; Music 10.0, Music 210 I/Africana Studies 3236, Music 2I04/Africana Studies 3237, Music 4430, 443I, 4940, 494I; Puerto Rican and Latino Studies 3125; additional special topics course by permission of program director.

## Minor in American Studies

Department Requirements
Fifteen credits in advanced electives in American studies, each completed with a grade of C or higher, as follows:
American Studies 100 I.
One of the following: American Studies 3206, 3I02, 32I2, 3 I 08.
One of the following: American Studies 3306, 3702, 3706, 3302, 3304, 3406.
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 the teacher education program indicated are described in the "Education" section of this 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 100 I.
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, 344I, 3442, 34I 8, 3455, 34I0, 3480, 3485, 4200.
Two of the following: English 3|57, 3|66, 60.| $1,3|5|, 3|52,3| 53,3 \mid 63$.

## Courses

+Students may take no more than three credits of mini-courses in this program.
§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 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 260 I

Prerequisite: Core Curriculum 1230 with a grade of B - or higher or Core Studies 3 with a grade of B- or higher, or Sociology *। 10 I or permission of the chairperson.

## AMST 1001 Introduction to the American Experience

3 hours; 3 credits
The beliefs that have shaped our identities as Americans: the self-made man/woman; the land of plenty; the rise from rags to riches. Material culture and how it has marked American life. The American Dream as it is constructed by political realities and racial inequalities. Introduction to the methodologies of American studies and to the process of connecting disciplines in order to understand how the American heritage has been formed.

## AMST 3102 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 History 3435 [43. I 3]. (Not open to students who completed History 3490 [43.9] in spring, 1988.)

Core Curriculum I220 [2.2] or permission of the program director or chair of the History Department.

## AMST 3104 North American Indians: Traditional and Contemporary <br> 3 hours; 3 credits <br> 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 and Archaeology 3104 [52].

Prerequisite: American Studies 3 I 02 [20.3]; or Anthropology *। 00 I [I] or 2.I; or Core Studies I or 3 or 9 ; or six credits in social science courses; or permission of the program director.

## AMST 3106 Religious Experience in America

3 hours; 3 credits
Development of the major American traditions of Protestantism, Catholicism, and Judaism. Puritanism and its legacy; the Great Awakening; Christianity, slavery and the Civil War, the religious experience of Black Americans. Interaction between religious thought and such other aspects of American culture as ethnicity, social change, sexual mores, intellectual life. This course is the same as History 3416 [43.1 I].

Prerequisite: Core Curriculum 1220 [2.2] or Core Studies 4 or permission of the program director.

## AMST 3108 American Dreams and Realities

3 hours; 3 credits
Interdisciplinary exploration of the "American Dream" and research into the lives of ordinary Americans. Historical background, changing definitions, and various dreams that shape the American experience;
capitalism, competition, and the myth of the "self-made" American; collision of ideals and realities; psychological consequences of "failing" in American society; class, ethnic, gender, and racial boundaries guiding American life; status consciousness/anxiety and the over-worked, over-extended, and sleep-deprived American. (This course is not open to students who completed History 4003 [63] during Fall 2001, History 3490 [43.9]/American Studies 3902 [60] during Fall 2005, or SCP50 during Fall 2007.) This course is the same as History 3472 [46].

Prerequisite: Core Curriculum 1220 [2.2], Core Curriculum 1230 [2.3], or permission of the 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 [7I], spring, I989, or spring, I99I.)

Prerequisite: sophomore, junior, or senior standing or permission of the program director.

## AMST 3302 Private Lives: American Autobiography

3 hours; 3 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 [6I].

Prerequisite: English 1012 [2].

## AMST 3304 The Immigrant Experience in Literature, Film, and Photography

3 hours; 3 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 [67]. (Not open to students who have completed American Studies 70.)

Prerequisite: one of the following: English 1010 [I], 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 [25.2].

## AMST 3307 Transnational America

3 hours; 3 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 3402 American Folklore

3 hours; 3 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 [25.3].

Prerequisite: one of the following: English 1010 [I], or 1.2, or 1.7.

## AMST 3404 New York City Folklore

3 hours; 3 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 [25.4].

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 [43.18].

Prerequisite: one of the following: English 1010 [1], or 1.2, or 1.7.

## 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 50.

Prerequisite: Core Studies 2.2 or Core Curriculum II 30 [1.3] or permission of the director.

## AMST $\mathbf{3 7 0 4}$ 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 3 and 10.3.

Prerequisite: Core Studies 2.2 or Core Curriculum II 30 [1.3] or permission of the director.

## AMST 3706 American Popular Music and Technology

3 hours lecture; 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 [I0.6]. (Not open to students who took American Studies 3902 [60] or Music 3493 [49.3] in spring 2007.)

Prerequisite: Core Corriculum II30 [1.3] or permission of the program 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' self-conception. Examples drawn from early US drama, nineteenth-century 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.

Prerequisite or corequisite: American Studies 100 I or permission of the director.

## 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 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 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 *|0|2 [2], nine credits of American Studies courses, permission of the program director and of the sponsoring faculty member.

## The following inactive course(s) will only be offered if there is sufficient demand:

AMST 5002
Independent Research

## Anthropology and Archaeology

Department office: 3307 James Hall
Phone: 718.95I. 5507

## Full-time Faculty

Professors: Bankoff, Perdikaris, Rosenberger
Associate Professors: Antoniello, Cavanaugh, Sharman
Assistant Professor: Hejtmanek

Anthropology studies how people live, how they develop physically and culturally, and how they interact within their own group and with others. Round the world, in the remains of an ancient civilization, the isolated mountains of New Guinea, an industrialized modern urban area, and the turmoil of the Middle East, anthropologists and archaeologists study the human experience. Using a four-field approach that includes cultural anthropology, archaeology, physical anthropology, and linguistic anthropology, anthropology combines the sciences with the humanities to understand the physical, social, and cultural factors contributing to the commonalities and differences of historical and contemporary human behavior. It considers humans living in hunter and gatherer, horticultural, herding, nomadic, peasant, island, urban, industrial, and postindustrial societies. Employing a methodology developed over the past 150 years, anthropologists do their work by living with the subjects of their study and experiencing their own lives as those people do, thereby developing an empathetic knowledge, which informs their work.

The Brooklyn College Department of Anthropology and Archaeology offers a bachelor of arts degree in anthropology, a minor in anthropology and archaeology, and an interdisciplinary minor in law and society. 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 I-6). The department's course offerings present the richness of human diversity and encourage students to employ a cross-cultural, holistic perspective to analyze experiences and solve problems. For many of our students, anthropology becomes a lifelong framework for integrating and organizing knowledge.

Undergraduate majors in our department have ongoing opportunities to do hands-on research in laboratory and fieldwork studies conducted by full-time faculty members. Our graduates find employment in education, business, nonprofit, and governmental settings that require a background in the diversity of human behavior and lifestyle. Many of our students pursue graduate degrees to further their career goals. A doctorate in anthropology is offered by the Graduate Center of the City University of New York.

## Core curriculum

The department recommends Anthropology 1000 for students who have not yet had the opportunity to take the core sequence.

## B.A. degree program in anthropology HEGIS code 2202; SED program code 02102

Department requirements (39-42 credits)
Anthropology 1000 and 1002.
One course chosen from: Anthropology 2400 or 2200.
One course chosen from Anthropology 2100 or 2300.
One field course chosen from: Anthropology $3470,3015,3480,3475$ or 4110 or 4104.
Anthropology 4000.
Eighteen additional elective credits; I5 credits must be in courses numbered 3000 and above. Students are required to concentrate in one or two of the subfields of anthropology (cultural, linguistic, physical anthropology, or archaeology). A concentration consists of three elective courses in one of these four areas. Local, national, and international field experiences are available during the winter and summer sessions.

Concentrators must take one of the following courses:
Anthropology 3120 for cultural anthropology concentration;
Anthropology 3301 for linguistic anthropology concentration;

Anthropology 3240 or 3425 for physical anthropology concentration;
Anthropology 3445 for archaeology concentration

Department recommendations:
Majors must consult a department counselor each year in planning their programs. Students should plan on taking a field course (3470, 3405, 3480, 3475 , or 4110 or 4104 ) as soon as possible after finishing the $2100-2400$ sequence. Majors should take the senior seminar (4000) in the fall of their senior year.

## B.A. degree program in adolescence education: social studies teacher HEGIS code 220I.0I; SED program code 26754

Adolescence education (grades 7-I2) and special subject programs are writing intensive.
Program requirements
Students who wish to pursue a bachelor of arts degree in adolescence 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.

The following pedagogical courses in the Department of Secondary Education: SEED 200 I, 2002, 340 I, 3402, 4402, 4408, 3456 (total of 24 credits):
This four-term sequence may be started in the lower-sophomore term or upper-sophomore term.
SEED 200I, 2002, 340I, 3402 (I2 credits).
The appropriate 5 -credit course in student teaching:
SEED 4402 Seminar on Methods of Teaching Social Studies, Student Teaching I
The appropriate 4-credit course in student teaching:
SEED 4408 Advanced Seminar on Methods of Teaching Social Studies, Student Teaching II

This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department.
Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking Education 3454.

Students, except music education majors, must complete 24 credits in the School of Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take SEED 2001, 2002, 340 I or 3402; an average of 2.75 in SEED 200 I and 2002 is required to continue to SEED 340 I and/or 3402; to take SEED 44 I 3 or $440 \mathrm{I}-4406$, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take SEED 4407-4406, students must earn a B- or higher in SEED 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes SEED 4407-44I2 prior to SEED 440I-4406 must earn a B- or better grade in SEED 4407-44I2 to take SEED 440 I-4406.

## Departmental Minor(s)

## Minor in Anthropology and Archaeology

## Department Requirements

[^2]
## 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 3I60, 3155 ; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 330I, [76. I], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 31 I0, 3344; Anthropology 3I30, 3I40, 3170 , 3185 ; English 3194; Judaic Studies 30I7; Philosophy 3702; Political Science 334I; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 22I5, 3130, 3395; Children and Youth Studies 31 I 0; Health and Nutrition Science 2130; Judaic Studies 4I95; Philosophy 3307;
Political Science 3240, 3242, 3243; Women's Studies 3328
d. Media and Communications in a Global Context

Anthropology 3I80; Film 2131; Philosophy 3315; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; 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 3I20, 3123, 3122, 3240; Sociology 3503, 3504.
Courses in anthropology and archaeology 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) and childhood education teacher (grades I-6) programs are described in the "Education" section of the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in anthropology and archaeology must complete at least 30 credits in the Anthropology and Archaeology 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.

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Concentration requirements: (30 credits)
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Anthropology and Archaeology 1000 and 1002.
One course chosen from Anthropology 2200 or 2400 and one course chosen from Anthropology 2100 or 2300.
One field course chosen from: Anthropology 30I5, 3470, 3475, 3480 or 4 II 0.
An additional 12 to 15 credits chosen from anthropology and archaeology courses numbered 3000 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 $\left({ }^{*}\right)$ are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in this department.
+Students may take no more than three credits of mini-courses 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 successful completion of this independent work.

## General anthropology

## ANTH * 1000 Introduction to Anthropology: Cultural and

 Linguistic3 hours; 3 credits
Introduction to the basic concepts, theories, and methods of cultural and linguistic anthropology.

## ANTH * 1002 Introduction to Anthropology: Archaeology and Physical Anthropology <br> 3 hours; 3 credits

Introduction to the basic concepts, theories and methods of archaeology and physical 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 * 1008 Mini-Course in Selected Topics in Anthropology

I hour; I credit
Lectures and discussions on selected topics in anthropology. Seven, two-hour, sporadically scheduled meetings and a final examination. Course descriptions and reading lists are available in the Anthropology and Archaeology Department office before registration. Students may take this course twice, but may not repeat topics.

## Introductory \& general courses

## ANTH 2100 Cultural Anthropology

2 lecture, 2 laboratory; 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 experience.

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. (Not open to students who have completed Anthropology 4.)

## ANTH 2210 Anthropological Perspectives on Sexual Behavior

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.

Prerequisite: One of the following: Anthropology * 000 or 2200 or Core Studies 8.1 or 9, or Core Curriculum I220[2.2] or I32 I [3.2 I] or permission of the chairperson.

## ANTH $\mathbf{2 3 0 0}$ Linguistic Anthropology

2 hours lecture, 2 hours laboratory; 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 Linguistics I.)

## ANTH 2400 Archaeology

2 hours lecture, 2 hours supervised laboratory; 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 Classics 2.2 or 19 or 3210 or 60. )

## 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 * 000 or 1002 or Core Studies I, or 3, or 4 , or 9 , or permission of the chairperson.

## General electives

## 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.

Prerequisite: Anthropology *I 000 or 1005 [1.05] or 2400 or 2300 or 2200 or permission of the chairperson.

## 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 *1000 or Core Studies I, or 3, or 4, or 9 or permission of the chairperson.

## ANTH 3015 Anthropology Abroad

I 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.

## Linguistic anthropology

## ANTH 3301 Language and Culture

3 hours; 3 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.

Prerequisite: Anthropology *1000 or Linguistics 200 [ [I] 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 [29].

Prerequisite: Anthropology I000 or 2300 or Women Studies 1000.

## ANTH 3320 Anthropology of Language and Media

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.

Prerequisite: Anthropology *I000 or 2300 or permission of the chairperson.

## ANTH 3360 Endangered Languages, Heritage Languages, and Cultural Consequences

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, social, political and economic processes enabling linguistic shifts.

Prerequisite: Anthropology I 000 or 2300 or permission of the chairperson.

## ANTH 3390 Sociolinguistics

3 hours; 3 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 [24.8] and Linguistics 3029 [30].

Prerequisite: English 1010 [I] and either Anthropology I000 or 2300 [2.3] or Linguistics 200 [ [ ] or permission of the chairperson.

## ANTH 3392 Historical Linguistics

3 hours; 3 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.

Anthropology 230 I [2.3] or Linguistics 200 I [I] or permission of the 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. I] 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.

Prerequisite or corequisite: Anthropology 2401 [2.2] or Classics 2.2 or 3210 [26] and permission of the instructor.

## ANTH 2407 Great Discoveries in Archaeology

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 Archaeology in Biblical Lands

3 hours; 3 credits
Major archaeological discoveries in the lands of the Bible, 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 321 I [27]. (Not open to students who have completed Classics 21. )

Prerequisite: one of the following: Anthropology 2400, 20, Classics 3210 , permission of the chairperson

## ANTH 3412 World Prehistory

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 *I 000 or 1002 or 2407 [7] with a grade of B or better, or Core Studies I or 9, or Core Curriculum 1210 [2.1] or 1220 [2.2], or permission of the chairperson.

## ANTH 3415 Old World Archaeology

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 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 *I000 or Anthropology 2400 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 *I000 or I002 or Core Studies 3, or 8.I, or 9 , or permission of the chairperson.

## ANTH 3440 Introduction to 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 leoenvironments.

Prerequisite: one of the following: Anthropology 3240 [24.1] or Biology 3081 [24.1] or Physical Education and Exercise Science 3275 [22.75], 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 EES 3750.

## 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 32 I2 [29]. 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

Prerequisite: permission of the chairperson and one of the following: Anthropology 2400 [2.2], Classics 3210 [26], Core Studies I, 1210 [2.1], 9, Judaic Studies 3012 [I2], a course in archaeological theory and methodology.
240। [2.2]

## 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 and Archaeology 3470 [70. I] or Classics 3212 [29] or equivalent archaeological field experience, and permission of the chairperson.

## ANTH 3480 Intersession Archaeological Field School

I 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. I] or who have previously received credit for archaeological fieldwork.)

Prerequisite: Anthropology 2400[2.2] and permission of the chairperson.

## Physical anthropology

## ANTH 2205 Forensic Anthropology: A Digital Approach

3 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.

## ANTH 3230 Evolutionary Context of Primate Behavior and Ecology <br> 3 hours; 3 credits <br> 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 *I000, I002, 2200, or permission of the chairperson.

## ANTH 3240 Human 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 Core Studies 8.I, or Physical Education 327 I and 3275 [22.75]; or Health and Nutrition Sciences 22.7; or Health and Nutrition Sciences 2300 and 22.75; or Biology 308 I or permission of the chairperson.

## ANTH 3250 Paleontological Evidence for Human Origins

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 3240 or Core Studies 8.1 or Biology 308। or permission of the chairperson.

## ANTH $\mathbf{3 2 6 0}$ 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 I002 or 2200 or Core Studies 8 . I or Core Curriculum I 32 I, Biology 2073 or Physical Education 327 I and 3275 [22.75]; or Health and Nutrition Sciences 22.7; or Health and Nutrition Sciences 2300 and 22.75 , or 230 I; or permission of the chairperson.

## ANTH 3265 Human Anatomy and Physiology I

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 Physical Education and Exercise Science 3281.

Prerequisite: I) 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 Physical Education and Exercise Science 3285.

Prerequisite: One of the following: Anthropology and Archaeology 3265, Biology I50I, Physical Education and Exercise Science 3281, or Health and Nutrition Sciences 2302.

## ANTH 3425 Human Evolutionary Anatomy: An Anthropological Approach

3 lecture; 4 laboratory (including four 2 prosection sessions at Mount Sinai School of Medicine); 5 credits
A collaborative effort between faculty at the Mount Sinai School of Medicine and Brooklyn College will afford students the unique opportunity to view both cadaveric material at Mount Sinai School of Medicine (MSSM) and learn about new and powerful technological imaging (CT, MR, laparoscopic viewing) that afford 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.

Prerequisite or Corequisite: any one of the following: Anthropology and Archaeology 1002, 2200, 3230, 3240, 3250, 3260; or Biology I00I, I080; or permission of instructor. Not open to students who have taken Physical Education and Exercise Science 3275.

## Cultural anthropology

## ANTH 3120 Introduction to Ethnography

3 hours; 3 credits
Survey of early and contemporary ethnography. Analysis of ethnographic techniques, critiques, and development. Includes representative works from various regional specialties, theoretical perspectives, and historical periods.

Prerequisite: Anthropology *1000 or Core Studies I or 3 or 9, or Core Curriculum 1210 [2.1] or 1220 [2.2], or permission of the chairperson.

## 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 and Archaeology 3135.)

Prerequisite: Anthropology *1000 or 2100 or Core Studies 3 or 4 or Core Curriculum 1210 [2.1] or 1220 [2.2], 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.

Prerequisite: two of the following: Core Studies 3, 4, and 9, or Core Curriculum 1210 [2.1] or 1220 [2.2], or their equivalents.

## ANTH 3140 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 [IO] in Fall, I999.)

Prerequisite: Anthropology *1000.

## 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 Core Studies 8.1 or Core Curriculum I 32 I[3.2 I] or Biology *I 080[3] 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 3 I I I [64].)

Prerequisite: Anthropology I 000 or Anthropology 2200 or Anthropology 3150 or Core Studies 8.1 or Core Curriculum I32I or Biology 1080 or permission of the instructor.
Anthropology 3150 [14].

## 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 * 1000 or 2100 or Core Studies 3 or Core Curriculum 1230 [2.3], 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 30 IO [I0] in Fall, 1992, or Spring, 1994.)

Prerequisite: Anthropology 1000 or Anthropology 2100.

## 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.

Prerequisite: Anthropology *I000 or 2100 or Core Studies I or 3 or 9 or Core Curriculum 1210 [2.1] or 1220 [2.2] or 1230 [2.3] or permission of the chairperson.

## ANTH 3180 Visual Anthropology

3 hours; 3 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. Includes lectures and some limited practical work with visual media.

Prerequisite: Anthropology *1000 or 2100 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 Core Studies I or 9 or Core Curriculum I2IO [2.1] or I220 [2.2] or Studies in Religion 3003 [1.1] or 3005 [1.2] 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 * 100 I [I] or 2.1 or Psychology I000 or Core Curriculum 3208 or Core Studies 9 or permission of the chairperson.

## ANTH 4104W Ethnographic Theory and Methods

3 hours lecture; 2 hours laboratory; 4 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 and Archaeology 70.3, 71, or 71.3.)

Prerequisite: Anthropology *I000, and 2200 or 2300 or 2400 or permission of the chairperson; English *। 0 I2[2].

## ANTH 4IIO 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 plus nine credits in Anthropology and Archaeology 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 [52].

Prerequisite: Anthropology *1000 or 2100 or Core Studies I or 3 or 9 or six credits in social science courses, 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; post-independence political and economic development; contemporary identity politics; religion and social movements; urbanization and international migration. This course is the same as Puerto Rican and Latino Studies 3210.

Prerequisite: Anthropology *I 000 or 2100 or Core Studies I or 3 or 9 or six credits in social science courses, 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 *I 000 or 2100 or Core Studies I or 3 or 9 or six credits in social science courses, 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 Core Studies I, 3, or 9 or Core Curriculum I230 [2.3] or six credits in social science courses, 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 *I 000 or 2100 or Core Studies I or 3 or 9 or six credits in social science courses, or permission of the chairperson.

## Seminars and internships

## ANTH 4000 Senior Seminar in Anthropology

2 hours and independent work; 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. Intensive writing course required for majors.

Prerequisite: Completion of the appropriate introductory (I000 and 2000 level) courses and field course for a major in Anthropology and Archaeology plus at least 12 credits in Anthropology and Archaeology Department courses numbered 3000 and higher, or permission of the chairperson.

## ANTH 4601 Seminar in Anthropological Theory

2 hours and independent work; 3 credits
Reading of significant works. Course descriptions may be obtained in the department office before registration. Report or final written examination.

Prerequisite: the appropriate introductory course (Anthropology I000 or 1002 or 2200 or 2300 or 2400 ) plus nine credits in Anthropology
and Archaeology 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 84.I, 84.2, 84.3, 84.4 , and 4630 [75. I].

Prerequisite: the appropriate introductory course (Anthropology I000 or 1002 or 2100 or 2200 or 2300 or 2400 ) plus nine credits in Anthropology and Archaeology Department courses numbered 3000 and higher, or permission of the chairperson.

## ANTH 463I 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 84.I, 84.2, 84.3, 84.4 , and 4630 [75.I].

Prerequisite: the appropriate introductory course (Anthropology I000 or 1002 or 2100 or 2200 or 2300 or 2400 ) plus nine credits in Anthropology and Archaeology Department courses numbered 3000 and higher, or permission of the chairperson.

## ANTH 4635 Seminar in Museum Techniques

2 hours and independent work; 3 credits
Introduction to museology. Practical experience in cooperation with museums in New York City.

Prerequisite: the appropriate introductory course (Anthropology I000 or 1002 or 2100 or 2200 or 2300 or 2400 ) plus nine credits in Anthropology and Archaeology Department courses numbered 3000 and higher, or permission of the chairperson.
*1000 or 240। [2.2] or 2301 [2.3] or 220। [2.4]

## 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 and Archaeology Department courses numbered 10 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 and Archaeology 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 and Archaeology Department courses and permission of the chairperson.

## ANTH 566 I 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: completion of an approved program of advanced Anthropology and Archaeology Department courses and permission of the chairperson.
Prerequisite Anthropology 5660 [83.I].

## 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 and Archaeology Department courses and permission of the chairperson.

## The following inactive course(s) will only be offered if there is sufficient demand:

ANTH 3395 Anthropological Perspectives on Intercultural Communication
ANTH 3125 Comparative Social Systems
ANTH 3196 Cult, Occult, and Secret Societies
ANTH 3197 Folklore
ANTH 3198 Animals and Monsters
ANTH 3535 Africa South of the Sahara
ANTH 3555 Peoples and Cultures of Japan

## Art

Department office: 5306 Boylan Hall
Phone: 718.951.518।

## Full-time Faculty

Presidential Professor: Rand
Distinguished Lecturer: Acconci
Professors: Carlile, Cronin, Giusti, Hadler, Kiel, Mallory, McCoy
Associate Professors: Ball, Comerford, Kousser
Assistant Professors: Cloud, Kilroy, Schwab
Lecturer: Simon

The Brooklyn College Art Department, located in the heart of the art world, draws on a vast community of distinguished art figures for its faculty as well as 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 I-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, and digital art. 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. Undergraduates benefit from interaction with our accomplished graduate students.

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, and an attractive skylit gallery for student exhibitions.

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.

## Core curriculum

The Department of Art participates in the College's core curriculum through Core Curriculum II20.

## B.A. degree program in art HEGIS code 1002; SED program code 02015

The Art major is writing intensive.

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Department requirements (4I - 42 credits)
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Art 1050 or Core Studies 2.1 or Core Curriculum 1120.

Art 22IO, 22II, 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.
B.A. degree program in art history HEGIS code 1003; SED program code 81408

The Art History major is writing intensive.
Department requirements (29-30 credits)
Art I 050 or Core Studies 2.1 or Core Curriculum II 20 or, with permission of the chairperson, Art I I50.
Art 2210 and 3066.

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.

Fulfillment of the foreign-language requirement of the college in French or German. Another language may be substituted with permission of the chairperson.

## B.F.A. degree program in art <br> HEGIS code I002; SED program code 82460

The Art major is writing intensive.
Department requirements (68-69 credits)
Art I 050 or Core Studies 2.1 or Core Curriculum II 20.

Art 22IO, 22II, 3066, 4290,and 429I.
Nine additional credits in art history courses excluding Art 1050, Core Studies 2.1 and Core Cirriculum II20.
Forty-two additional credits in studio art courses subject to the following:
I) 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 fulfilment of the subject-area requirement with permission of the instructor and the chairperson.

Exhibition of the student's art work, following approval by the 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 department for procedures.

## Departmental Minor(s)

## Minor in Art History

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Department requirements (12 Credits)
Twelve credits in art history courses, except Art 1050 or Core Studies 2.1 or Core Cirriculum II20. All courses must be completed with a grade of $C$ or higher.

## Minor in Studio Art

Program requirements ( 12 credits):
Twelve credits of studio art courses. All courses must be completed with a grade of $C$ or higher. Prerequisites for entry to the minor are Core Curriculum II20, Art 2210 and 2211 .

## 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 I 050 or Core Studies 2.1 or Core Curriculum II20.
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: Art $23 \mathrm{I} 0,24 \mathrm{I} 0,25 \mathrm{I} 0,26 \mathrm{I} 0,27 \mathrm{I}, 28 \mathrm{II}$.

## 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.

## Division of Graduate Studies

The Art Department offers the following graduate degree programs: M.A. in art history, M.F.A. in art, and M.A. in education: art teacher (all grades). Some courses may be creditable toward the CUNY doctoral degree.

For information about the art history and doctoral programs, students should consult the deputy chairperson for graduate art history. 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

## ART HISTORY

## 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 I2.5.)

Prerequisite: Art I050 [1.3] or Core Studies 2.1 or Core Curriculum |l20 [1.2].

## 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 I2.I.)

Prerequisite: Art I050 [1.3] or Core Studies 2.I or Core Curriculum | 120 [1.2].

## 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 I2.2 or 12.21.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2].

## ARTD 3014 Early Christian and Byzantine Art

3 hours lecture; 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 I 050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2].

## ARTD 3018 Early 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 | 120 [1.2].

## ARTD 3022 Romanesque Art

3 hours; 3 credits
Exploration of art and architecture of the Medieval West from 1000-I250.

Prerequisite: Art I050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2].

## ARTD 3026 Gothic Art and Architecture

3 hours; 3 credits
Exploration of art and architecture of the Medieval West from 1200-1500.

Prerequisite: Art I050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2].

## 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 I 050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2].

## 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 I9.3 or 19.6.)

Prerequisite: Art I050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2].

## 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 I 050 [1.3] or Core Studies 2.1 or Core Curriculum |l 20 [1.2].

## ARTD $\mathbf{3 0 4 2}$ 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 I9.6 or 19.8.)

Prerequisite: Art IO50 [1.3] or Core Studies 2.I or Core Curriculum | 120 [1.2].

## 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 I3.1.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.I or Core Curriculum | 120 [1.2].

## 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: Core Curriculum II20 or Art 1050.

## 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 I6.2 or 16.4.)

Prerequisite: Art I 050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2].

## ARTD 3062 Realism, Impressionism, and Post-Impressionism

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. Major artists: Courbet, Manet, Degas, Monet, Renoir, Cezanne, Van Gogh, Gauguin. (Not open to students who have completed Art 16.5.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.I or Core Curriculum | 120 [1.2].

## 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 I 5.2.)

Prerequisite: Art 1050 [1.3] or Core Studies 2. I or Core Curriculum | 120 [1.2].

## ARTD 307 I Modern Sculpture

3 hours; 3 credits
Art of various European and American sculptors from the late nineteenth century to the present. Major sculptors: Rodin, Brancusi, 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].

## 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 | 20 [1.2].

## ARTD 3089 Women in Modern Art

3 hours; 3 credits
Exploration of the changing image and role of women in nineteenthand 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 I 5.6.)

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2] or Women's Studies I0.8.

## ARTD 3094 Contemporary Art

3 hours; 3 credits
Twentieth-century art since World War II from Abstract Expressionism to the present. Contemporary art exhibited in New York City galleries and museums. Major movements: Pop Art, Minimalism, Conceptual Art, Post-Modernism. Major artists: Pollock, de Kooning, Johns, Warhol. (Not open to students who have completed Art I5.3.)

Prerequisite: Art 1050 [I.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2].

## 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: Core Curriculum II 20 or Core Studies I.2.

## ARTD 3124 Foundations of Islamic Art

3 hours lecture; 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.

Prerequisite: Art I 050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2].

## 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 II 20 [1.2].

ARTD 3149 The Art and Architecture of New Spain and the Andes, I492-I82I
3 hours, 3 credits
Examination of art and architecture of the former Spanish Viceroyalties of New Spain (Mexico), from I521-1821, and the Andes, from c. 1534-I820.

Prerequisite: Art I 050 [1.3] or Core Studies 2.1 or Core Curriculum II 20 [1.2].

## ARTD 315 I 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: Core Curriculum II 20 or Art I 050

## Architecture

## ARTD 3075 Architecture from I900 to 1939

3 hours; 3 credits
Major personalities and developments in the architecture of Europe and the United States. Major architects: Wright, Gropius, Mies van der Rohe, Taut, Le Corbusier, Aalto. Major movements: Functionalism, Futurism, Constructivism, Expressionism, the Bauhaus movement, de Stijl.

Prerequisite: Art I050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2].

## ARTD 3079 Architecture from World War II to the Present

3 hours; 3 credits
Major personalities and developments in the architecture of Europe, Asia, and the United States. Major architects: Mies van der Rohe, Wright, Le Corbusier, Aalto, Kahn, Isozaki, Gehry. Major movements: the new Brutalism, utopian visions, Venturi, Post-Modernism, Rationalism, Deconstructionism.

Prerequisite: Art I 050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2].

## 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 | | 20 [1.2].

## ARTD 3160 History of Architecture: Renaissance through Nineteenth Century

3 hours; 3 credits
Exploration of the history of architecture in Europe and the United States from the Renaissance through the 19th Century

Prerequisite: Art I 050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2].

ARTD 3161 History of Architecture: Modern through Contemporary

3 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 I050 [1.3] or Core Studies 2.1 or Core Curriculum II 20 [1.2].

## 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 I 050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2].

## ARTD 3164 Architecture and Urban Design in New York City

3 hours; 3 credits
Study of New York City's monuments and infrastructure.
Contextualization of the city's built environment within architectural discourse

Prerequisite: Art I050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2].

## 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 I050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2].

## 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 I 050 [1.3] or Core Studies 2.1 or Core Curriculum II 20 [1.2] and three additional credits in art history.

## 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 470 I [70.I]. (Not open to students who have previously received credit for archaeological fieldwork.)

Prerequisite: Art I050 [1.3] or Core Studies 2.1 or Core Curriculum | 120 [1.2] or Art 21 or Anthropology 240। [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 I050 [1.3] or Core Studies 2.1 or Core Curriculum I 120 [1.2] and six additional credits in art history courses.

## ARTD 4150 Seminar: Methods in Art History

3 hours; 3 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. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: Art 1050 [1.3] or Core Studies 2.1 or Core Curriculum 1120 [1.2] and three additional credits in art history.

## 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, supenvised by a faculty member, on an approved topic. Weekly conference. Thesis or report. (Art 5I50 [83.10] is not open to students who have completed Art 83.)

Prerequisite: Art I050 [1.3] or Core Studies 2.1 or Core Curriculum I I 20 [I.2] and twelve additional credits in art history, 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 22 IO Basic Design, Drawing, and Color

I hour recitation, I 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 II 20 [1.2].

## ARTD 22II Basic Three-Dimensional Design

I hour recitation, I hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Introduction to the elements of three-dimensional design in a basic workshop. Development of expressive forms in various materials and the use of hand tools for the general student and the art major. (Not
open to students who have completed Art 27 or 51 .)
Prerequisite or corequisite: Art I 050 [1.3] or Core Studies 2.1 or Core Curriculum II 20 [1.2].

## Drawing

## ARTD 2310 Drawing I

I hour recitation, I 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: Art 25 or 2210 [25.1I].

## ARTD 23II Drawing II

I hour recitation, I hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 2310 [26.1 I]. Abstract and figurative expression and composition. (Not open to students who have completed Art 33.6 or 33.7.)

Prerequisite: Art 26 or 2310 [26.1I].

## ARTD 2320 Figure Drawing I

I hour recitation, I 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 26 or 2310 [26.11].

## ARTD 3321 Figure Drawing II

I hour recitation, I hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 2320 [26.2I]. Media-expressive interpretation of the human figure using selected drawing materials. (Not open to students who have completed Art 34.4.)

Prerequisite: Art 2320 [26.2I] or 34.3.

## ARTD 3350 Artistic Anatomy

I hour recitation, I hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 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 26 or 2310 [26.1I].

## Painting

## ARTD 24 IO Painting I

I hour recitation, I 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 .)

Prerequisite: Art 25 or 2210 [25.1I].

## ARTD 24II Painting II

I hour recitation, I hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 24 IO [26.5I]. 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 [26.5I] or 40.1.

## ARTD 3412 Painting III

I hour recitation, I hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 24II [26.52]. Advanced problems and concepts in painting. (Not open to students who have completed Art 40.3.)

Prerequisite: Art 24।I [26.52] or 40.2.

## Sculpture

## ARTD 25IO Sculpture I

I hour recitation, I hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Introduction to creative sculpture practice and techniques; to include plaster and clay. (Not open to students who have completed Art 51.I.)

Prerequisite: Art 2211 [25.12] or 27.

## ARTD 25 I I Sculpture II

I hour recitation, I hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 2510 [30.1 I]. Advanced projects in creative sculpture and theory. (Not open to students who have completed Art 52.1.)

Prerequisite: Art 25 IO [30.1I] or 5 I .1 .

## ARTD 2520 Wood Sculpture I

I hour recitation, I 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.I.)

Prerequisite: Art 2211 [25.12] or 27.

## ARTD 2521 Wood Sculpture II

I hour recitation, I hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 2520 [31.1 I]. Advanced sculptural techniques and concepts. Creative development of figurative and non-figurative sculptural form in wood. (Not open to students who have completed Art 54.2.)

Prerequisite: Art 2520 [3I. II] or 54.I.

## ARTD 2530 Metal Sculpture I

I hour recitation, I 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. Methods of joining and forming. (Not open to students who have completed Art 55.I.)

Prerequisite: Art 2211 [25.12] or 27.

## ARTD 253I Metal Sculpture II

I hour recitation, I hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 2530 [32.1 I]. Advanced concepts of form and space. Creative development of representational and abstract form in metal. (Not open to students who have completed Art 55.2.)

Prerequisite: Art 2530 [32.1 I] or 55.I.

## ARTD 2540 Ceramics I

I hour recitation, I 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 pottery design, firing, and glazing methods. (Not open to students who have completed Art 53.I.)

Prerequisite: Art 2211 [25.12] or 27.

## ARTD 254I Ceramics II

I hour recitation, I hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 2540 [33.1 I ]. Advanced ceramics projects and firing and glazing techniques. (Not open to students who have completed Art 53.2.)

Prerequisite: Art 2540 [33.1 I] or 53.I.

## Printmaking

## ARTD 2610 Printmaking: Relief and Woodcut

I hour recitation, I hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 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.I.)

Prerequisite: Art 25 or 2210 [25.1I].

## ARTD 26 II Printmaking: Lithography

I hour recitation, I hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 2610 [35.1 I]. Creation of images using advanced relief and planographic techniques, including lithography. (Not open to students who have completed Art 67.2.)

Prerequisite: Art 2610 [35.1I] or 67.1.

## ARTD 2630 Printmaking: Etching I

I hour recitation, I hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Creative development of visual form using all etching techniques.
(Not open to students who have completed Art 66.)
Prerequisite: Art 2210 [25.11] or 26.

## ARTD 263 I Printmaking: Etching II

I hour recitation, I 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.I.)

Prerequisite: Art 2630 [35.2I] or 66.

## ARTD $\mathbf{2 6 4 0}$ Screenprinting

I hour recitation, I 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.

Prerequisite: Art 2210

## ARTD 3640 Edition Printing

I hour recitation, I 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 [35.1 I] or 2630 [35.2 I] or 66 or 67.1 or permission of the chairperson.

## Photography

## ARTD 27 IO Photography I

I hour recitation, I 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.I.)

Prerequisite: Art 25 or 2210 [25.1I].

## ARTD 27II Photography II

I hour recitation, I 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 45.1 or 2710 [45.10].

## ARTD 2723 Digital Photography

I hour recitation, I 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.

## ARTD 3712 Photography III

I hour recitation, I hour lecture, 2 hours laboratory, a minimum of 4 hours independent work§; 3 credits
Continuation of Art 27II [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 27 II [45.20].

## ARTD 3750 Workshop in the History of Photography

I hour recitation, I 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 45.1 or 2710 [45.10].

## Digital art

## ARTD 28 II Introduction to Digital Art

I hour recitation, I 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.

Prerequisite: Art 2210 [25.1 I].

## ARTD 2812 Multimedia and Two-Dimensional Animation

I hour recitation, I 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 28 II [48.1 I].

## ARTD 2820 Digital Video

I hour recitation, I hour lecture, a minimum of 4 hours independent work§; 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 28| | [48.1 I].

## ARTD 2821 Three-Dimensional Graphics and Animation

I hour lecture, I hour recitation, a minimum of 4 hours independent work§; 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 28|| [48.1 I].

## ARTD 3812 Internet Art and Design

I hour recitation, I 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 [3.1]. (Not open to students who are taking or have completed Computer and Information Science 3800 [13.2] or 3630 [52].)

Prerequisite: Art 281। [48.1 I].

## General and combined media

## ARTD 3450 Workshop in New Materials

I hour recitation, I 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 429I 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.

Prerequisitie: Art 4290, or permission of the chairperson.

## Independent work and special topics

## ARTD 4264 Internships in the Visual Arts II

Minimum of 9 hours conference and independent work§; 3 credits Internships in artistic vocations and in public service agencies in the arts.

Prerequisite: Art 4920 [72.10].

## ARTD 4270 Special Topics in Studio Art I

I hour recitation, I 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 427 I Special Topics in Studio Art II

I hour recitation, I 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 4920 Internships in the Visual Arts I

Minimum of 9 hours conference and independent work§; 3 credits Internships in artistic vocations and in public service agencies in the arts.

Prerequisite: Permission of the chairperson.

## 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 495I 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 [73.1 I] 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 $2210,221 \mathrm{I}, 23 \mathrm{I} 0$, and 23 II , 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 597 I 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 86.1 or 5970 [86.10] 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 86.2 or 5971 [86.20] 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 86.3 or 5972 [86.30] 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 II50 Masterpieces of Non-Western Art
ARTD 3157
American Art from the Colonial Period through the Civil War
ARTD 2801 Visual Communication I

## Biology

Department office: 200 Ingersoll Hall Extension
Phone: 718.95I.5396

## Full-time Faculty

Professors: Gavin, Lipke, Polle, Quadri, Tramontano
Associate Professors: Basil, Forest, He, Muth, Nishiura, Singh
Assistant Professors: Forlano, Ikui, Saxena, Studamire
Lecturer: McEntee

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.

## Core curriculum

The Department of Biology participates in the College's core curriculum through Core Curiculum I321.

## B.A. degree program in biology HEGIS code $0401 ;$ SED program code 01985

## Department requirements (35-41.5 credits)

To enroll in any of the following courses--Biology I002, 2074, 207I or 2072W, 2002 or 2002 W and Biology 3004 --students must have completed the appropriate pre- or co-requisite 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 I 00 I and I 002 in all degree requirements.

One of the following biology sequences, a), b), c), or d).
a) All of the following: Biology I07I or 40 I9, I072, 2073, 3003, 3006 or $3007 \mathrm{~W}, 30 \mathrm{II}$.

All of the following: Biology 207I or 2072W, 2074, 3004.
At least 6 credits of the following: Biology 400 I, 4002, 40 II, 40 I 0 or Computer and Information Science 28I0, Biology 200 I, 2002 or 2002W, 20 I 0 , 2020 or Psychology 26 I 0 , Biology 40 I2, 40 I3, 40 I5, $4016,4022,3083,5020$, Interdisciplinary Studies 410 I or 4 I02, Chemistry 4570 or 457 I or other advanced courses approved by the chairperson or deputy chair for advising.
b) All of the following: Biology I00I, I002, 3003, 3004, 3006 or $3007 \mathrm{~W}, 30$ I I.

At least 8 credits of the following: Biology 200I, 2002 or $2002 \mathrm{~W}, 400 \mathrm{I}, 4002,40 \mathrm{II}, 207 \mathrm{I}$ or $2072 \mathrm{~W}, 40 \mathrm{I} 0$ or Computer and Information Science 28 IO , Biology $20 \mathrm{I} 0,2020$ or Psychology 26 IO , Biology $40 \mathrm{I} 2,40 \mathrm{I} 3,40 \mathrm{I} 5,40 \mathrm{I} 6,4022,3083,5020,500 \mathrm{I}$ or 50 I 0 or 5003 W or 50 I 4 W or Interdisplinary Studies 410 or 4102 , Chemistry 4570 or 457 I or other advanced courses approved by the chairperson or deputy chair for advising.
c) All of the following: Biology I002, I07I, I072, 3003, 3004, 3006 or $3007 \mathrm{~W}, 30 \mathrm{II}$.

At least 8 credits of the following: Biology 200I, 2002 or $2002 \mathrm{~W}, 400 \mathrm{I}, 4002,40 \mathrm{II}, 207 \mathrm{I}$ or $2072 \mathrm{~W}, 40 \mathrm{I} 0$ or Computer and Information Science 28 I , Biology 20IO, 2020 or Psychology 26 I , Biology $40 \mathrm{I} 2,40 \mathrm{I} 3,40 \mathrm{I} 5,40 \mathrm{I}, 4022,3083,5020,500 \mathrm{I}$ or 50 I 0 or 5003 W or 50 I 4 W or Interdisplinary Studies 410 I or 4102 , Chemistry 4570 or 457 I or other advanced courses approved by the chairperson or deputy chair for advising.
d) All of the following: Biology I00I, 2073, 2074, 3003, 3004, 3006 or $3007 \mathrm{~W}, 30 \mathrm{II}$.

At least 8 credits of the following: Biology 200I, 2002 or $2002 \mathrm{~W}, 400 \mathrm{I}, 4002,40 \mathrm{II}, 207 \mathrm{I}$ or $2072 \mathrm{~W}, 40 \mathrm{I} 0$ or Computer and Information Science 2810 , Biology 20I0, 2020 or Psychology 26I0, Biology $4012,4013,4015,4016,4022,3083,5020,500 \mathrm{I}$ or 5010 or 5003 W or 5014 W or Interdisplinary Studies 410 I or 4102 , Chemistry 4570 or 457 I or other advanced courses approved by the chairperson or deputy chair for advising.

One of the following chemistry sequences, a), b), c), or d):
a) (Chemistry I 100, (or both 1050 and 2050), and 2500.
b) (Chemistry II00, or (both 1050 and 2050), and 2100 and either 3510 or (both 35 II and 35 I ).
c) (Chemistry I 100, or (both 1050 and 2050), 2100,3510 , or (both 3511 and 3512 ), and either 3520 or (both 3521 and 3522).
d) (Chemistry I 100 , or (both 1050 and 2050), and 2100 and 2500.

Mathematics 1201.

Department recommendations
Chemistry 35 I 0 (or both 35 II and 35 I ) and 3520 or (both 352 I 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 18 credits in advanced courses in the Biology department or allowed electives in other departments as described above (not including Biology I07I and I072 OR Biology I00I). These I8 credits must be completed with a grade of C - or higher in each course, and 10 or more credits must be completed at Brooklyn College. Specific course requirements for a B.A. degree are described above.

## B.A. degree program in adolescence education: biology teacher HEGIS code 0401.01 ; SED program code 26814

The Department of Biology and the Department of Secondary Education jointly offer a program for students who plan to teach biology in grades 7 through 12. Additional information may be obtained from the School of Education or the Department of Biology. Students should consult a counselor as early as possible to plan their program.

Adolescence education (grades 7-12) and special subject programs are writing intensive.
To enroll in any of the following courses--Biology I002, 2074, 207 I or $2072 \mathrm{~W}, 3002$, and 3004 ,--students must have completed the appropriate preor co-requisite 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 I 081 before fall 2010 may substitute them for Biology 100 I and I 002 in all degree requirements.

Program requirements (59-75.5 credits):
One of the following biology sequences, a), b), c), or d).
a) All of the following: Biology I07I or 40 I9, I072, 2073, 3006 or $3007 \mathrm{~W}, 300 \mathrm{I}, 3003,20 \mathrm{II}$.

All of the following: Biology 2074, 207I or 2072W, 3002 or 3002W, 3004.
At least 3 credits of the following: Biology 400I, 4002, 401I, 4010 or Computer and Information Science 28I0, Biology 2010,2020 or Psychology 2610 , Biology $4015,4016,40 \mathrm{I} 3,4022,3083,5020$, or Interdisciplinary Studies 410 I or 4102 , Chemistry 4570 or 457 I.
b) All of the following: Biology I00I, I002, 300 I, 3002 or $3002 \mathrm{~W}, 3003,3004,3006$ or $3007 \mathrm{~W}, 20 \mathrm{II}$.

At least 5 credits of the following: Biology $400 \mathrm{I}, 4002,40 \mathrm{II}, 207 \mathrm{I}$ or $2072 \mathrm{~W}, 4010$ or Computer and Information Science 28 I 0 , Biology 2010,2020 or Psychology 26 I 0 , Biology $40 \mathrm{I} 5,40 \mathrm{I} 6,40 \mathrm{I} 3,4022,3083,5020,500 \mathrm{I}$ or 50 I 0 or 5003 W or 50 I 4 W or Interdisciplinary Studies 4 IO or 4 I 02 , Chemistry 4570 or 4571.
c) All of the following: Biology I002, I07I, I072, $300 \mathrm{I}, 3002$ or $3002 \mathrm{~W}, 3003,3004,3006$ or $3007 \mathrm{~W}, 20 \mathrm{II}$.

At least 5 credits of the following: Biology 400 I, 4002, 40 II, 207 I or $2072 \mathrm{~W}, 4010$ or Computer and Information Science 28 I0, Biology 2010,2020 or Psychology 26 I 0 , Biology $40 \mathrm{I} 5,40 \mathrm{I} 6,40 \mathrm{I} 3,4022,3083,5020,500 \mathrm{I}$ or 50 I 0 or 5003 W or 50 I 4 W or Interdisciplinary Studies 4 IO I or 4 I 02 , Chemistry 4570 or 4571.
d) All of the following: Biology I00I, 2073, 2074, 300 I, 3002 or $3002 \mathrm{~W}, 3003,3004,3006$ or $3007 \mathrm{~W}, 20 \mathrm{II}$.

At least 5 credits of the following: Biology 400 I, 4002,40 II, 207 I or $2072 \mathrm{~W}, 4010$ or Computer and Information Science 28 I0, Biology 2010,2020 or Psychology 3600 , Biology $40 \mathrm{I} 5,40 \mathrm{I} 6,40 \mathrm{I} 3,4022,3083,5020,500 \mathrm{I}$ or 50 IO or 5003 W or 50 I 4 W or Interdisciplinary Studies 4 IOI or 4 IO , Chemistry 4570 or 457 I.

One of the following chemistry sequences, a), or b), or c), or d):
a) (Chemistry 1100 , or 1050 and 2050), and 2500.
b) (Chemistry 1100 , or 1050 and 2050), and 2100 and 3510 .
c) (Chemistry I 100, or 1050 and 2050), $2100,35 \mathrm{I} 0$, and 3520.
d) (Chemistry 1100 , or 1050 and 2050), and 2100 and 2500.

One of the following courses in Physics: Physics 1100 , or 111 , or 1112 , or 1150 , or Core Curriculum I331
Three credits in Geology or Earth and Environmental Sciences or Core Curriculum I332.
Mathematics 1201 .
The following pedagogical courses in the Department of Secondary Education: SEED 200I, 2002, 340I, 3402, 4404, 44I0, 3456 (total of 24 credits):
This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term: SEED 200I, 2002, 340I, 3402 (I2 credits).
The appropriate 5-credit course in student teaching: SEED 4404: Seminar on Methods of Teaching Science, Student Teaching I
The appropriate 4-credit course in student teaching: SEED 44I0: Advanced Seminar on Methods of Teaching Science, Student Teaching II
Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than English qualifies students for New York State initial certification in adolescence education for grades 7 through 12.

Completion of a special subjects program as part of a major in music education or physical education qualifies students for New York State initial certification in special subjects for all grades.

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 SEED 3454.
Students must complete 24 credits in the Department of Secondary Education as specified above.


#### Abstract

Admission requirements and academic standing Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take SEED 200I, 2002, 340I or 3402; an average of 2.75 in SEED 200 I and 2002 is required to continue to SEED 3402; to take SEED 44 I 3 or $440 \mathrm{I}-4406$, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take SEED 4407-4406, students must earn a B- or higher in SEED 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes SEED 4407-44I2 prior to SEED 4401-4406 must earn a B- or better grade in SEED 4407-44 I2 to take SEED 440 - 4406 ).


[^3]
## B.S. degree program in biology <br> HEGIS code 040 I; SED program code 01984

Department requirements ( $48-50.5$ credits)
To enroll in any of the following courses--Biology I002, 2074, 207 I or $2072 \mathrm{~W}, 2002$ or 2002 W , and 3004 --students must have completed the appropriate pre- or co-requisite 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 I 080 and I 08 I before fall 2010 may substitute them for Biology 1001 and 1002 in all degree requirements
One of the following biology sequences: a), b), c), or d):
a) All of the following: Biology 2073, 1072, 107 I or 4019,3006 or $3007 \mathrm{~W}, 3003,30 \mathrm{II}$.

All of the following: Biology 2074, 207 I or 2072W, 3004.
At least 9 credits of the following: Biology 200I, 2002 or 2002W, 400I, 4002, 40II, 4010 or Computer and Information Science 28I0, Biology 20I0, 2020 or Psychology 2610 , Biology $4015,4016,4012,4013,4022,3083,5020,500$ or 5010 or 5003 W or 5014 W or Interdisciplinary Studies 4101 or 4102 , Chemistry 4570 or 457 I or other advanced courses approved by the chairperson or deputy chair for advising.
b) All of the following: Biology I00I, 1002, 3003, 3004, 3006 or $3007 \mathrm{~W}, 30$ II.

At least 12 credits of the following: Biology 200I, 2002 or $2002 \mathrm{~W}, 400 \mathrm{I}, 4002,401 \mathrm{I}, 207 \mathrm{I}$ or $2072 \mathrm{~W}, 4010$ or Computer and Information Science
 Interdisciplinary Studies 410 I or 4102 , Chemistry 4570 or 457 I, or other advanced courses approved by the chairperson or deputy chair for advising.
c) All of the following: Biology 1072, 107I, 1002, 3003, 3004, 3006 or $3007 \mathrm{~W}, 30$ II.

At least I2 credits of the following: Biology 200I, 2002 or $2002 \mathrm{~W}, 400 \mathrm{I}, 4002,401$ I, 207 I or $2072 \mathrm{~W}, 4010$ or Computer and Information Science 2810 , Biology 2010,2020 or Psychology 2610 , Biology $4015,4016,4012,4013,4022,3083,5020,5001$ or 5010 or 5003 W or 5014 W or Interdisciplinary Studies 410 I or 4102 , Chemistry 4570 or 457 I, or other advanced courses approved by the chairperson or deputy chair for advising.
d) All of the following: Biology I00I, 2073, 2074, 3003, 3004, 3006 or $3007 \mathrm{~W}, 30$ I I.

At least 12 credits of the following: Biology 200I, 2002 or $2002 \mathrm{~W}, 400 \mathrm{I}, 4002,40 \mathrm{II}, 207 \mathrm{I}$ or 2072 W , Biology $20 \mathrm{I} 0,40 \mathrm{I} 0$ or Computer and Information Science 2810 , Biology 20I0, 2020 or Psychology 26IO, Biology $4015,4016,4012,4013,4022,3083,5020,500$ I or 5010 or 5003 W or 5014 W or Interdisciplinary Studies 410 I or 4102 , Chemistry 4570 or 457 I, or other advanced courses approved by the chairperson or deputy chair for advising.

All of the following: Chemistry II 00 or both 1050 and 2050, 2100,3510 or both 3511 and 3512,3520 or both 3521 and 3522 . Mathematics 1201 .
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 in items a), b), c) or d) above (not including Biology IO7I and IO72 OR I00I). 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 $\left(^{*}\right)$ symbol in the Department of Health and Nutrition Sciences.
C) ---Anthropology and Archaeology 220I, 3230, 3240, 3250, 3260, 3199, 4665.
---Core Studies 5, 5.I, 5.2, 7.I, 7.2, 8.I , 8.2.
---Core Curriculum 1300 through 1399.
---Core Curriculum 3301 through 3399.
---Economics 3400, 44I0, 34I0, 4422.
---Philosophy 3203, 3204, 360 I.
---Physical Education 327I, 3275, 3023, 4229, 425 I.
---Sociology 2701.

## Departmental Minor(s)

## Minor in Biology

Department Requirements
Both Biology IOOI and I002, or all of the following courses: Biology I07I or 40I0, I072, 207I, 2073, 2074.
Any two of the following elective courses: Biology $400 \mathrm{I}, 4002,40 \mathrm{I} 0$ or Computer and Information Science 28 I 0, Biology 200I, 40II,40I2, 40I6, 3006 or $3007 \mathrm{~W}, 300$ I, 3003, 40 I 3, 40I5, 4022, 3083, 5020, 20 I 0; Biology 2020 or Psychology 26I 0, Biology 30 II.

Each course must be completed at Brooklyn College with a grade of C- or higher.

## Minor in Neuroscience

Program Requirements: Interdisciplinary minor, offered by the departments of Psychology and Biology; requiring $|8-2|$ credits including 12 advanced credits each completed with a grade of C- or higher. At least 6 of the advanced credits must be completed at Brooklyn College. Two of the advanced electives courses cannot be used to satisfy the requirements of both the minor and the major. Students who do not major in psychology are strongly encouraged to also take Psychology 3400 or Mathematics 450 I.

## Courses:

All of the following:
Psychology 2600 Mind, Brain, and Behavior;
Psychology 2610 Neurobiology / Biology 2020 Neurobiology
Psychology 3600 Introduction to Physiological Psychology
Three of the following:
Psychology 3660 Drugs and Behavior;
Psychology 3670 Comparative Psychology;
Psychology 3680 Human Neuropsychology;
Psychology 4690 Special Topics in Biopsychology (cross-listed with Biology 5020); requires approval of the Chair of Psychology or Biology.
Note that the prerequisite for Psychology 2600 is one of the following: Psychology I or Psychology I000 or Psychology 40 I9 or Health and Nutrition Sciences 2300 or Physical Education 327I. Therefore, students who otherwise would not take any of these courses will have to complete 21 credits for the minor.

## 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 3I60, 3I55; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 330 I, [76. I], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 3140, 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 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 Studies 3328
d. Media and Communications in a Global Context

Anthropology 3I80; Film 213I; Philosophy 3315; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; 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 500 I, 5002 or 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.

## Division of Graduate Studies

The Biology Department offers master of arts degree programs in biology, applied 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. A Graduate Bulletin may be obtained in the Office of Admissions.

## Courses

*Courses marked with an asterisk $\left({ }^{*}\right)$ are not counted toward the requirement of no fewer than 18 credits in advanced courses for majors in this department.

## BIOL * 1001 General Biology I

Hours: 3 lecture, 3 laboratory; Credits: 4 I/2
Systems, ecological and evolutionary biology. Integration of plant and animal form and function with 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: Biology *I 080 [3], or both Biology 1072 [29] and Biology * 071 [34.1]).

## BIOL 1002 General Biology 2

Hours: 3 lecture, 3 laboratory; Credits: 4 I/2
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 [I7.1], or I08। [4].).

Prerequisite and/or co-requisite: Successful completion of Biology I00| [I.5] with a grade of C- or higher, or both Biology I072 [29] and I07I [34. I] with a grade of C- or higher in each course, or by permission of the department; Chemistry *। I 00 [1] or 2050 [ I.2] or Chemistry * 040 [5]. Chemistry * । 00 [I] or 2050 [I.2] or 1040 [5]; may be taken concurrently with Biology I002 [2.5] by permission of the department.

## BIOL *107I Comparative Physiology

2 hours lecture, 2 workshop laboratory; 3 credits
Physiological processes will be compared at the cellular and whole organism levels among a broad variety of organisms ranging from bacteria, plants, and fungi, to animals, including humans.

Prerequisite: Biology *2073 [I7] and I072 [29]

## BIOL *1072 Organismic Biology I, Botany

2 hours; 2 credits
Concepts in the structure, diversity, growth, and development of plants and related organisms. (Not open to students who have completed Biology I I.5.)

## BIOL I50I Human Anatomy and Physiology I

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 and Archaeology 3265, Health and Nutrition Sciences 2302, and Physical Education and Exercise Science 328।.

Prerequisite: I) 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

## BIOL I502 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 and

Archaeology 3266, Health and Nutrition Sciences 2303, and Physical Education and Exercise Science 3285.

Prerequisite: One of the following: Anthropology and Archaeology 3265, Biology I50I, Health and Nutrition Sciences 2302, or Physical Education and Exercise Science 328।.

## BIOL 2001 Organismic Biology II, Zoology

2 hours; 2 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 1002 or both Biology *2073 [I7] and I 072 [29].

## BIOL 2002 Animal Form and Function Laboratory

4 hours; 2 credits
Dissection and microscopic examination of the structure and development of animals.

Prerequisite: Biology 1002 or both Biology 2073 and 1072. Corequisite: Biology 200 I.

## 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 3002.)

Prerequisite: English 1012 and Biology 1002 or both Biology 2073 and 1072.

Corequisite: Biology 200 I

## 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 I002 or *2073 [I7], and Chemistry *2100 [2].

## 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 I00I and I002; or Psychology I000 and one of the following: Psychology 2600, 3600 or Biology I 00 I; or permission from the instructor

## BIOL 207 I Plant Form and Function Laboratory

4 hours; 2 credits
Experiments and examination of the structure, diversity, growth, and development of plants and related organisms. (Not open to students who have completed Biology II.5.)

Prerequisite: Biology I072 [29] and any two of the following: *2073
[I7], 40 I9 [34], 3006 [38], 300। [45], 3003 [52], 20 I। [58]

## BIOL 2072W Organismic Biology of Plants Laboratory

2 hours recitation/lecture, 2 hour lab/writing; 3 credits
Recitations, experiments and demonstrations of the structure, diversity, growth and development of plants. Techniques and standards of scientific writing. Research and observation of selected plants, and write-ups of plant profiles containing personal observations, drawings, cultural uses, history and technical botanical descriptions of selected plants. Writing-intensive course.

Prerequisite: Biology I072 [29], English *। 012 [2].

## BIOL *2073 Cell and Molecular Biology

2 hours; 2 credits
Principles and problems of the structure and functions of cell components. Emphasis will be placed on the molecular composition of cells and on methods of research. (Not open to students who have completed Biology 2010 [35].)

Prerequisite: Chemistry *। 100 [I] or *2050 [I.2] and Biology I07। [34.1] or Biology I 072 [29]

## BIOL 2074 Laboratory in Eukaryotic Cell Biology and Physiology

## 4 hours; 2 credits

Experiments designed around fundamental questions in eukaryotic cell biology and physiology with a strong emphasis on contemporary sophisticated cell and molecular biology techniques. Computer simulations and prerecorded video disks will supplement the experiments.

Prerequisite: Biology *2073 [17]

## BIOL 2080 Genetics

3 hours; 3 credits
Principles and problems of heredity. (Not open to students who have completed Biology 53.)

Prerequisite: Biology I or 108I [4] and Chemistry *2 100 [2].

## BIOL 3003 Microbiology

2 hours; 2 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 I002, or Biology *I 080 [3] and I08। [4], or Biology *2073 [17] and 1072 [29].

## 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 or corequisite: Biology 3003.

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 I002 or both Biology *1080 [3] and I08। [4]P, and permission of the chairperson of Biology or Health and Nutrition.

Prerequisite or corequisite: Biology 3003 [52].

## BIOL 3006 Evolution

2 hours; 2 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.IW] or Biology 4080 [50].)

Prerequisite: Biology 301 I; either a) I002, or b) 2073 and either 1072 or 1071 .

## 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 I 002 or both 2073 and I072, and 30 I I; English 1012.

## BIOL 30II 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 1002 or both Biology 2073 and 1072.

## BIOL 3080 Invertebrate Zoology

2 hours lecture, 4 hours laboratory; 4 credits
Structure, life histories, and phylogeny of the most important invertebrate forms.

Prerequisite: Biology 1002

## BIOL 308I Developmental Anatomy

2 hours lecture, 4 hours laboratory; 4 credits Introduction to structure, development, and phylogeny of vertebrates.

Prerequisite: Biology 1002

## BIOL 3082 Ecology

2 hours lecture, 4 hours laboratory and supervised field work; 4 credits Populations of plants and animals, their relationships to environments and each other. Natural communities, their functions and utilizations. Field and laboratory methods in ecology. Five all-day field trips. (Not open to students who have completed Biology 62.)

Prerequisite: Biology 3006 [38] or 4080 [50].

3 hours lecture, 3 credits
Introduction to the principles of ecology; biology of populations, communities, and ecosystems; basic issues of biodiversity.

Prerequisite: Biology I 002 or all of Biology I 072 [29], 207I [29.1] and I07I; or both Biology 300 I [45] and 3002 [45. I].

## BIOL 4001 Field Studies in Botany

30 hours lecture, 60 hours fieldwork and laboratory work; 4 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 I002 or 1072 [29].

## BIOL 4002 Field Studies in Zoology

30 hours lecture, 60 hours fieldwork and laboratory work; 4 credits Field studies of animals in their natural environments. Laboratory work. Summer session.

Prerequisite: Biology 1002 or 2071 [29.1].

## BIOL 4003 Field and Laboratory Methods in Ecology

4 hours laboratory including supervised fieldwork; 2 credits Introduction to field and laboratory methods in ecology, with focus on nearby ecosystems, including Jamaica Bay. One weekend all-day field trip required. Students work as a research team on field and laboratory projects. Grades based on individual student reports on team projects. (Students registering for Biology 4003 [63.1] must take Biology 3083
[63] concurrently.) (Not open to students who have completed Biology 3082 [62.5].)

Prerequisite: Biology I002 or all of Biology I072 [29], 207I [29. I], I07I; and Biology 300 I
Prerequisite or corequisite: Biology 3002

## BIOL 4010 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 28 IO [I0.33].)

## BIOL 40 I I Molecular Biology of Development

I hour recitation, 3 hours lecture; 4 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 1002 or 2074 [17.1] and Chemistry *2500 [50] or 3510 . The chairperson may waive Chemistry *2500 [50] or 3510 as a prerequisite of Biology 401 I [27.5] for students who received a grade of B or higher in Chemistry *2100 [2].

## 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 3003 or permission of the chairperson.

## 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 3003.

## BIOL 4015 Recombinant DNA Technology

2 hours lecture, I hour recitation; 3 credits
Introduction to recombinant DNA technology. Application to current biological research. Basic biological understanding that supports recombinant DNA laboratory technology.

Prerequisite: Biology 1002 or both 2073 and 2074.

## BIOL 4016 Recombinant DNA Laboratory

4 hours laboratory; 2 credits
Central techniques used in recombinant DNA studies. Gene cloning.

Prerequisite or corequisite: Biology 4015 [55.1] and permission of the instructor.

## BIOL 4019 Animal Physiology

2 hours; 2 credits
Lecture survey of how basic physiological processes are influenced and controlled by the nervous and endocrine systems. The relationships between structure and function will be emphasized. A comparative approach using examples from different groups of vertebrate animals. Those physiological processes that do not come under direct neuroendocrine control will be contrasted with those that do.

Prerequisite: Biology I002 or both Biology *2073 [I7] and I072

## BIOL 4020 Plant Physiology

Lecture 2 hours lecture; 2 credits
Basic topics in plant physiology, including water household,mineral nutrition, respiration, photosynthesis, nitrogen and sulfur fixation, plant hormones and development, plant molecular biology, genetic engineering, and environmental physiology.

Prerequisite: Biology 1002 or all of Biology *2073 [I7], 1072 [29] and I07I [34.I], and Chemistry *II00 [I].

## BIOL 402 I Plant Physiology - Laboratory

4 hours laboratory; 2 credits
Experiments designed to gain better understanding of fundamental questions encountered in plant physiology, covering topics such as water household, transport, photosynthesis, respiration, nitrogen fixation, and secondary metabolism.

Prerequisite: Biology 4020 [36.3].

## BIOL 4022 Biotechnology of Algae

2 hours lecture; 2 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 I002 or 1072 [29] and Chemistry *। 100 [I]

## BIOL 4080 Ecology and Evolution

3 hours; 3 credits
Introduction to ideas and models of evolutionary ecology. Emphasis on natural selection and other processes in explaining structures and functions of populations, communities, ecosystems. (Not open to students who have completed Biology 3006 or 3007 W .)

Prerequisite: Biology 1002

## BIOL 5001 Research I

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent research in an approved area supervised by a faculty member. (Not open to students who are enrolled in Biology 5010 [83.1]-5013 [83.4.])

Prerequisite of 5001 : one of the following: Biology II, II.5, 12, 3080 [2I], 308। [24.I], 3I, 2010 [35], 4I, 4080 [50], 53, 53.5; or any one of the following: Biology 2074 [17.1], 207 I [29.1], 3002 [45.]I, 3004 [52.2]; and permission of the sponsoring faculty member and department chairperson.

## BIOL 5002 Research II

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent research in an approved area supervised by a faculty member. (Not open to students who are enrolled in Biology 5010 [83.1]-83.4.)

Prerequisite of 5002: Biology 500 I [73.I] and permission of the sponsoring faculty member and department chairperson.

## BIOL 5003W Biology Research, writing intensive

Minimum of 9 conference and independent work, 3 credits Writing Intensive Research in Biology in an approved area supervised by a faculty member. (Not open to students who are enrolled in Biology $5010-5014 \mathrm{~W}$ ). Writing intensive course; Biology majors must complete at least one writing intensive W course in the department.

Prerequisites: English 1012; At least one of the following: Biology I001, I002, 2074, 207I, 3002, 3004; and permission of the sponsoring faculty member.

## BIOL 5010 Independent Research I

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent research supervised by a faculty member. Weekly conference. Thesis or report.

Prerequisite of 5010 [83.1]: Biology * 08 । [4]; completion of at least two advanced Biology Department electives with a grade of A or B in each; or any two of the following: Biology 2074 [17.1], 207I [29.1], 3002 [45. I], 3004 [52.2] with a grade of A or B in each; and permission of the instructor and the chairperson.

## BIOL 50 II Independent Research II

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent research supervised by a faculty member. Weekly conference. Thesis or report.

Prerequisite of 501 I [83.2]: Biology 5010 [83.1] and permission of the instructor and the chairperson.

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent research supervised by a faculty member. Weekly conference. Thesis or report.

Prerequisite of 50 I2 [83.3]: Biology 50 I I [83.2] and permission of the instructor and the chairperson.

## BIOL 5013 Independent Research IV

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent research supervised by a faculty member. Weekly conference. Thesis or report.

Prerequisite of 5013 [83.4]: Biology 5012 [83.3] and permission of the instructor and the chairperson.

BIOL 5014W Honors Research in Biology, writing intensive
Minimum of 9 conference and independent work, 3 credits Writing Intensive Independent Honors Research in Biology in an approved area supervised by a 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 500I, 5002, or 5003W.)

Prerequisites: English 1012; Both Biology IOOI and Biology I002, or any two of Biology 107I, 1072, and 2073; and any two advanced biology courses with grades of $B$ or better and permission of the sponsoring faculty member and department chairperson.

## BIOL 5020 Colloquium

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.

Prerequisite: completion of an approved program of advanced Biology Department courses and permission of the chairperson.

## The following inactive course(s) will only be offered if there is sufficient demand:

## Caribbean Studies

Department office: 3103 James Hall
Phone: $718.951 .5000 \times 1772$
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, History, Political Science, Puerto Rican and Latino Studies, and Sociology 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 contribution to the world.

As interdisciplinary dual majors, our students enjoy working with scholars and researchers in varied disciplines who have different perspectives on the impacts of slavery and colonialism on the Caribbean region. The program is further enriched by visiting lecturers and mini-conferences 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 8200 I

Program requirements (I8 credits plus a major in any department of the college)

Students must also complete parts I through 4.
I. Caribbean Studies 100 I.
2. Nine credits from the courses listed below, plus any prerequisite of the courses. The courses must be in three different participating departments. Africana Studies 1040 or 17
Africana Studies 3145/Political Science 3305
Africana Studies 3147
Africana Studies 3240/Comparative Literature 3623/Puerto Rican and Latino Studies 3315
Africana Studies 3340
Africana Studies 3344
History 35I5
History 3517
Political Science 49.6/Puerto Rican and Latino Studies 45I5, 3I25, 4450 or Spanish 48, 49
3. Six additional credits 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 Departments of Africana Studies, History, Political Science, and Puerto Rican and Latino Studies. 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.

## Caribbean Studies

## 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.

## Chemistry

Department office: 359 Ingersoll Hall Extension
Phone: 718.95I.5458

## Full-time Faculty

Professors: Ciszkowska, Davenport, Greer, Levine, Magliozzo, Sanchez-Delgado
Associate Professors: Contel, Dowd, Gibney, Jarzecki, Kobrak
Assistant Professors: Brenner, Juszczak, Murelli
Lecturer: Horowitz

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 Brooklyn College 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 equivalent 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. The department maintains an office library of materials 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.

## Core curriculum

The Department of Chemistry participates in the college's core curriculum through Core Curriculum I 322.

## 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 IIO0 and IO50 are intended for students planning a career in any of the following: the physical, chemical, or biological sciences; engineering; geology; medicine; dentistry; pharmacy; or physical therapy. Students who have taken one year of high school chemistry and who have taken or are enrolled in Mathematics IOII (or IO26) or its equivalent should take Chemistry IIO0. Students who are not prepared for Chemistry 1100 but who have completed intermediate high school algebra 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 selected courses, including instrumental analysis (Chemistry 3420),

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inorganic chemistry (Chemistry 4760), and biochemistry (Chemistry 4570 or 457I) 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.

## B.A. degree program in chemistry HEGIS code 1905; SED program code 02082

## Department requirements (49-53 I/2 credits)

Chemistry I 100 or both Chemistry 1050 and 2050.
All of the following: Chemistry 2100,3410 or $3415 \mathrm{~W}, 35 \mathrm{IO}$ or both 35 II and $35 \mathrm{I} 2,3520$ or both 352 I and 3522,4600 or 46 I 0 .
At least five credits chosen from the following: Chemistry 2700, 3420, 4530, 4550, 4570, 457I, 4580, 458I, 4620, 4640, 4720, 4760, 476I, either 4780 or 4790; Biology 2073 and 2074 (or Biology I7 and I7.I).

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 I20I and I206.

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.A. degree program in adolescence education: chemistry teacher HEGIS code 1905.01; SED program code 26813

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.

Program requirements (7I-84 I/2 credits):
Chemistry II 00 or both Chemistry 1050 and 2050.
All of the following: Chemistry $2 \mathrm{I} 00,2700,34 \mathrm{IO}$ or $34 \mathrm{I} 5 \mathrm{~W}, 3450,2500$ or 35 I 0 and 3520 or 35 II and 35 I 2 and 352 I and 3522,4600 or 46 I 0 .
One of the following physics sequences, a), or b), or c):
a) Physics 1100 (or Physics $1||\mid$ and $|| \mid 2$ ) and 2100 .
b) Physics 1150 and 2150.
c) Physics 1150 and 2100 .

One of the following biology sequences, a), or b):
Biology I001 or I080 and Biology I002 or I08।
Biology 2073 and 2074.
The following mathematics sequence: Mathematics I20I and I206.
The following pedagogical courses in the Department of Secondary Education: SEED 200I, 2002, 340I, 3402, 4404, 44I0, 3456 (total of 24 credits):
This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term: SEED 200I, 2002, 340I, 3402 (I2 credits).
The appropriate 5-credit course in student teaching: SEED 4404 Seminar on Methods of Teaching Science, Student Teaching I
The appropriate 4-credit course in student teaching: SEED 4410 Advanced Seminar on Methods of Teaching Science, Student Teaching II
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department.
Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking SEED 4410 .

Students must complete 24 credits in the Department of Secondary Education as specified above.

Admission requirements and academic standing
Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take SEED 200I, 2002, 340I or 3402; an average of 2.75 in SEED 200 I and 2002 is required to continue to SEED 340 I and/or 3402; to take SEED 44 I 3 or $440 \mathrm{I}-4406$, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take SEED 4407-44I2, students must earn a B- or higher in SEED 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes SEED 4407-44I2 prior to SEED 440I-4406 must earn a B- or better grade in SEED 4407-44I2 to take SEED 440I-4406.

## B.S. degree program in chemistry HEGIS code 1905; SED program code 02084

Department requirements (67-70 I/2 credits)
Chemistry I 100 or both Chemistry I 050 and 2050.
All of the following: Chemistry $2100,34 \mathrm{IO}$ or $34 \mathrm{I} 5 \mathrm{~W}, 35 \mathrm{I} 0$ or both 35 II and $35 \mathrm{I} 2,3520$ or both 352 I and $3522,46 \mathrm{I} 0,4620$.
At least nine credits chosen from the following: Chemistry 2700, 3420, 4530, 4550,4570, 457I, 4580, 458I, 4640, 4720, 4760, 476I, either 4780 or 4790; Biology 2073 and 2074 (or Biology 17 and I7.I).
One of the following physics sequences a) or b) or c):
a) Physics 1100 (or Physics 1 III and $11 \mid 2$ ) and 2100 .
b) Physics 1150 and 2150.
c) Physics 1150 and 2100 .

Computer and Information Science 1110 .
One of the following mathematics sequences a) or b):
a) Mathematics 1201 and 1206 and 2201 .
b) Mathematics 3.20 and 4.20 or 1211 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 and Archaeology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470, 4665.
---Core Studies 5, 5.I, 5.2, 7.I, 7.2, 8.I, 8.2.
----Core Curriculum 1300 through 1399
----Core Curriculum 330I through 3399
---Economics 3400, 44I0, 34I0, 4422.
---Philosophy 3203, 3204, 3231, 3232, 3422, 3423, 360I, 3605, 3610.
---Physical Education 3023, 327I, 3275, 328I, 3285, 4229, 425 I.
---Sociology 2701.

## Departmental Minor(s)

## Minor in Biochemistry

## Department Requirements

Biology 2073;

Chemistry IIO0 or both 1050 and 2050;
Chemistry 2100;
Chemistry 34 I 0 or 34 I 5 W or Biology 2074 or Biology I002;
Chemistry 3510 or both 35 II and $35 \mathrm{I} 2,3520$ or both 352 I and 3522,4570 ;
Chemistry 4580 or 458 I.

## Minor in Chemistry

Department Requirements
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.

## Division of 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. A Graduate Bulletin may be obtained online.

## Courses

*Courses marked with an asterisk $\left(^{*}\right)$ 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.

## 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.

Prerequisite: Core Curriculum 1321 [3.2I] or 1322 [3.22].

## CHEM * 1040 General Chemistry for Health-related <br> \section*{Professions}

I 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 *। 100 [1] or 2050 [1.2] or the equivalent.)

Prerequisite: one year of high school algebra.

## CHEM * 1050 General Chemistry IA

## 3 hours lecture; 3 credits

Introduction to the principles of chemistry with more introductory material than is covered in Chemistry *। 100 [I]. Chemistry *। 050 [I.I] and *2050 [1.2] constitute a two-term sequence intended for students who are not prepared for Chemistry *। 100 [I]. (Not open to students who are enrolled in or who have completed Chemistry *। 100 [I].)

Prerequisite: a passing grade in intermediate high school algebra or equivalent.

## CHEM *II00 General Chemistry I

I 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 *। 050 [I.I])

Prerequisite: a passing grade in high school chemistry. Prerequisite or corequisite: Mathematics *101| [2.9] or 1026 [2.92]; or assignment by the Department of Mathematics to Mathematics *I201 [3.3].

## CHEM * 2050 General Chemistry IB

3 hours lecture, 3 hours laboratory; $41 / 2$ credits
Continuation of Chemistry * 1050 [1.1]. (Not open to students who are enrolled in or who have completed Chemistry * I 100 [I].)

Prerequisite: Chemistry *I 050 [I.I]

## CHEM *2100 General Chemistry II

I hour recitation, 3 hours lecture, 3 hours laboratory; 5 credits Continuation of Chemistry *। 100 [I].

Prerequisite: Chemistry *। 100 [1] or 2050 [1.2].

## CHEM *2500 Organic Chemistry for Health-related

 Professions
## I 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 35 I 0 [5I] or both 35 II and 35 I .)Prerequisite: Chemistry *। 100 [1] or 2050 [1.2] or 1040 [5]

## 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 *2 100 [2].

## CHEM 34IO 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 34 I 5 W [4IW].)

Prerequisite: Chemistry *2 100 [2].

## CHEM 34I5W Analytical Chemistry

3 hours lecture, 4 hours laboratory, I 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 [4I].)

Prerequisite: Chemistry *2100 [2] 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 34 IO [4I] or 34 I 5 [4IW]; and Physics *2 100 [2] or 2150 [2.5].

## CHEM 3450 Chemistry Teaching Laboratory Management

Hours: 2 lecture, 4 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 35 IO [ 5 I ] or both 35 II and 35 I 2 ) and one semester of analytical chemistry (Chemistry 34 IO [4I] or 34 I 5 W [4IW])

## CHEM 3510 Organic Chemistry I

I 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 35 IO [5I] (or both Chemistry 35 II and 35 I 2 ) and 3520 [52] (or both 352 I 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 *2 100 [2].

## CHEM 35II Organic Chemistry I Lecture

3 hours lecture, I 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
Prerequisite or co-requisite: Chemistry 3512

## 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 35 I0 will lose credit for Chemistry 2500 and 35 I 0 upon successful completion of this course.)

Prerequisite: Chemistry 2100
Prerequisite or co-requisite: Chemistry 351।

## CHEM 3520 Organic Chemistry II

I hour recitation, 2 hours lecture, 4 hours laboratory; 5 credits Continuation of Chemistry 35 IO [5I] or both 35 II and 35 I 2 .

Prerequisite: Chemistry 35 IO [5I] or both 35 II and 35 I 2 .

## CHEM 352I Organic Chemistry II Lecture

3 lecture, I recitation; 3 credits
Continuation of Chemistry 35 II . Different classes of compounds, including biomolecules and polymers, with a greater emphasis on reaction mechanisms and synthesis. A second 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 Chemistry 3520 will lose credit for Chemistry 2500 and 3520 upon successful completion of this course.)

Prerequisite: Chemistry 35 II and Chemistry 35 I2; or Chemistry 35 IO Prerequisite or co-requisite: Chemistry 3522

## CHEM 3522 Organic Chemistry II Laboratory

4 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 or Corequisite: Chemistry 352 I.

## 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 [4I] or 34 I 5 W [4IW]; and 3520 [52] or both 352 I and 3522.

## CHEM 4550 Advanced Organic Chemistry

3 hours lecture; 3 credits
Intensive study of organic reaction mechanisms including topics of current interest.

Prerequisite: Chemistry 3520 [52] or both 352 I 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 [57.1].)

Prerequisite: Chemistry 34 I 0 [4I] or 34 I 5 W [4IW], or Biology 2074 [17.1]or 1002.
Prerequisite or corequisite: Chemistry 3520 [52] or both 3521 and 3522.

## CHEM 457I Biochemistry I Lectures

3 hours; 3 credits
This course is the same as Chemistry 4570 [57], but without laboratory work. (Not open to students who are enrolled in or have completed Chemistry 4570 [57].)

Prerequisite: Chemistry 3520 [52] or both 3521 and 3522.

## CHEM 458I 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 457 I [57.1].

## CHEM 4600 Physical Chemistry for the Health Professions

3 hours lecture; 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 or biochemistry. Students who complete Chemistry 4600 [60.1] may take Chemistry 4610 [6I], but must forfeit three credits of Chemistry 4600 [60.1]. (Not open to students who are enrolled in or have completed Chemistry 4610 [6I].)

Prerequisite: Chemistry *2I00 [2] and Mathematics *I206 [4.3].
Prerequisite or corequisite: Physics *2 100 [2] or 2150 [2.5].

## CHEM 46IO 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.I].

Prerequisite: Chemistry 34 IO [4I] or 34 I 5 [4IW]; and Mathematics *2201 [5.3]; and Physics *2I00 [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 [6।]

## CHEM 4640 Quantum Chemistry

3 hours lecture; 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 molecular-orbital 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 [6I]; Chemistry 2700 [35] is strongly recommended.

## CHEM 476I Inorganic Chemistry

3 hours lecture; 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 lecture; 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 34 IO [4I] or 34 I 5 W [4IW]; 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 34 I5W; 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.

## CHEM 5030 Research III

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 35 I 0 or both 35 II and 3522 , and either Chemistry 3520 , or both 352 I and 35 I 2 , or Chemistry 34 IO, or Chemistry 3415 W . A minimum GPA of 2.3 or better within Chemistry courses is also required.

## Honors courses

## CHEM 5IIO 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 34 I5W; 3520 or both 352 I and 3522 ; an index of 3.30 or higher in chemistry; and permission of the instructor and the chairperson.

## CHEM 5I20 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 5 IIO [83.I], an index of 3.30 or higher in chemistry, and permission of the instructor and the chairperson.

## CHEM 5I30 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 5 I 20 [83.2], an index of 3.30 or higher in chemistry, and permission of the instructor and the chairperson.

## CHEM 52IO Seminar I

Minimum of 3 hours conference and independent work§; I 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§; I 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§; I 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

## Children and Youth Studies

Department office: | 304 James Hall
Phone: 718.95I.3192
The innovative interdisciplinary field of children's studies was founded in 1991 at Brooklyn College. Called "pioneering" by The New York Times, it was soon emulated by other colleges. Brooklyn College children's studies faculty draw on the arts, humanities, social and natural sciences, education, medicine, and the law. Although individual disciplines deal with the experience of childhood and youth, children's studies considers the different perspectives of these disciplines on children and youth as the main focus of inquiry. It provides students with a holistic and comprehensive understanding of the propensities and aptitudes of children, from birth to age I8, in their formal and informal contexts, both historical and contemporary. At the same time, children's studies advances the rights of children, who often cannot advocate for themselves.

Every year since its inception, children's studies has attracted more and more students at Brooklyn College. The Children's Studies Center was established in 1997 to expand the scope of the academic courses and to promote teaching, research, and community outreach and advocacy. A student-organized ChildrenFirst Club is now chartered, with a blog by the same name.

The interdisciplinary bachelor of arts degree in children's studies was approved by the Board of Trustees of The City University of New York in June 2009. Since 200I, the children's studies program has offered a 30-credit interdisciplinary concentration in children's studies for education majors in the early childhood education teacher program (birth-grade 2) and the childhood education teacher program (grades I-6). A I5-credit interdisciplinary minor was established in 1994 for all liberal arts majors. The children's studies program also offers an interdisciplinary area of concentration for students in the CUNY Baccalaureate program. Approval by the new York State Education Department, the name of the Children's Studies program was changed to Children and Youth Studies, as of fall 201I. The children's studies programs include such topics as the history of childhood; human rights of children; autobiography as an inquiry into the child's self; the child's imagination; child development and health; the child in family, school, and community contexts; applied research methodologies; social, economic, and educational policies affecting children and youth; children and the media; children and disability; and advocacy and policy research in the areas of child welfare and juvenile justice.

The interdisciplinary bachelor of arts degree in children and youth studies provides training in traditional, contemporary, and evolving research methodologies for studying the well-being of the whole child, promotes an awareness of child-related issues for students in their present or future roles as parents, citizens, and professionals, equips students for future careers in professions and occupations related to children and youth, and offers students professional level internships through the Career Exploration Internship.

The degrees in children and youth studies support multiple careers in professional domains 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, to name a few. Children and youth studies Career Exploration Internship program provides students with opportunities to explore professions in multiple child and youth-related settings. Children and youth studies students are encouraged to pursue graduate degrees to attain advanced professional success. Graduates successfully pursue advanced degrees in such various fields as child welfare and services, the medical field, law and education.

Students also benefit in numerous ways from the interdisciplinary major, the concentration, and the minor, as well as from the many courses offered by the Children and Youth Studies program at Brooklyn College. These offerings enrich the student's liberal arts education and complement the major areas of study in other disciplines. Many students have availed themselves of the possibility of pursuing a double major in children and youth studies and another major.

## 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 2 I 00W, 4200, 4900.
b) Five of the following courses: Children and Youth Studies 2200, $3|I 0,36| 0,34|0,33| 0,3320,3620,3630,35 I 0,3430,3|30,3700,4| 00,5 \mid 00$, 5200.
c) Two of the following courses: Africana Studies 3335; Education 2002; English 3189 or Speech 1717 or Speech 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 240 I.

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 4900.

## Departmental Minor(s)

## Minor in Children and Youth Studies

Department Requirements
Fifteen credits as follows:

One course from the following: Children and Youth Studies 2100 or Children and Youth Studies 3110 .
Two courses from the following: Children and Youth Studies 4200; Children and Youth Studies 2200; Children and Youth Studies 34I0; Children and Youth Studies 3310; Children and Youth Studies 3620; Children and Youth Studies 3630;; English 3189 or Speech 1717 or 2231; Health and Nutrition Sciences 3170 or Children and Youth Studies 4I00; Psychology 22 I0; Sociology 240 I.

Two courses from the following: Africana Studies 3335; Children and Youth Studies 3610; Children and Youth Studies 35I0; Children and Youth Studies 3I30; Children and Youth Studies 3430; Children and Youth Studies 3320;; Children and Youth Studies 5I00; 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)

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 I-6) programs are described in the "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 Children and Youth Studies Program 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 3I I 0; Children and Youth Studies 3 I20 or History 3320; Sociology 2400 or 240 I
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 ; Speech 2231 .

Three courses from the following:
Africana Studies 3335; Children and Youth Studies 2200; Children and Youth Studies 3310; Children and Youth Studies 3510 ; Children and Youth Studies 3630; Health and Nutrition Sciences 3I70; 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 3I 30; English 3I 89; Speech I7I7.
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 the concentration in Children and Youth Studies should consult with the Children and Youth Studies program adviser to plan an appropriate sequence of courses and to declare their concentration.

## Courses

## Introduction to children and youth studies

## CHST 2100W 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 [I] or 2100.)

Prerequisite: English IOI2 or permission of program director. This is a writing-intensive course.

## 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 IOIO or permission of program director.
Children in history and society

## CHST 31IO The Human Rights of Children: A Transnational Development

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 [I]; or permission of program director.

## CHST 3120 History of Children, Public Policy, and the Law

 in the United States3 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 [43.2 I ].)

## 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: Children and Youth Studies 2100 [20] or 3110 [30] or 3610 [31], or permission of the program director

## Children and institutions

## 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 [I] or permission of the program director.

## Children and culture

## CHST 2120 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.

Prerequisite: English 1012 or the permission of the program director.

## CHST 3410 The Professional Performing Child: Past and Present Issues

3 hours; 3 credits
Examination of the stage child in western history with particular emphasis on the last one hundred and thirty years. Focus will be on the performer in society, rather than on the dramatic character. Construction of popular views of the stage child through an examination of the regulations, laws, and mores applied at various junctures. Issues in children's employment such as health and safety, education, professional training and prospects, the role of organized labor, long-term psycho-social adjustment. Venues in which children work today. Regulation of these professional children through state laws and union work rules. Scholarly studies and individual histories of professional performing children.

Prerequisite: English 1010 or permission of the program director.

## 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.

## Children and advocacy

## 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 the Fall 2009 or Fall 2010 semesters.)

Prerequisite: English 1010 or permission of 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 [I] or permission of the program director.

## Children and adversity

## 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 II, 200।; 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 [I] 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 the Fall 2010 or Spring 201I semesters.)

Prerequisite: English 1010 or permission of the program director.

## Children in research and the professions

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.

Prerequisite: Children and Youth Studies 2100 W or permission of the program director.

## CHST 4100 Internship in Applied Children's Studies

7 hours fieldwork, I 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 [20] or 3110 [30] or 3610 [3I] 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 4900 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.

Prerequisite: Children and Youth Studies 2100W, Children and Youth Studies 4200, and permission of the program director.

## 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.

## Independent study and honors courses

## 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 [20]; and 4200 [21]; Children and Youth Studies 3110 [30], or 3610 [31], 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.

## Classics

Department office: 2408 Boylan Hall
Phone: 718.951.5।91

## Full-time Faculty

Professors: Clayman, Smith, Van Sickle, Williams
Associate Professors: Thibodeau, Yarrow
Assistant Professors: Kellogg, Schur
Lecturers: Pletcher, 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 HEGIS code I 504; SED program code 02049

Department requirements (29-37 credits)

## Classics is a writing-intensive major.

Students who have studied Greek or Latin before coming to Brooklyn College may receive a waiver of some of these requirements from the chairperson.

Option I: Concentration in Ancient History
The Ancient History concentration is for students with an interest in the history of classical antiquity who may want to pursue such study in graduate school. It is also an excellent choice for students interested in law, politics, or business.

## Degree Requirements

Greek 2001, and 2002, and 3011; or Greek 2019. or Latin 2101 , and 2102 and 3111 ; 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 nine credits in Greek and Latin are required for this concentration.

History 3010 or 3020;
Two of the following: Classics 3200, 3230, 3231, 3232, 3220, 3222, 3233, 3240, 3221, 3223, 3224, 3234, 3235; Any Latin course numbered above 31 II or any Greek course numbered above 30 II can be substituted for one of these courses.
Three of the following: Classics 40I0; 40II; 40I2; 4020; 402I; 4030; 4032; 4040; 5 I 00.
Capstone Seminar: Classics 4900.

Option II: 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

## Classics 150

excellent choice for those who plan to teach languages in high school, and for those who will pursue law or computer studies.

Degree requirements

Greek 200 I, and 2002, and 30 II ; or Greek 20I9. and Latin 2 I 0 I , and 2 I 02 and 3 II I ; or Latin 2 II ;
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.

Four of the following: Greek 30I2, 403I, 4032, 404I, 4042, 4043, 4070, 4044; Latin 3II2, 4I33, 4I5I, 4I70, 4I3I, 4I32, 4|4I, 4I34, 4|42, or Greek 4060, or Latin 4160;
And an additional two of the following: Greek 30I2, 403I, 4032, 404I, 4042, 4043, 4070, 4044; Latin $3|I 2,4| 3|, 4| 32,4|33,4| 34,4|4|, 4|42,4| 5 \mid$, 4I70;
Two of these courses must be numbered 4000 or above. Greek 3012 is not open to students who have completed Greek 20I9. Latin 3 II2 is not open to students who have completed Latin 2119;

One of the following: Classics 3200, 3230, 32I0, 32II, 323I, 32I2, 3232, 3220, 3222, 3233, 3240, 322I, 3223, 3224, 3234, 3235;
One of the following: Classics $4010 ; 40$ II; 40I2; 4020; 402I; 4030; 4032; 4040; 5 I 00.
Capstone Seminar: Classics 4900.

Option III: Concentration in Classical Literature
The Literature 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.

## Degree requirements

Greek 200 I, and 2002, and 3011; or Greek 2019; or Latin 2101 , and 2102 and 3111 ; 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 nine credits in Greek and Latin are required for this concentration.

Four of the following: Classics 3200, 3223, 3220, 3222, 3233, 3240, 322I, 3224, 3235, 3236, 5100 ;
A course in Latin numbered 3112 or higher, OR a course in Greek numbered 3012 or higher may be substituted for up to two of these courses. One course in ancient philosophy may be substituted for one of these courses;
One of the following: Classics $4010 ; 40 \mathrm{II} ; 40 \mathrm{I} 2 ; 4020 ; 402 \mathrm{I} ; 4030 ; 4032 ; 4040 ; 5 \mathrm{I} 00,403 \mathrm{I}$.
Capstone Seminar: Classics 4900.

## Option IV: Concentration in Material Cultures

The Material Cultures concentration is intended for students who plan to go on for further study in Graeco-Roman archaeology, art history, architecture, anthropology, or museum studies. It is also an excellent choice for students interested in industries emphasizing visual skills, such as marketing and communications.

## Degree requirements

Greek 200 I , and 2002, and 30 II ; or Greek 2019; OR Latin 2 I 0 I , and 2 I 02 and 3 III ; or Latin 2 II ;
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 nine credits of Greek or Latin classes is required for this concentration.

Classics 3210 ;
Two of the following: Classics 32II, 32I2, 3240, 4030, 4040, 5100 ; Art 3002, 3006, 3010 ;
One of the following: Classics 40I 0; 40II; 40I2; 4020; 402I; 4030; 4032; 4040; 5 I 00.
One of the following: Classics $3200,3220,3222,3233,3240,3221,3223,3224,3235,5100,323$ I; Latin 31 I 2 or Greek 3012 may be substituted for this course.

Capstone Seminar: Classics 4900.

## Departmental Minor(s)

## Minor in Classics

Department Requirements
One of the following options:
a) Twelve credits in classics ( 1213 and higher), Greek (301I and higher), or Latin (3111 and higher) courses.
b) Eight credits from either Latin 210 I and Latin 2102 or Greek 200 I and Greek 2002, plus six credits in Classics (I213 and higher), Greek (301। and higher), or Latin ( $3 \mathrm{I} \mid \mathrm{I}$ and higher) courses.
c) Nine credits from either Greek 2019 or Latin 2119, plus three credits from a Classics course numbered 1213 and higher or a Greek or Latin course numbered 4000 and higher.

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) and childhood education teacher (grades I-6) programs are described in the "Education" section of 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:

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 IOII, I2I3, 3200, 3230, 32I0, 32II, 323I, 32I2, 3232, 3220, 3222, 3233, 3240, 3221, 3223, 3224, 3234, 3235; Latin 31II, 3II2; Greek 3011,3012 and at least two of the following courses:

Classics 40 I 0,40 II, $40 I 2,4020,402 I, 4030,403 I, 4032,4040,4900$; Latin $4|33,4| 5 I, 4|60,4| 70,4|80,4| 3|, 4| 32,4|4|, 4|34,4| 42$; Greek 403I, 4032, 404I, 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 $200 \mathrm{I}, 2002,30 \mathrm{II}$, and 30 I 2.
(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 $2 \mathrm{I} 0 \mathrm{I}, 2 \mathrm{I} 02,3 \mathrm{II} \mathrm{I}$, and $3 \mathrm{I} \mid 2$.
(b) Intensive track: Latin 2119.

## Summer programs

In addition to sections of the Core 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 2|2-8|7-208I or the Department of Anthropology and Archaeology at 718-95I-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 * 1000 Special Topics

I hour; I credit
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.

## CLAS * 101 I 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 *1012 Medical and Scientific Terminology

3 hours; 3 credits
Introduction to medical and scientific terminology through a study of Greek and Latin word roots. (Not open to students who have completed Classics 3.I.)

## 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 I or Core Curriculum IIIO [I. I] or permission of the chairperson.
Corequisite: Education 3202 [37].

## CLAS 3200 Greek and Roman Mythology

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 Studies in Religion 3030 [16]

Prerequisite: English 1010 [I] or permission of the chairperson.

## CLAS 3210 Introduction to Archaeology

2 lecture, 2 lab; 3 credits
Survey of major techniques and methods of archaeology. Reconstruction of social and subsistence patterns from material remains. Methods and procedures in excavation, classification, and evaluation of finds. This course is the same as Anthropology 240 I [2.2]

## 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 and 3470 [70.I]. (Not open to students who have previously received credit for archaeological fieldwork.)

Prerequisite: permission of the chairperson and one of the following: Classics 3210 [26], Anthropology 240 I [2.2], Core Studies I or Core Curriculum IIIO[I.I], 2.I, 9, Judaic Studies 3012 [I2], 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 [I] or permission of the chairperson.

## CLAS 322I 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 [I] 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 lliad and Odyssey, Apollonius' Argonautica, Vergil's Aeneid, Statius' Thebaid, Lucan's Pharsalia. Oral and written traditions. Narrative focus and intertextuality.

Prerequisite: English 1010 [I] 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 [I] 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 [50.91] and Comparative Literature 3602 [|8.5].

Prerequisite: English 1010 [I] or permission of the chairperson.

## CLAS 3230 Greek Athletics

3 hours; 3 credits
An investigation of ancient Greek athletics as a cultural phenomenon with special attention to the nature of the various athletic events and the social context in which these competitions took place. Analysis of representative ancient Greek (and some Roman) texts (epic, history, philosophy, tragedy, comedy, medical writings, epigraphy) and relevant iconographical evidence. Comparison with modern athletics.

Prerequisite: English 1010 [I] 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 [I] 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 [I] 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 [I] 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 [I] 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. This course is the same as Speech 4748 [48].

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 [I] or permission of the chairperson.

## CLAS 3240 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 Classics 3240 [38] for credit twice but may not repeat topics.

Prerequisite: English 1010 [I] or permission of the chairperson.

## CLAS 4010 Democracy and Imperialism: Athens in the Fifth Century BC

3 classroom hours plus conference and independent research; 4 credits The development of Athenian ideas about democracy and empire in the fifth century through a study of the literature of the period. Emphasis on research methodologies. (Not open to students who have completed Classics 18.)

Prerequisite: English 1012 [2] and at least sophomore standing; or permission of the chairperson.

## CLAS 40II The Rise of Macedon

3 hours; 3 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.

Prerequisite: English 1012 [2] and at least sophomore standing, or permission of the chairperson.

## CLAS 4012 Delphi and Apollo: The Oracle and the Site

3 classroom hours plus conference and independent research; 4 credits The religious, historical, and social significance of Apollo's shrine at Delphi. Literary and archaeological evidence. Athletic festivals held on the site. 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 Julio-Claudian Rome: City of Empire

3 classroom hours plus conference and independent research; 4 credits Establishment of a dynasty. Literary and historiographical reflections of empire. Changes in the urban environment and provincial landscape: housing, public buildings, monuments, boundaries, land use. 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 402 I Pagans, Christians, and Jews

3 hours; 3 credits
Religious conflict in the Roman Empire. The relation of Judaism and Christianity to their pagan environment. Emphasis on research methodologies. This course is the same as History 3310 [30.2 I]. (Not open to students who have completed Classics 37.)

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 403 I Approaches to Greek and Latin Poetry

3 classroom hours plus conference and independent research; 4 credits Ancient and modern approaches to literature in general and poetry in particular. Study of characteristic features of ancient Greek and Latin poetry, such as intertextuality and metapoetry. Readings will include selections from modern introductions to literary theory, Plato's Republic, Aristotle's Poetics and Horace's Ars Poetica, and relevant Greek and Latin poetic texts in English translation. 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. (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 4040 Ancient Explorations

6 hours; 6 credits
Summer course which meets for four weeks on campus and for two weeks at an ancient site abroad. Topography and monuments of a major center of ancient Greek or Roman civilization such as Athens, Rome, the Bay of Naples, or western Asia Minor. Detailed presentations in class and reports on site. Emphasis on research methodologies.

Prerequisite: English 1012 [2] and at least sophomore standing; or permission of the chairperson.

## CLAS 4900 Capstone Seminar

4 hours and independent research and conference; 4 credits Capstone seminar for majors with upper junior or senior standing. Focus to be chosen by instructor. Emphasis on research methods, evidentiary analysis, and classical language skills. Interpretive writing, class presentation, and final research paper.

Prerequisite: Completion of 75 credits or more; either Latin 2119 [1.9] or Latin 3111 [II] or Greek 2019 [1.9] or 301I [12]; and one Classics course numbered 40 IO or higher; or permission of the chairperson.

## CLAS 5000 Interdepartmental Humanities Seminar

2 hours recitation and a minimum of 7 hours conference and independent work; 3 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 [74.7], English 4 I 12 [74.7], Philosophy 4120 [84.7].

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 *200I Elementary Greek I

4 hours; 4 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].)

## GRKC *2002 Elementary Greek 2

4 hours; 4 credits
Continuation of Greek 200 I [I]. Review of fundamentals. Readings from Greek prose and poetry. (Not open to students who are enrolled in or have completed Greek 2019 [I.9])

Prerequisite: Greek 2001 [I] 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.

Prerequisite: application to and permission of the director of the Latin/Greek Institute.

## GRKC 30II Intermediate Greek I

3 hours; 3 credits
Review of basic morphology and syntax. Readings from ancient Greek prose and/or poetry. (Not open to students who have completed Greek 2019.)

Prerequisite: Greek 2002 [2] or permission of the chairperson.

## GRKC 3012 Intermediate Greek 2

3 hours; 3 credits
Readings from the lliad and the Odyssey. (Not open to students who have completed Greek 2019 [I.9].)

Prerequisite: Greek 301। [12] or permission of the chairperson.

## GRKC 403I Greek Drama I: Aeschylus and Sophocles

3 hours; 3 credits
One tragedy of Aeschylus and one of Sophocles. Close analysis of language, meter, and dramatic structure. Survey of modern critical perspectives.

Prerequisite: Greek 2019 [1.9] or 3012 [14].

## GRKC 4032 Greek Drama II: Euripides and Aristophanes

3 hours; 3 credits
One tragedy of Euripides and one comedy of Aristophanes. Close analysis of language, meter, and dramatic structure. Survey of modern critical perspectives.

Prerequisite: Greek 2019 [1.9] or 3012 [14].

## GRKC 404 I Herodotus and Thucydides: Athenian Politics

3 hours; 3 credits
Athenian democracy and political leadership in the fifth century B.C. Miltiades, Themistocles, and Pericles. Readings from Herodotus and Thucydides.

Prerequisite: Greek 2019 [1.9] or 3012 [14].

## GRKC 4042 Plato and Aristotle: Political Ideals

3 hours; 3 credits
Selected readings from Plato and Aristotle. Contrasting views of society and political leadership.

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.

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.

Greek 2019 [1.9] or 3012 [14] 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. Seven-week summer course taught at the CUNY Graduate School and University Center. Special fee for photocopied materials.

Prerequisite: Permission of the director of the Latin/Greek Institute.

## GRKC $\mathbf{4 0 7 0}$ 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.

Prerequisite: Greek 2019 [1.9] or 3012 [14] or permission of the chairperson.

## GRKC 4080 Readings in Greek

I hour; I 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.

Prerequisite: Greek 2019 [1.9] or 3012 [14]; and permission of the chairperson.

## LATN *2101 Elementary Latin I

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].)

## LATN *2 $\mathbf{1 0 2}$ Elementary Latin II

3 hours; 3 credits
Continuation of Latin *2101 [I]. Review of fundamentals. Readings from Latin prose and poetry. (Not open to students who are enrolled in or have completed Latin 2119 [1.9].)

Prerequisite: Latin $* 2101$ [I] or permission of the chairperson.

## LATN 2II9 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 [I2] and satisfies the college language requirement. Eleven-week summer course taught at the Graduate Center.

Prerequisite: application to and permission of the director of the Latin/Greek Institute.

## LATN 3 I I I Intermediate Latin I

3 hours; 3 credits
Review 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. )

Prerequisite: Latin *2102 [2] or permission of the chairperson.

## LATN 3 II 2 Intermediate Latin 2

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.)

Prerequisite: Latin 3|।| [||] or permission of the chairperson.

## LATN 4131 Roman Drama

3 hours; 3 credits
Readings of select plays by the major Roman dramatists, Plautus, Terence, and Seneca. Students will read at least two plays in the original. Attention to be paid to style, meter, dramaturgy, relationship of the plays to their Greek models, the social context of performance, and the reception of Roman drama in Renaissance and modern theater.

Prerequisite: Latin 3112 [12] or Latin 2119 [1.9] or permission of the chairperson.

## LATN 4I32 Roman 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.

Prerequisite: Latin 3112 [12] or Latin 2119 [1.9] or permission of the chairperson.

## Classics

## LATN 4133 The Satiric Spirit

3 hours; 3 credits
Satires and parodies from the works of Lucretius, Horace, Tacitus,
Seneca, and Juvenal.
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.

Prerequisite: Latin $3 \mid 12$ [12] or Latin $2 \mid 19$ [1.9] or permission of the chairperson.

## LATN 4I4I Cicero

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.

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.

Prerequisite: Latin 3112 [12] or Latin 2119 [1.9] or permission of the chairperson.

## LATN 4I5I Vulgar and Medieval Latin

3 hours; 3 credits
Morphology and grammar of vulgar and medieval Latin by Petronius, Gregory the Great, Einhard, Abelard, and other authors. Inscriptions. Connections with Romance languages.

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. Seven-week summer course taught at the CUNY Graduate School and University Center. Special fee for photocopied materials.

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.

Prerequisite: Latin 2119 [1.9] or 3112 [12] or permission of the chairperson.

## LATN 4180 Readings in Latin

| hour; I 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.

Prerequisite: Latin 2119 [1.9] or 3112 [12]; and permission of the chairperson.

## LATN 5085 Senior Research Essay

3 hours; 3 credits
Bibliographical resources for research using classical texts. Directed research and paper. (Not open to students who have taken or are enrolled in Greek 85 or Classics 85.)

Prerequisite: six credits of classics courses numbered 31 and above.

The following inactive course(s) will only be offered if there is sufficient demand:
CLAS 3211 Interdisciplinary Approaches to Archaeology
GRKM 2310 Peer Tutoring I
GRKM 2320 Peer Tutoring II

## Communication Program

## B.A. degree program in communication <br> HEGIS code 0601.00; SED program code 31603

Program requirements (32-33 credits)
Tier One (18-credits)
Each of the following six courses must be completed with a grade of C or better:
Communication 1001 (Speech 1205); Communication 3000 (English 3196); Communication 3100 (Psychology 3120); Communication 3150 (TV/Radio
2222); Communication 3200 (Philosophy 33I5); Communication 3300 (TV/Radio 3535).

Tier Two ( 12 credits)
Students choose either Track A or Track B and then select four additional courses, one from each area:
Track A. Visual and Media Studies Track

- Culture

Anthropology 3180, Film 21I7, Film 3I22, Puerto Rican and Latino Studies 3335, Television and Radio 25 I7.

- Media

Film 2120, Film 2129, Television and Radio 2726.

- History

History 3462, English 2402, Film 21 16, Television and Radio 2265.

- Theory

Film 3I30, Philosophy 350 I, Sociology 2800, Television and Radio 4430
Track B. Interpersonal and Intercultural Communication Track

- Culture

Africana Studies 3230, American Studies 3406, Anthropology 3395, American Studies 3402, Film 21 17, Film 2131 , Puerto Rican and Latino Studies 3105.

- Society

Political Science 3106, Political Science 3160, Sociology 2602, Sociology 53, Sociology 2604

- Small Groups

Psychology 3140, Speech 1608, Speech 1618, Speech 1619,
Tier Three (2 or 3 credits)
One of the following off-campus internship courses:
Communication 4000 (14 or more field hours per week) or Communication 4100 ( 21 or more field hours per week)

## Courses

## 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 Speech 1205 [5].)

## 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 [I0.4].)

Prerequisite: Communication 1001 [I] and English 1010 [I].

## 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 [I7].)

Prerequisite: Psychology *2 100 [I0] or 2210 [20] or Communication 100| [1].

## COMM 3I50W 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 and Radio 2222W).

Prerequisite: English 1012 and one of the following: Television and Radio 2265; or Core Studies 5; or both Core Studies 5.I and 5.2; or Core Curriculum 13|। or 1312; or Communication 100 I.

## 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 33 I 5 [14.2].)

Prerequisite: One course in philosophy or Core Studies 10; or Core Curriculum 1210 [2.1]; or one course in communication, information, or the media, 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 Television and Radio 3535 [35].)

Prerequisite: Television and Radio II 65 [6.5] or instructor's permission.

## 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.
Prerequisite: senior standing in Communication Program and approval of Program advisor.

## COMM 4100 Internship

14 hours per week independent work; 3 credits
A minimum of one hundred ninety-six hours field experience in a professional communications setting commensurate with student's area of interest within the program. Evaluative report required as part of the course.

Prerequisite: senior standing in Communication Program and approval of Program advisor.

## Computer and Information Science

Department office: 2109 Ingersoll Hall
Phone: 718.95I.5657

## Full-time Faculty

Distinguished Professors: Parikh, Raphan
Professors: Arnow, Augenstein, Bar-Noy, Dexter, Harrow, Kopec, Langsam, Parikh, Parsons, Raphan, Rudowsky, Tenenbaum, Weiss, Whitlock, Zhou, Ziegler
Associate Professors: Cox, Jones, Schnabolk, Sklar, Sokol, Thurm, Yanofsky, Yarmish
Assistant Professors: Clark, Cogan

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 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 three bachelor of science degrees, three 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.

With the Department of Finance and Business Management we offer a bachelor of science degree program in information systems.
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. With the Department of Finance and Buisness Management we also offer a bachelor of science-master of professional studies degree (B.S.-M.P.S.) in business information systems.

## Core curriculum

The Department of Computer and Information Science participates in the College's core curriculum through Core Curriculum 1312 and in courses in the upper-tier series.

## 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 BASIC 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 I70I; 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 (49-58 credits)
Students should select option I or option II.

Option I: Computational.
MATH 1201 [3.3] and MATH 1206 [3.4]. Transfer students may also need to take MATH I2 | - see math department chair. All of the following: Mathematics 2201, 2001, 2101, 4201, 2206, 4701 and 3501.
All of the following: Computer and Information Science IIIO or II 80, 3II0, 3I20, 3I30, 3220.
Two courses chosen from among: Computer and Information Science 3240 or Mathematics 3107, Computer and Information Science 3160 , 3150 , $3310,3230,3350,3330,3820,4335$.
Students choosing Option I are also encouraged to minor in Distributed and Parallel Computing.

## Option II: Theoretical.

MATH I20I [3.3] and MATH I 206 [3.4]. Transfer students may also need to take MATH 12 II - see math department chair. All of the following: Mathematics 220I, 200I, 210I, 420I, 3IOI, and 4I0I.
All of the following: Computer and Information Science IIIO or II 80, 3II0, 3I20, 3I30, 3220, 3230, 4900 or 500 I.
Two of the following: Computer and Information Science 3240 or Mathematics 3107 , Computer and Information Science 3160,3150 , 3350,3330 , 3820, 4335.

## Program recommendations

Mathematics 450 I 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 200 I for Computer and Information Science 22 IO as a prerequisite for Computer and Information Science courses.

[^4]
## B.S. degree program in computer science HEGIS code 0701 ; SED program code 01991

Department requirements (54-57 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 I I IO or I I 80.
All of the following: Computer and Information Science 22IO, $3|10,3| 20,3|40,3| 30,3320,3|50,33| 0,3220$ or $3230 ; 4900$ or $500 \mid$.
Students who have enrolled in Computer and Information Science 27 before Spring 2008 may substitute completion of that course for Computer and Information Science 3310 . Students who enrolled in Computer and Information Science I34I before Spring 2008, but who did not complete Computer and Information Science 3305, must complete Computer and Information Science 3305 or 3310 to meet the requirements of the program.

Computer and Information Science 2820W or Philosophy 3318 W .
Two additional courses in Computer and Information Science chosen from courses numbered between 3000 and 4899
Mathematics 120 I and 1206 , or 3.20 and 4.20 and 1211 .

Mathematics 250 I or 350 I.

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 and Archaeology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470 and 4665.

Core Studies [5, 5.I, 5.2, 7.I, 7.2, 8.I and 8.2], Core Curriculum I 300 through I399, Core Curriculum 330I through 3399.
Economics 3400, $3410,4410,4422$.
Philosophy 3203, 3204, 323I, 3232, 3422, 3423, 360I, 3605, and 3610.
Physical Education and Exercise Science 3023, 327I, 3275, 328I, 3285, 4229, 425 I.
Sociology 270 I.

## B.S. degree program in information systems HEGIS code 0702; SED program code 32153

## Degree Requirements (62-65 credits)

## All of the following

Computer and Information Science IIIO or II80, 3 II0, $3|20,3| 30,38 \mid 0,4900$ or 500 I.
Students unfamiliar with PC application software (word processing, spreadsheet software, database management software, and presentation software) should also complete Computer and Information Science I050. Knowledge of such software is prerequisite for Computer and Information Science 3810 .

Two courses chosen from the following:
Computer and Information Science 3800, 3I40, 3I50, 3I7I, 34I0, 3820, 3340, 3345.
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, 33I 0, 3630.

Computer and Information Science 2820W or Philosophy 3318 W .
Business 3420 or Computer and Information Science 1590.
Business 3430 or Computer and Information Science 253I.
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 I580W.

Economics 2100 or Business 2100 .
Economics 2200 or Business 2200.
Business 3200 and 3310
Accounting 2001
Business 3400 or Economics 3400 or Mathematics 250 I or 350 I or Psychology 3400.
Business 34 I 0 or Economics 3410 or Mathematics I20I.
24 credits must be completed in advanced courses in the Departments of Accounting, Computer and Information Science, Economics, and/or Finance and Business Management. These 24 credits must be completed at Brooklyn College with a grade of $C$ or higher in each course.

## 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 (57-59 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 IIIO or II $80,1600,22|0,3| 10,3|20,3| 30,3220,3620,3630$, and 4900 or 500 I.
All of the following: Mathematics I20|, I7II or I206, I7I6 or 250I. One of the following: Computer and Information Science 3650 or 3660 or 3665 .
Two additional courses chosen from the following: Computer and Information Science $3140,3150,3410,34 \mid 5,36 I 0,3650,3660,3665,38 \mathrm{I} 0,46 \mathrm{I} 0$.
Two courses chosen from among the following: Art 28II, 28I2, 38I2, 2820, 282I; Music 3260, 326I, 3262, 3322; Film I20I, 270I; Television and Radio 2420, 386I, 387I, 395I.

Program Recommendation
It is recommended that students in this program fulfill their writing-intensive course requirement with Computer and Information Science 2820W or Philosophy 3318W.

## 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 and Archaeology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470 and 4665.

Core Studies [5, 5.I, 5.2, 7.1, 7.2, 8.1 and 8.2], Core Curriculum I 300 through 1399, Core Curriculum 330I through 3399.
Economics 3400, 3410, 44I0, 4422.
Philosophy 3203, 3204, 323I, 3232, 3422, 3423, 360I, 3605, and 3610.
Physical Education and Exercise Science 3023, 327I, 3275, 328I, 3285, 4229, 425 I.
Sociology 270 I.

## B.S.-M.P.S. degree program in business information systems HEGIS code 0799; SED program code 02104

## Admission

Students should apply for admission to the program after they have completed Computer and Information Science 1110 or 1180 , and Economics 2100 or Business 2100 , but no later than the fifth term of undergraduate work. Applications are considered by the chairperson of the Computer and Information Science Department and the chairperson of the Economics Department on the basis of superior academic records and evidence of scholarly potential. Students must maintain a scholastic index of $B$ or higher to remain in the program.

## Computer and Information Science

Planning the program
Students must plan their programs before the beginning of the junior year with the assistance of a counselor in each department. Some undergraduate course requirements may be satisfied by advanced placement or exemption examination. Information about the examinations is in the chapters
"Admission" and "Academic Standing" of the Brooklyn College Bulletin of Undergraduate Programs.

Program requirements (140 credits)

Undergraduate courses ( 110 credits)
Computer and Information Science IIIO or II80, I050, $3110,3120,3130,4900$ or 5001 . Students already familiar with PC application software (word processing, spreadsheet software, database management software, and presentation software) may substitute an alternative computing course for Computer and Information Science 1050 with the permission of the chairperson of the Department of Computer and Information Science.

Two courses chosen from the following: Computer and Information Science $3 I 50,317 I, 3810,3820,3340,3345$. 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, $3160,3320,3305,33$ I 0.

Business 3400 or Economics 3400 or Mathematics 250I or 350 I or Psychology 3400.
Economics 34 I 0 or Business 34 I 0 or Mathematics I20I.
Business 3410 or Computer and Information Science 1590 or Computer and Information Science 3800.
Business 3430 or Computer and Information Science 253I.
Business 3120 or Business 3110 or Computer and Information Science 1530 or Computer and Information Science 1597 or Television and Radio 3537.

Business 3200, 3 I00, 33। $0,3170$.
Business 80.3 or 4202W or Computer and Information Science I580W.
Economics 2100 or Business 2100 .
Economics 2200 or Business 2200.
Philosophy 3318 W or Computer and Information Science 2820W.
Accounting 2001 and 3201.
Additional undergraduate courses in any department or program to bring the total number of undergraduate credits to at least 110 .

Graduate courses (30 credits)
Three courses chosen from either group (a) or (b):
(a) Economics 7205X or Business 7205X, Economics 7020X, Economics 702IX, Economics 7230X or Business 7230X , or Economics 7060X.
(b) Business $7204 \times$, Business $7210 \times$, Business $7215 \times$ or Economics $7215 \times$, Business 7220X, Business $7240 \times$, Economics $7028 \times$.

Four of the following: Computer and Information Science 7200X, 75I0X, 7320X, 7500X, 7534X, 7532X, 7362X, 7530X, 7520X, 7540X, 7354X, 7522X. Students who have completed CIS 45 may not include CIS 75IOX.

Nine additional credits in 7000-level courses in Computer and Information Science.
Thesis or comprehensive examination under the guidance of the Department of Finance and Business Management or the Department of Computer and Information Science.

## Certificate program in computers and programming HEGIS code 5IOI; SED program code 82457

The Department of Computer and Information Science offers a certificate program in computers and programming. To be eligible for the certificate, students must earn 24 credits. Students must apply to the Office of Student Records for their certificates upon completion of program requirements. The certificate in computers and programming will be issued upon the completion of the program with a grade of $C$ or better in each course.

Admission requirements are described under the heading "Certificate programs" in the chapter "Admission" in the Undergraduate Bulletin. Students are
required to pass the CUNY Assessment Tests for admission.
Program requirements (24 credits)
Computer and Information Science 1110 or 1180
Computer and Information Science 1050 or 2800.
Computer and Information Science 3110 .
Computer and Information Science 3120.
Computer and Information Science 3130.
Computer and Information Science 3140.
Computer and Information Science 3810 or 3310 .
Additional courses in the Computer and Information Science department numbered 3000 or above as needed to bring the total number of credits to 24.

In some cases, the department will permit students to take prerequisite courses as corequisites. Students may apply up to two courses of transfer credits towards the certificate.

## Departmental Minor(s)

## Minor in Computer Science

## Department Requirements

A program of 12 credits in advanced electives in computer and information science, including at least one of the following: Computer and Information Science 3120 or 3130 or 3310 , each with a grade of $C$ or higher.

## Minor in Multimedia Computing

A student with a major in Computer and Information Science or another field may take a minor in Multimedia Computing. Any minor at BC requires completing 12 advanced elective credits with an average of C - or better. The minor in multimedia requires $25-27$ credits and includes the following courses

Department Requirements
All of the following: Computer and Information Science 1110 or $1180 ; 1600$ and 3110 and 3120 and 3130 ; and 3620 or 3630 .
Two of the following: Computer and Information Science 36I0, 3620, 3630, 3650, 3660, 3665, 46 I 0.
Courses presented for the major in computer and information science may also be used to satisfy the minor in multimedia computing.

## Minor in Parallel and Distributed Computing

Department requirements
All of the following: Computer and Information Science IIIO or II $80,1|50,3| I 0,3 \mid 30,3350,4330,3330,4335$.
Courses presented for the major in computer and information science may also be used to satisfy the minor in distributed and parallel 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, requiring 12 to 13 credits in advanced electives.

All of the following:
Philosophy 3422, Computer and Information Science II IO, Psychology I000, Psychology 3530.
One from each of the following groups, a) and b):
a) Philosophy 3 I23, 340 I, 34I0,3420, or 360 I.
b) Computer and Information Science I4I0 or 34I0, 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 "Education" section 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 IIIO, I080 or Education 3003 (formerly Education 68. I), I050, 2820W.
One of the following options, (a) or (b):
(a) Computer Science Option: Computer and Information Science 3110,2210 or 3130.
(b) Information Technology Option: Computer and Information Science I030, I035, I060, 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, 34I0, 3230, and 38 I 0.

## Division of 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 I. 10 or higher with a grade of C or higher, or who have completed Core Studies 5 or 5.I.)

## 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), client-server 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 I3 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 [48.13]. (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 I

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 . I, 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 13 I2 [3.12] or 3303 [30.03], or Core Studies 5 or 5 . I, 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 *IIIO 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.

CISC * II II Basic Principles of Computer Programming With Science Applications I
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 *III2 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 IIII [1.5।].

## CISC * II50 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 3110 [15] or 16.

## CISC *1 155 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 *II60 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 *II70 Java for Programmers

3 hours; 3 credits
The facilities of Java programming language core and the key Java class libraries. The imperative (nonobject-oriented) language, support for object-oriented programming, exception handling, concurrency and network programming. Images and graphic display techniques, drawing tools, event generation and handling, containers and container hierarchies, layout techniques and applet construction. Language issues such as comparison with C and $\mathrm{C}++$, compile-time vs. run-time checking, and implementation. Class design file I/O, threads, and navigating the Java class libraries. (Not open to students who are enrolled in or have completed Computer and Information Science 1.6 or 16. )

Prerequisite: Computer and Information Science 3130 [22].

## CISC *1 180 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 IIIO [1.5] or 3 I 10 [15].)

Prerequisite: An introductory programming course in a language other than $\mathrm{C}++$ or C .

## CISC *I34I 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 2.40 or 1180 [2.80].

## 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 13| | [3.1 I] 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 [29] and Psychology 3580 [57.2]. (Not open to students who have completed Computer and Information Science 32.I.)

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 [31.5].

Prerequisite: Core Curriculum 1312 [3.12] or Core Studies 5 or 5.1 or any course in computing.

## CISC *I580W 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. This course is the same as Business 4202 W [80.3W]. (Not open to students who have completed Economics 80.3.)

Prerequisite: English 1012 [2]. Prerequisite or corequisite: Business 3400 [30.2] or Mathematics 250 I [8. I] or 5 I. I; and Business 3430 [31.4] or Computer and Information Science 253| [|0.3|]; and Computer and Information Science 1050 [5.2] or 11 IO [1.5]; and senior standing; and at least 34 credits in Computer and Information Science and/or Business courses required for the B.S. degree in computer and information science or the B.S. degree in business, management, and finance.

## 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 e-commerce. 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 [31.3]. (Not open to students who have completed Business 3420 [31.3].)

Prerequisite: Computer and Information Science IO50 [5.2] and at least sophomore standing; or permission of the chairperson.

## CISC *1595 Management of New and Emerging Technologies

3 hours lecture; 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 [50.8]. (Not open to students who have completed Economics 50.8.)

Prerequisite: Computer and Information Science I050 [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 and Radio 3537 [31.7] and Business 3110 [31.7].

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 2.40 or 1180 [2.80]; and Mathematics IOII [2.9] or 2.92 or assignment to Mathematics 3.20, I20। [3.3], or 4.10 by the
Department of Mathematics.

## CISC 253I 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 [31.4]. 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 1.5 or 5.2; Computer and Information Science 2210 [II] or Business 3400 [30.2] or Economics 3400 [30.2] or Mathematics 250 I [8.I] or Mathematics 350 I [5I.I].

## 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 28IO Macromolecular Structure and Bioinformatics

## 3 hours lecture; 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 4010 [33].
Prerequisite: Core Curriculum 1312 [3.12] or Core Studies 5.1 or Computer and Information Science 1000 [1.0] or Computer and Information Science II IO [1.5] or equivalent.

## 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 3318 [14.4W].)

Prerequisite: Core Curriculum 1312 [3.12] or Core 5.1 or Computer and Information Science 1000 [I.0] or Computer and Information Science 1110 [1.5], and English 1012 [2].

## CISC 2830 Introduction to Natural Language Processing

## 3 Hours; 3 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 English 3525 [24.8I] and Linguistics 3023 [24].

Computer and Information Science IIIO [1.5]; prerequisite or co-requisite Computer and Information Science 2210 [II] and Linguistics 200 [ I].

## CISC 31IO 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].)

Prerequisite: Computer and Information Science II IO [1.5] or I | 80 [2.80].

## CISC 3120 Design and Implementation of Software Applications I

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 instructor-authored 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
Stacks and their implementations. Prefix, postfix, and infix notation. Queues and linked lists and their implementations. Binary and general trees and their implementations and traversals. Sorting and searching techniques. Graph algorithms. (Not open to students who are enrolled in or have completed Computer and Information Science 14 or 21 .)

Prerequisite: Computer and Information Science 3110 [15] or 16.

## CISC 3140 Design and Implementation of Software

 Applications 23 hours; 3 credits
Continuation of Computer and Information Science 3I20. Essential topics in standards-based client-server application development; database creation and programming; source management and software deployment tools. Scripting. Emphasis on the software development process and practical experience in team software development. Introduction to intelligent systems. Specification, design, implementation and testing of a web-based, data-backed interactive application, such as an educational game or an e-commerce site. This course should be taken in the semester after Computer and Information Science 3120.

Prerequisite: CISC 3120 [20.I] and 3130 [22].

## 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 3 I20 [20.1] and 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 IIIO [1.5] or 2.80; and 3130 [22].
Prerequisite or corequisite: Computer and Information Science 3150 [26].

## CISC 3I7I 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: Computer and Information Science 2210 [II]; 21 or 3130 [22]; Mathematics 3.20 or 1201 [3.3] or 4.10 .

## 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: Computer and Information Science 2210 [II], 21 or 22, and Mathematics 3.20, 120 I [3.3], or 4.10 .

## 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 [18.5].

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 real-time 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 134I [4.I]; and 2210 [1I].

## 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 IIIO [1.5] or I I 80 [2.80]; and 2210 [1 I].

## CISC 3315 Digital Computer Systems

3 hours lecture, 3 hours laboratory; $4 \mathrm{I} / 2$ 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 [II].

## 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 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 3110 [15]; and 3305 [27] or 3310 [27.1]; 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 33 I 5 [28]; and Mathematics 250। [8.I].

## 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 250 I [8.I].

## 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 $2.85 ; 2210$ [1 I ]; 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: CIS 3130 [22] and CIS 2210 [1I].

## 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].

## 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 10 I | [2.9] or 1026 [2.92] or assignment to Mathematics
*I20I [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 I030 [3] or 1050 [5.2]; and 3800 [13.2] or 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 human-computer 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 3 I20

## 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.

Prerequisite: Computer and Information Science 3 I 30 [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.

Prerequisite: Computer and Information Science 3130, and Mathematics 1011 or 1201 .

## 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 II 80 [2.80]; 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 real-world database management systems, with an emphasis on microcomputer applications. Database recovery query and transaction processing, concurrency. Distributed and object-oriented databases.

Prerequisite: Computer and Information Science 21 or 3130 [22]; and 1050 [5.2] or permission of the chairperson.

## 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.

Computer and Information Science 3110 [15]; and Mathematics 250 I [8.1] or 350 I [5I.I].

## 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 3 I 30 [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 II 50 [2.50], I I 70 [2.70], 3160 [24], 3320 [25], 3150 [26], 3410 [32], 3350 [46], 3330 [47], 3820 [48].

## CISC 46IO 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 38 IO [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 [15] 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

| 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 3 I 30 [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 I
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 84.I: 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 each term
Independent research study or project supervised by a faculty member; approved reading; project report or written examination.

Prerequisite: Computer and Information Science 3130 [22], an advanced elective in Computer and Information Science numbered 3220 [23] or above, a minimum grade point average of 3.0 overall and in Computer and Information Science advanced electives, a declared major in the Department of Computer and Information Science, and permission of the chairperson.

## CISC 5002 Independent Study and Research II

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent research study or project supervised by a faculty member; approved reading; project report or written examination.

Prerequisite: Computer and Information Science 3130 [22], an advanced elective in Computer and Information Science numbered 3220 [23] or above, a minimum grade point average of 3.0 overall and in Computer and Information Science advanced electives, a declared major in the Department of Computer and Information Science, and permission of the chairperson.

## CISC 5003 Independent Study and Research III

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent research study or project supervised by a faculty member; approved reading; project report or written examination.

Prerequisite: Computer and Information Science 3 I 30 [22], an advanced elective in Computer and Information Science numbered 3220 [23] or above, a minimum grade point average of 3.0 overall and in Computer and Information Science advanced electives, a declared major in the Department of Computer and Information Science, and permission of the chairperson.

## CISC 5004 Independent Study and Research IV

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent research study or project supervised by a faculty member; approved reading; project report or written examination.

Prerequisite: Computer and Information Science 3 I 30 [22], an advanced elective in Computer and Information Science numbered 3220 [23] or above, a minimum grade point average of 3.0 overall and in Computer and Information Science advanced electives, a declared major in the Department of Computer and Information Science, 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

## Earth and Environmental Sciences

Department office: 3I3I Ingersoll Hall
Phone: 718.951 .5416

## Full-time Faculty

Professors: Chamberlain, Cranganu, Marra, Savage, Seidemann
Associate Professors: Aja, Cheng, Powell
Assistant Professors: Boger, Branco
Lecturer: Garb

The Department of Earth and Environmental Sciences (formerly the Department of Geology) 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 geological materials, including minerals, rocks, fossils, soils, water and energy resources, and to geological processes that alter our natural physical environment--climate change, coastal erosion, mountain building and the migration of continents, among others. Geologists 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 geology 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 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.

Students who major in earth and environmental science and maintain high academic standing may apply for honors through independent research under the mentorship of a departmental faculty member. Honors students present the results of their research in a professional meeting or college seminar series. Research may involve field-based studies, lab-based studies in such areas as geochemistry or geophysics, examination of specimens in curated collections, or computational analysis of geological data sets.

Department of Earth and Environmental Sciences graduates master a comprehensive education that is a gateway to a wide range of geoscience career options in industry, government agencies, 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.

## Core curriculum

The Department of Earth and Environmental Science participates in the college's core curriculum through Core Curriculum I 332 .

## 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 (33-34 credits)

## All of the following:

Earth and environmental sciences IIOI, I20I, 2200, 2300, 3350, 3675, 3750.
Earth and environmental sciences 3400 W .
Chemistry 1040 or II 00 or its equivalent.

Mathematics I20I, or Computer and Information Science IIIO. or Earth and Environmental Sciences 3800.
All required Earth and Environmental Sciences courses numbered 1500 or higher must be completed with a grade of C- or higher in each course.

## 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 School of Education or the Department of Earth and Environmental Sciences. Students should consult a counselor as early as possible to plan their program.

Adolescence education (grades 7-12) and special subject programs are writing intensive.

Program requirements (69-74 credits)

## All of the following:

a) Earth and environmental sciences IIOI, I20I, 2100 or 2200, 2300, 3000, 3300 or $3350,3400 \mathrm{~W}, 3850,3900$.
b) Chemistry 1100 or its equivalent.
c) Mathematics 1201 or 1501 , or Earth and environmental sciences 3800 .
d) One of the following courses in physics: Physics 1100 or 1150 , or Core Curriculum 1331, or Earth and Environmental Sciences 3200.
e) One of the following courses in biology: Biology I001 or I080, or Core Curriculum I32I.

The following pedagogical courses in School of Education: SEED 200I, 2002, 340I, 3402, 4404, 44I0, 3456 (total of 24 credits):
This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.
SEED 200I, 2002, 340I, 3402 (I2 credits).
The appropriate 5-credit course in student teaching:
SEED 4404: Seminar on Methods of Teaching Science, Student Teaching I
The appropriate 4-credit course in student teaching:
SEED 44 I0: Advanced Seminar on Methods of Teaching Science, Student Teaching II
Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking SEED 3454.

Students, except music education majors, must complete 24 credits in the Department of Secondary Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take SEED 200 I, 2002, 340 I or 3402; an average of 2.75 in SEED 200 I and 2002 is required to continue to SEED 3401 and/or 3402; to take SEED 4413 or $4401-4406$, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take SEED 4407-4406, students must earn a B- or higher in SEED 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes SEED 4407-44I2 prior to SEED 4401-4406 must earn a B- or better grade in SEED 4407-44I2 to take SEED 440I-4406.

## B.S. degree program in earth and environmental sciences HEGIS code 1914; SED program code 02092

## Department requirements (58.5-60 credits)

## All of the following:

a) Earth and environmental sciences $1 \mathrm{IO} \mathrm{I}, \mathrm{I} 20 \mathrm{I}, 2200,2300,3100,3350,3675,3750,3850,3400 \mathrm{~W}$.
b) At least twelve additional credits in the following courses: any Earth and environmental sciences courses numbered 1500 or above, and which may include up to six credits from the following:
Anthropology 2402, 3440, 3470, 3480, 3250.
Biology 3003, 3082, 3083, 4003, 4080.
Chemistry 2500, 2700, 34I0, 3420, 35IO, 46IO.

Health and Nutrition Sciences 2130.
Physics 3500, 4200.
c) Chemistry 1040, 1100 or its equivalent.
d) Mathematics 1201 .
e) Mathematics 1206 or Computer and Information Science IIIO or Earth and environmental sciences 3800.
f) Biology I00 I or Physics I I 00 or its equivalent or I I50.

All required earth and environmental sciences courses numbered 1500 or higher must be completed 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 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 and Archaeology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470, 4665.
----Core Studies 5, 5.I, 5.2, 7.I, 7.2, 8.I, 8.2.
----Core Curriculum I 300 through I 399
----Core Curriculum 330I through 3399
---Economics 3400, 44I0, 34I0, 4422.
---Philosophy 3203, 3204, 3231, 3232, 3422, 3423, 360I, 3605, 3610.
---Physical Education 3023, 327I, 3275, 328I, 3285, 4229, 425 I.
---Sociology 2701.

## Departmental Minor(s)

## Minor in Earth and environmental science

## Department Requirements

A program of 12 credits of advanced electives in earth and environmental science, 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 330I, [76.I], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3II0, 3344; Anthropology 3130, 3140, 3170, 3185; English 3194; Judaic Studies 3017 ; Philosophy 3702; Political Science 334।; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's 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 Studies 3328
d. Media and Communications in a Global Context

Anthropology 3I80; Film 2131; Philosophy 3315; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; 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 general geology should select advanced electives pertinent to their planned course of study. All B.S. students planning graduate study should also develop reading competence through course 2 in at least one foreign language chosen from French, German, and Russian.

## Division of Graduate Studies

The Department of Earth and Environmental Science offers a master of arts degree program in earth and environmental science. The department also offers courses creditable toward the CUNY doctoral degree program in earth and environmental studies. 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 $\left(^{*}\right)$ 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 *IIOI Introduction to Earth Science

I. 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.

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 I500 Introduction to Urban Sustainability

2 lecture, 2 laboratory; 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 Sociology 2202 and Economics 2251.

## EESC I501 Urban Sustainability Theory

3 lecture; 3 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 the same as Sociology 3201 and Economics 3251.

Prerequisite: Earth and Environmental Sciences 1500 or Economics 225 I or Sociology 2202.

## EESC 2100 Mineralogy

2 hours lecture, 4 hours laboratory; 4 credits Crystallographic, chemical, and physical properties of minerals with emphasis on crystal structure. Introduction to recognition of minerals using transmitted light and X-ray diffraction analysis. Laboratory work includes one or more field trips.

Prerequisite: Earth and Environmental Sciences ||O|.
Prerequisite or corequisite: Chemistry IIOO.

## EESC 2200 Sedimentology and Sedimentary Petrology

2 hours lecture, 4 hours laboratory; 4 credits
Sediments and sedimentary rocks, their conditions of formation, basis of classifications; methods of mechanical, chemical, mineralogic, graphic, and statistical analysis, stressing binocular and petrographic microscopy; application of paleodirectional structures. Laboratory work includes one or more field trips.

Prerequisite or corequisite: Earth and Environmental Sciences IIOI.

## EESC 2300 Structural Geology and Field Analysis

2 hours lecture, 2 hours laboratory; 3 credits
Mechanical properties of rocks; rock deformation; folds; faults; joints; igneous, sedimentary, and metamorphic structures. Laboratory work includes structural maps and cross sections, stereographic projections and field-based analysis and documentation of deformed sedimentary and metamorphic rocks.

Prerequisite: Earth and Environmental Sciences $110 \mid$.

## EESC 3000 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: Earth and Environmental Sciences 2100 or 2200.

## 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: Earth and Environmental Sciences 1101 or Core Curriculum 1322; or permission of the chairperson.

## EESC $\mathbf{3 2 0 0}$ General Geophysics

3 hours; 3 credits
Study of the gravitational, magnetic, seismic, and electrical principles involved in geophysics; geophysical exploration; earthquakes; structure and composition of the earth's crust and interior; geodesy; submarine geophysics.

Prerequisite: Physics 2100 or 2150 or Earth and Environmental Sciences $110 \mid$ or permission of the chairperson.

## EESC 3300 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: Earth and Environmental Sciences IIOI ; or Biology I00| and Core Curriculum I332; or permission of the instructor.

## EESC 3350 General Stratigraphy

2 hours lecture, 2 hours laboratory; 3 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 includes one or more field trips.

Prerequisite: Earth and Environmental Sciences 2200.

## EESC 3400W Geological Problems and Opportunities in

## Urban Areas

2 hours lecture, 2 hours laboratory; 3 credits
Geologic aspects of environmental problems and opportunities of urban areas: water supply, waste disposal, construction materials, foundations, ground stability, stream floods, and coastal processes. Geology and urban and regional planning. Geology and the origin, evolution and future of cities. Laboratory work includes the construction and use of observational and judgmental maps. Writing-intensive course.

Prerequisites: Earth and Environmental Science $|10|$ or permission of the chairperson, Earth and Environmental Science I201, English IOI2, plus nine credits of Earth and Environmental Science courses numbered 2000 or above.

## EESC 3450 Economic Geology and Energy Resources

3 hours lecture; 3 credits
Earth's mineral and energy resources; their occurrence, associations, genesis, recovery, and use.

Prerequisite: Earth and Environmental Sciences IIOI.

## EESC $\mathbf{3 6 0 0}$ 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: Earth and Environmental Sciences IIOI.

## EESC 3610 Coastal Marine Science

3 hours; 3 credits
Global and local changes in coastal marine environments; biological, chemical and physical processes and human impacts in coastal waters; topics include water quality, habitat restoration, sediment contamination and climate change.

Prerequisites: Earth and Environmental Sciences 1201, 3750 and 3800. Prerequisites and Corequisites: Earth and Environmental Sciences 3600 and 3675 and either Chemistry 1040 or 1100 or Earth and Environmental Sciences 3100 .

## EESC 3650 Environmental Geochemistry

2 hours lecture, 2 hours laboratory; 3 credits
Low-temperature geochemistry and applications to environmental problems; biogeochemical cycling; evaluation of geochemical reservoirs and trace element movement in natural systems. Laboratory exercises in geochemical sample collection of waters, soils, sediments, and related media; field measurements; maintenance of sample integrity; sample preparation and instrumental analysis; map preparation; environmental impact statements and reports.

Prerequisite: Earth and environmental sciences 1101 or 1201. Prerequisite or corequisite: Chemistry 1040 or 1100.

## EESC 3675 Environmental Aspects of Soils Geology

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: Earth and environmental sciences 2200 and 3100 or permission of the chairperson.

## EESC 3750 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 and Archaeology 3445.

## EESC 3755 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: Earth and environmental sciences 3750 or permission of the department chairperson.

## EESC 3800 Statistics and Data Analysis in Geosciences

3 hours lecture; 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(r), MINITAB(r), STATISTICA(r), ORIGIN(r) or MATLAB(r).

Prerequisite: Earth and Environmental Sciences ||0| or $120 \mid$

## EESC 3850 Field Mapping

I 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: Earth and Environmental Sciences IIOI, 2300, 3350, 3750; or permission of the chairperson.

## EESC 3900 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: Earth and Environmental Sciences 1101 .

## EESC 4000 Special Topics in Geology

3 hours; 3 credits
A special topic in geology not covered in the regular curriculum. Topics vary and reflect the interest of students and faculty. Subject matter is announced before registration. This course is intended primarily for students choosing Option I for the B.S. degree. Topics include geochemistry, geophysics/tectonophysics, mineralogy/petrology, paleobiology/stratigraphy, sedimentology, geomorphology, and oceanography. A student may take this course and Geology 4050 [70.2] at most three times in total, but may not repeat topics

Prerequisite: at least nine credits of advanced electives as established by the instructor and permission of the chairperson.

## EESC 4050 Special Topics in Environmental Geology

3 hours; 3 credits
A special topic in environmental geology not covered in the regular curriculum. Topics vary and reflect the interest of students and faculty. Subject matter is announced before registration. This course is intended primarily for students choosing Option 2 for the B.S. degree. Topics include environmental geochemistry, hydrogeology, medical geology, environmental geology, environmental policy, and other related environmental subjects. A student may take this course and Geology 4000 [70. I] at most three times in total, but may not repeat topics.

Prerequisite: at least nine credits of advanced electives as established by the instructor and permission of the chairperson.

## EESC 5000 Independent Research I

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent research supervised by a faculty member. Weekly conference. Thesis or report.

Prerequisite: Completion of an approved program of advanced Earth and Environmental Sciences Department courses and permission of the instructor and the chairperson.

## EESC 5100 Independent Research II

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent research supervised by a faculty member. Weekly conference. Thesis or report.

Prerequisite: Geology or Earth and Environmental Sciences 5000 [83.I] and permission of the instructor and the chairperson.

## EESC 5200 Independent Research III

Minimum of 9 hours conference and independent work§; 3 credits each term
Independent research supervised by a faculty member. Weekly conference. Thesis or report.

Prerequisite: Geology or Earth and Environmental Sciences 5 IO0 [83.2] and permission of the instructor and the chairperson.

## EESC 5500 Seminar I

Minimum of 9 hours conference and independent work§; 3 credits each term
Group study of some fundamental geological problem. Thesis or examination.

Prerequisite: completion of an approved program of advanced Earth and Environmental Sciences Department courses and permission of the chairperson

## EESC 5600 Seminar II

Minimum of 9 hours conference and independent work§; 3 credits each term
Group study of some fundamental geological problem. Thesis or examination.

Prerequisite: completion of an approved program of advanced Earth and Environmental Sciences Department courses and permission of the chairperson.

## EESC 5700 Seminar III

Minimum of 9 hours conference and independent work§; 3 credits each term
Group study of some fundamental geological problem. Thesis or examination.

Prerequisite: completion of an approved program of advanced Earth and Environmental Sciences Department courses and permission of the chairperson.

## Economics

## Economics

Department office: 218 Whitehead Hall
Phone: 718.951.5153

## Full-time Faculty

Professors: Cherry, Peng, Sardy, Uctum
Associate Professors: Arenberg, Fox, Goldberg, Klein, Thorne
Assistant Professors: Doytch, Wang

The economics program 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, and 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 ( 35 credits)
a. All of the following: Economics 2100, 2200; Economics 3400 or Business 3400 or Mathematics 2501 or 350 ।;

Economics 3410 or Mathematics 2101 .
Students must achieve a grade of $C$ or better in at least three of the above courses. Students who have received transfer credit for any of the above courses must have a grade of C or better in all of the above courses taken in residency.
b. Economics 4400 W or Business 4400 W.
c. One of the following concentrations:
I. Enterprise and Public Policy:

Any four courses from Economics 3202, 32I2, 3222, 3252, 3332, 3232, 3242.
2. International Economics:

Any four courses from Economics 3102, 3152, 3202, 3352, 3362.
3. Financial Economics:

Any four courses from Economics 3 I 02, 3320, 3370, 3332, 3342, 3352, Business 3330.
4. Political Economy:

Any four courses from Economics 3I02, 32I2, 3222, 3I54, 3252, 3342, 3I53, 3232.
5. Economic Analysis:

Economics 3102 , 3202, and any two additional Economics courses.
d. Two additional courses with an economics prefix not used to meet requirements in b) or c) above.

Students considering graduate work in economics are strongly encouraged to take Economics 4422 and the Economic Analysis concentration; those intending to pursue a Master of Business Administration are encouraged to take Economics 3102 and/or Economics 3202.

Residence requirement:
At least I 8 credits of the above courses must be taken at Brooklyn College.

## B.A. degree program in adolescence education: social studies teacher HEGIS code 2201.01 ; SED program code 26754

Adolescence education (grades $7-12$ ) and special subject programs are writing intensive.

## Program requirements

Students who wish to pursue a bachelor of arts degree in adolescence 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.

The following pedagogical courses in the Department of Secondary Education: SEED 200I, 2002, 340 I, 3402, 4402, 4408, 3456 (total of 24 credits):
This four-term sequence may be started in the lower-sophomore term or upper-sophomore term.
SEED 200I, 2002, 340I, 3402 (I2 credits).
The appropriate 5 -credit course in student teaching:
SEED 4402 Seminar on Methods of Teaching Social Studies, Student Teaching I
The appropriate 4-credit course in student teaching:
SEED 4408 Advanced Seminar on Methods of Teaching Social Studies, Student Teaching II
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department.
Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking Education 3454.

Students, except music education majors, must complete 24 credits in the School of Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take SEED 200 I, 2002, 340I or 3402; an average of 2.75 in SEED 200 I and 2002 is required to continue to SEED 340 I and/or 3402; to take SEED 44 I 3 or $440 \mathrm{I}-4406$, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take SEED 4407-4406, students must earn a B- or higher in SEED 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes SEED 4407-44I2 prior to SEED 4401-4406 must earn a B- or better grade in SEED 4407-44I2 to take SEED 440I-4406

## Departmental Minor(s)

## Minor in Economics

Department Requirements
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 330I, [76.I], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 3140, 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 Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 22I5, 3130, 3395; Children and Youth Studies 3110 ; Health and Nutrition Science 2I30; Judaic Studies 4I95; Philosophy 3307; Political Science 3240, 3242, 3243; Women's Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131 ; Philosophy 3315; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Division of 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 Finance and 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 $\left(^{*}\right)$ 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.

## 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 Economics 2100 , or permission of the chairperson.

## 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 [IO.I].)

Prerequisite: Core Curriculum 131। [3.11] or Core Studies 5 or 5.2 , or passing Mathematics IOII or higher, or sophomore status.

## 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.I.)

Prerequisite: Economics 2200 [20.1] and 3410 [31.1], 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 neo-Ricardian models. Production functions and the capital valuation problem; the duality of the growth rate and the profit rate; two-sector 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.

## 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 [20.1].)

Prerequisite: Core Curriculum 1311 [3.11] or Core Studies 5 or 5.2, or passing Mathematics IOII or higher, or sophomore status.

## 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 3104 [31.1], or the equivalent.

## Quantivative and mathematical economics

## ECON 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 Business 3400 [30.2]. (Not open to students who are enrolled in or have completed any of the following: Sociology 2113 [19.1], 2114 [20], 20.1; Political Science I2.5, 3422 [57]; Psychology 3400 [40.1], 2600 [50]; Mathematics *2501 [8.1], 3501 [5I.I].)

Prerequisite: a score of 32 or higher on the CUNY Mathematics Skills Assessment Test or a grade of C or higher in Core Curriculum I31I [3.1I] or Core Studies 5 or passing Mathematics *10।I [2.9] or higher.

## ECON 3410 Fundamental Methods of Mathematical <br> 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 [ 31.1 ]. Not open to students who have completed Mathematics $210 \mid$ [ 0.1 ].)

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 [30.3W].
Prerequisite: Economics 3400 [30.2] or Business 3400 [30.2] or Mathematics 350 I [51.1]; and Economics 3410 [31.I] or its 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.

## Human resources and economics of poverty

## 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 Studies 3317 [54].)

Prerequisite: Economics 2100 [10.I].

## 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.I].

## Economic geography

## ECON 225 I Introduction to Urban Sustainability

2 hours lecture, 2 laboratory; 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 Sociology 2202 and Earth and Environmental Sciences 1500.

## ECON 325I Urban Sustainability Theory

3 lecture; 3 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 the same as Earth and Environmental Sciences 1501 and Sociology 3201.

Prerequisite: Earth and Environmental Sciences 1500 or Economics 225 I or Sociology 2202

## 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. I] or permission of the chairperson.

## ECON 3253 Economic Geography

3 hours; 3 credits
Course Description: 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 human-environment interaction.

Prerequisites: Economics 2200 and 3400

## Money and finance

## 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 [70.1].)

Prerequisite: Economics 2100 [IO.I].

## 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 3370 Investment Science

4 hours; 4 credits
Net present value, internal rate of return; yield, duration, immunization, and convexity of fixed-income securities; mean-variance 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 Business 3370 [70.7] and Mathematics 360 I [74.2].)

Prerequisite: Economics 3400 [30.2] or Business 3400 [30.2] or Mathematics *250I [8.I] or Mathematics 350I [5I.I]; Economics 3410
[31.1] with a grade of B- or better; Economics 3310 [70.2] or Business 3310 [70.2].

## 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 risk-neutral 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 Business 3375 and Mathematics 4601.)

Prerequisite: Mathematics 360 I or 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 Business 3378.

Prerequisite: Business 3310 [70.2] or Economics 3332 [70.8] or BUS 3330 [70.3]; Economics 2200 [20.1] or Business 2200 [20.1].

## Economic policy

## ECON 3I53 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 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 3254 Ecological Economics

## 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 the ecosystem services that underpin the wealth of nations. Examination of the following fundamental questions: I, 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 can 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 and 3400

## 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. I].

## 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.

## Development and trade

## 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].

## 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].

Independent research supervised by a faculty member. Approved topic. Weekly conference. Research paper.

Prerequisite: Economics 3102 [10.2].

## ECON 5II2 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 52l2 Independent Research in Human Resources and Economics of Poverty <br> Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Research paper. <br> Prerequisite: Economics 3212 [40.1] or 40.4.

## ECON 5222 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 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.I].

## ECON 5322 Independent Research in Economic Development and Trade

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 3352 [76. I] or 76.2.

## ECON 5402 Independent Research in Quantitative and Mathematical Economics <br> Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Research paper. <br> Prerequisite: Economics 4422 [31.2] or Business 3430 [31.4].

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 44I0 Advanced Economic and Business Statistics

# Education, Childhood, Bilingual and Special Education 

Department office: 2105 James Hall
Phone: 718.95I. 5447

## Full-time Faculty

Professors: Martinez-Pons, Rose, Rubal-Lopez
Associate Professors: Kharem, Morales
Assistant Professors: Angus, Ascenzi-Moreno, Haydar, Hwu, Kaya, Lee, O'Connor-Petruso, Reed, Rosenfeld

## B.A. degree program for childhood education teacher (grades I-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 I-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 and must be exempt from assignment to a speech course.

In addition to fulfilling the Core Studies requirements, students must complete a liberal arts and sciences concentration (30 credits). Specific requirements apply for each concentration. Students should consult separate listings for the following departments and programs and should also consult with an adviser in the Office of Student Advisement in the Department of Childhood and Special Education: American studies; anthropology and archaeology; art; children's studies; classics; environmental studies; 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; women's studies. (Additional concentrations may be offered.)

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 314I, Psychology 2040, Puerto Rican and Latino Studies 3325, Sociology 2200; one of the following arts and humanities courses: Art 62.10, Classics 12I3, English 3I80, Film 9, Judaic Studies 3010, Philosophy 3323, Speech I7I8, Television and Radio I0, Theater 1003; Mathematics I40I, 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 credits).

In addition, students must complete the following pedagogical courses: CBSE 200 I, 2002, 320 I, 3202, 3203, 3204, 3205, 3206, 3207, and 420I (33 credits).
Each education course must be completed with a grade of C or higher.
Note: Students must present a GPA of 3.00 or higher in education courses prior to student teaching CBSE 420 I.

## B.A. degree program for childhood education teacher, bilingual (Spanish/English) education extension (grades <br> I-6) <br> HEGIS code 0802.00; SED program code 26828

Childhood education teacher, bilingual (Spanish/English) is a writing-intensive major program.

## Program requirements

Completion of the B.A. degree with a major in childhood education with an extension for bilingual education qualifies students to receive New York State initial teacher certification for childhood education (grades I-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 Childhood, Bilingual and Special Education and 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 and must be exempt from assignment to a speech course.
In addition to fulfilling the Core Studies requirements, students must complete a Puerto Rican and Latino Studies concentration by taking the following courses: Puerto Rican and Latino Studies 44 I 0,44 I 5, 4420, 4425,4430 as well as one course from each of the four following groups: Puerto Rican and Latino Studies 3I05, 3I20, 3I25; Puerto Rican and Latino Studies 3215, 3220, 2005; Puerto Rican and Latino Studies 32, 4645; and Puerto Rican and Latino Studies 4450, 3315, 4640 (31 credits).

Students must also complete the following courses and their corequisites and prerequisites: One of the following social science courses: Africana Studies 3324, Anthropology 3I35, Political Science 314I, Psychology 2040, Puerto Rican and Latino Studies 3325, Sociology 26.4; one of the following arts and humanities courses: Art [62.10], Classics I213, English 3I80, Film [9], Judaic Studies 3010, Philosophy 3323, Speech I718, Television and Radio [I0],

Theater I003; Mathematics I40 I, or a mathematics course numbered 2000 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 credits). In addition, students must complete the following pedagogical courses: CBSE 200I, 2002, 320I, 3202, 3203, 330I, 3205, 3206, 3207, and 430I. (33 credits).

Students must present a G.P.A. of at least 2.50 in liberal arts and science courses. Each required education course must be completed with a grade of $C$ or higher. Note: Students must present a G.P.A. of at least 3.00 in education courses prior to student teaching (CBSE 430 I).

## Courses

## CBSE 2001 The Art, Philosophy, and Culture of Teaching

4 hours recitation, 25 hours field experience; 3 credits Study of teaching, linking theory and practice and connecting the philosophical, historical, and cultural foundations of education with curriculum and the art of teaching. Relation of significant educational movements, philosophies, and teaching practices to all students' educational experiences, including students with special needs and English language learners, from birth through adolescence. Opportunities through class discussion, portfolio preparation, and field experiences for reflection on interactions between school and community, teachers' roles, and issues of diversity and social justice. (Not open to students who are enrolled in or have completed Education 14 and open only to students who have completed at least 30 credits in liberal arts and sciences with a grade point average of 2.50 or higher.) This course is the same as Secondary Education 2001.

Prerequisite: English 1010 [I].

## CBSE 2002 Urban Children and Adolescents: Development and Education

3 hours recitation, 25 hours field experience; 3 credits Relationships between basic developmental processes of children and adolescents and their educational experiences in schools and communities. Role of culture, ethnicity, race, gender, and social class upon biological and psychological processes. Emphasis on children in urban, multicultural schools, including students with special needs and those who are English language learners, from birth through adolescence. Field trips to a variety of educational sites; observations and interviews of children; continuation of portfolio development; reflection upon field experiences of 25 hours. This course is the same as Secondary Education 2002.

Prerequisite or corequisite: Childhood and Special Education 2001 [16].

## 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.I, 48.2 I, 48.22, 58. I, 58.11, or 58.12.)

Prerequisite: Education 3201 [36].
Prerequisite or corequisite: Education 3204 [40] or 3104 [40. I] or 330 I [40.2] or 40.3; and Education 3205 [43].

CBSE 320I 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 200 I and 2002.
Corequisite: Childhood and Special Education 3205 and one of the following: Africana Studies 3324, Anthropology 3I35, Political Science 314I, Psychology 2040, Puerto Rican and Latino Studies 3325, Sociology 2200. A student who receives a failing grade in Childhood and Special Education 320 I and a grade of C or higher in the corequisite social science course may with departmental permission, repeat Childhood and Special Education 320 I 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 200 I and 2002. Corequisite: Childhood and Special Education 3204 and one of the following: Art 3260, Classics 1213, English 3180, Judaic Studies 3010 , Philosophy 3323, Speech 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 inquiry-based 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 *|401.

Corequisite: General Science 2040, 20I0, 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 200I 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 *|40| [1.95].
Corequisite: Mathematics *| 406 [1.97].

## CBSE 3207 Teaching Science: Childhood Education

I 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 330I 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 3456 Teaching Students with Special Needs

45 hours; 3 credits
Objectives, variations and clinical practice in collaborative and co-teaching methodology and curriculum development, evaluation, regulatory compliance, and application of early interventions to teaching children and youth with special needs. Making subject matter in the content areas understandable to students with a wide range of disabilities. Mastering, improvising, and adapting techniques for students with special-needs. Motivation and evaluation for children and youth with special-needs. This course is the same as Secondary Education 3456.

## CBSE 420 I 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 I-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 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 I 50 hours); 4 credits
Student teaching. Application of the principles of teaching to all aspects of the curriculum, including literacy instruction in childhood classrooms (grades I-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 422I Seminar and Comprehensive Student Teaching II:Childhood Education

3 hours recitation, weekly supervised teaching (at least I 50 hours); 5 credits
Student teaching. Application of the principles of teaching to all aspects of the curriculum, including literacy instruction in childhood classrooms (grades I-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 2.75 or higher in liberal arts and sciences courses.

Prerequisite: Childhood and Special Education 3206, 3207, and 4220.

## 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 I-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; 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 I 75 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 I-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 432I Seminar and Comprehensive Student Teaching II: Bilingual Education

3 hours recitation, weekly supervised teaching ( 175 hours); 5 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 I-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 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 averageof 2.75 or higher in liberal arts and science courses.)

Prerequisite: Childhood and Special Education 3206, 3207 and 4320.

## CBSE 450I 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 Seminar4 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 450 I, Instructor's permission.

# Education, Early Childhood and Art Education 

Department office: 2309 James Hall
Phone: 718.95I. 5205

## Full-time Faculty

Associate Professors: DeBey, Shannon

Assistant Professors: Ferholt, Jiesamfoek, Lauterbach, Li, Louis, O'Neill, Song

## 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. Students majoring in the early childhood education teacher program are expected to have satisfied the foreign language requirement in high school and must be exempt from assignment to a speech course.

In addition to fulfilling the Core Curriculum requirements, students must complete a liberal arts and sciences concentration (30 credits). Specific requirements apply for each concentration. 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 and archaeology; art; children's studies; classics; environmental studies; 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; women's studies. (Additional concentrations may be offered.)

Students must also complete the following courses and their corequisites and prerequisites: Psychology 3240 or Health and Nutrition Sciences 2170; Speech III4; Mathematics I40I or a mathematics course at an equivalent level such as Mathematics I20I or higher, Mathematics 1406; and a score of $80 \%$ or higher on the ECAE Department mathematics proficiency examination; and General Science 3050 (18-19 credits).

In addition, students must complete the following pedagogical courses: Early Childhood and Art Education 2003, 2004, 3 I 0 I, 3 I02, 3 I03, 3 I04, 3 I 05, $3106,3107,3108$, and 400 ( 36 credits).

Each early childhood education course must be completed with a grade of $C$ or higher and a grade point average of 2.75 or higher in liberal arts and sciences courses.
Note: In order to register for student teaching in the early childhood education program a student must have completed all required Early Childhood and Art 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.

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 major in the Dual 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 State exams must be passed. Students majoring in the dual certification for early childhood education teacher and teaching students with disabilities in early childhood are expected to have satisfied the foreign language requirement in high school and must be exempt from assignment to a speech course.

In addition to fulfilling the Core Curriculum requirements, students must complete a liberal arts and sciences concentration (30 credits). Specific requirements apply for each concentration. 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 and archaeology; art; children's studies; classics; environmental studies; 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; women's studies. (Additional concentrations may be offered.)

Students must also complete the following courses and their corequisites and prerequisites: Psychology 3240 or Health and Nutrition Sciences 2170; Speech III4; Mathematics I40I, or a mathematics course at an equivalent level such as Mathematics I201 or higher, Mathematics I406; and a score of $80 \%$ or higher on the ECAE Department mathematics proficiency examination; and General Science 3050 (I8-I9 credits).

In addition, students must complete the following pedagogical courses: Early Childhood and Art Education 2003, 2004, 3 I 0 I, 3 I 02, 3 I 03, 3 I 04, 3 I 05, $3106,3107,3108,3109,4020$ and 4001 ( 42 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. Each Early Childhood and Art Education course must be completed with a grade of C or higher and a grade point average of 2.75 or higher in liberal arts and sciences courses.

Note: In order to register for student teaching in the dual early childhood/teaching students with disabilities in early childhood (ECAE 400 I) a student must have completed all required Early Childhood and Art 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.

## Courses

## 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.

Corequisite: Early Childhood and Art Education 2003 or permission of the chairperson.

## ECAE 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.)

## ECAE 3IOI 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 3I0।.

## ECAE 3103 Early Education and Care of Infants and Toddlers: General and Special Education

2 hours recitation, I 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 or corequisite: Early Childhood and Art Education 310। 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, 3 I 0 I, 3102 , and 3103 .

Prerequisite or corequisite: Early Childhood and Art Education 3 I 05.

## 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, 3I 0 I, 3102 , and 3103 .

Corequisite: Early Childhood and Art Education 3104.

## ECAE 3106 Teaching Mathematics in the Early Years: General and Special Education

2 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, 3I 0 I, $3102,3103,3104,3105$, and Mathematics 1401 and $1406 ; 80 \%$ or above on the Early Childhood and Art Department math competency exam.

Prerequisite or corequisite: Early Childhood and Art Education 3 I 07.

## ECAE 3107 Science Inquiry for Young Children: General and Special Education

I hour recitation, 2 hours supervised field experience; 2 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, 3 I 0 I, $3102,3103,3104$, and 3105.

Prerequisite or corequisite: Early Childhood and Art Education 3I 06; General Science 3050.

## ECAE 3108 Foundations and Pedagogy in Early Childhood

 Special Education3 hours recitation, I 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, co-teaching 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, 3 I 0 I, and 3102.

## ECAE 3109 Environments and Curriculum Adaptation for Young Learners with Special Needs

3 hours recitation, I 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 Education3 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 and Art 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: Early Childhood and Art Education 2003, 2004, 310।, $3102,3103,3104,3105,3106,3107$ 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 EducationI 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 3I 09.

Prerequisite: Early Childhood and Art Education 2003, 2004, 3 I 0 I, $3102,3103,3104,3105,3106,3107$, 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-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 [75.1 I ] in preschool, kindergarten, or grades I 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 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: Early Childhood and Art Education 2003, 2004, 3 I 0 I, $3102,3103,3104,3105,3106,3107$ and 3108.

## Education, Secondary Education

Department office: 2608 James Hall
Phone: 718.951.5325
Full-time Faculty
Professors: Miele, Shanley, Taubman
Associate Professors: Alexakos, Florence, Meagher, Parmar, Rubel, Winslow, Zolkower
Assistant Professors: Adams, Murrow

## B.A. degree program in adolescence education: social studies teacher HEGIS code 2201.01 ; SED program code 26754

Adolescence education (grades 7-12) and special subject programs are writing intensive.
Program requirements
Students who wish to pursue a bachelor of arts degree in adolescence 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.

The following pedagogical courses in the Department of Secondary Education: SEED 200I, 2002, 340I, 3402, 4402, 4408, 3456 (total of 24 credits):
This four-term sequence may be started in the lower-sophomore term or upper-sophomore term.
SEED 2001, 2002, 3401, 3402 (I2 credits).
The appropriate 5 -credit course in student teaching:
SEED 4402 Seminar on Methods of Teaching Social Studies, Student Teaching I
The appropriate 4-credit course in student teaching:
SEED 4408 Advanced Seminar on Methods of Teaching Social Studies, Student Teaching II
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department.
Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking Education 3454.

Students, except music education majors, must complete 24 credits in the School of Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take SEED 2001, 2002, 340 I or 3402; an average of 2.75 in SEED 200 I and 2002 is required to continue to SEED 340 I and/or 3402; to take SEED 44 I 3 or 440 I-4406, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take SEED 4407-4406, students must earn a B- or higher in SEED 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes SEED 4407-44I2 prior to SEED 4401-4406 must earn a B- or better grade in SEED 4407-44I2 to take SEED 440I-4406.

[^5]All programs are writing-intensive. These programs reflect changes in teacher certification requirements recently implemented by the New York State Education Department.

Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than English qualifies students for New York State initial certification in adolescence education for grades 7 through 12. Completion of a special subjects program as part of a major in music education or physical education qualifies students for New York State initial certification in those subjects for all grades.

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, except music education majors, must complete 24 credits in the Secondary Education as specified below.
15 credits in General Education courses:

- Secondary Education 2001 The Art, Philosophy, and Culture of Teaching
- Secondary Education 2002 Urban Children and Adolescents: Development and Education
- Secondary Education 340I Language and Literacy Development in Adolescence

Education and Special Subjects

- Secondary Education 3402 Integrative and Multidisciplinary Teaching and Learning
- Secondary Education 3456 Teaching Students with Special Needs

And
The appropriate 5-credit 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 4404 Seminar on Methods of Teaching Science, Student

Teaching I, or

- Secondary Education 4405 Seminar on Methods of Teaching Modern

Languages, Student Teaching I, or

- Secondary Education 4406 Seminar on Methods of Teaching Physical

Education, Student Teaching I
And
The appropriate 4-credit 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, Student

Social Studies Teaching II, or

- Secondary Education 4409 Advanced Seminar on Methods of Teaching

Mathematics, Student Teaching II, or

- Secondary Education 44I0 Advanced Seminar on Methods of Teaching Science, Student Teaching II, or
- Secondary Education 44II Advanced Seminar on Methods of Teaching Modern Languages, Student Teaching II, or
- Secondary Education 4412 Advanced Seminar on Methods of Teaching Physical Education, Student Teaching II

The four-term 24 credits sequence may be started in the lower-sophomore term, or upper-sophomore term.
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 (12 credits):

- Secondary Education 200 I and 2002 (6 credits)
- Secondary Education 44I3 (6 credits)

In the case of social studies, in addition to the above 24 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.

Admission requirements and academic standing
Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 200I, 2002, 340 I, 3402 or 3456; an average of 2.75 in Secondary Education 2001 and 2002 is required to continue to Secondary Education 340I and/or Secondary Education 3402 and/or Secondary Education 3456;; to take Secondary Education 44 I 3 or 440 I-4406, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take Secondary Education 4407-44I2, 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 chair or deputy of the Department of Secondary Education. A student who takes Secondary Education 4407-44I2 prior to Secondary Education 4401-4406 must earn a B- or better grade in 4407-44I 2 to take Secondary Education 4401-4406.

## Courses

## SEED 2001 The Art, Philosophy, and Culture of Teaching

4 hours recitation, 25 hours field experience; 3 credits Study of teaching, linking theory and practice and connecting the philosophical, historical, and cultural foundations of education with curriculum and the art of teaching. Relation of significant educational movements, philosophies, and teaching practices to all students' educational experiences, including students with special needs and English language learners, from birth through adolescence. Opportunities through class discussion, portfolio preparation, and field experiences for reflection on interactions between school and community, teachers' roles, and issues of diversity and social justice. (Open only to students who have completed at least 30 credits in liberal arts and sciences with a grade point average of 2.50 or higher.) This course is the same as Secondary Education 200 I).

Prerequisite: English 1010 [I].

## SEED 2002 Urban Children and Adolescents: Development and Education

3 hours recitation, 25 hours field experience; 3 credits Relationships between basic developmental processes of children and adolescents and their educational experiences in schools and communities. Role of culture, ethnicity, race, gender, and social class upon biological and psychological processes. Emphasis on children in urban, multicultural schools, including students with special needs and those who are English language learners, from birth through adolescence. Field trips to a variety of educational sites; observations and interviews of children; continuation of portfolio development; reflection upon field experiences of 25 hours. This course is the same as Childhood and Special Education 2002.

Prerequisite or corequisite: Education 2001 [16].

## SEED 340 I Language and Literacy Development in Adolescence Education and Special Subjects

3 hours recitation, 25 hours field experience; 3 credits
Current theory and methods of teaching the use of written and spoken language in all subject areas of the curriculum from grades 7 to 12 . 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, and the relationship between identity formation and writing, reading, and speaking.

Prerequisite: Secondary Education 200 I and 2002.

## SEED 3402 Integrative and Multidisciplinary Teaching and

 Learning3 hours recitation, 25 hours field experience; 3 credits Principles for integrating multidisciplinary, multicultural, and aesthetic perspectives into the curriculum. Relating skills, knowledge, and
instructional technology through connecting themes, issues, and activities. Innovative and alternative research-based models and practices for inclusive settings, special education, reading, and writing across the curriculum.

Prerequisite: Secondary Education 200 I and 2002
Prerequisite or Corequisite: Secondary Education 340 I

## 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 200 I 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 [50.14].

Prerequisite: English 1010 [I].

## SEED 3456 Teaching Students with Special Needs

45 hours; 3 credits
Objectives, variations and clinical practice in collaborative and co-teaching methodologies and curriculum development, evaluation, regulatory compliance, and application of early interventions to teaching children and youth with special needs. Making subject matter in the content areas understandable to students with a wide range of disabilities. Mastering, improvising, and adapting techniques for students with special needs. Motivation and evaluation for children and youth with special needs. This course is the same as CBSE 3456. Not open to students who have taken EDUC 3456.

## SEED 440 I Seminar on Methods of Teaching English, 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 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 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 English education.

## SEED 4402 Seminar on Methods of Teaching Social Studies, 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 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 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 Social Studies.

## SEED 4403 Seminar on Methods of Teaching Mathematics, 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 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 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 340 I and 3402 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 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 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.

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 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 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.

## 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 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 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 Physical Education and Exercise Science.

## SEED 4407 Advanced Seminar on Methods of Teaching English, Student Teaching II

4 hours recitation, weekly supervised teaching (total 20 days, 150 hours); 4 credits
Advanced theories and methods of teaching English 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 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. 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 4401 and permission of head of the program in English education.

## SEED 4408 Advanced Seminar on Methods of Teaching Social Studies, Student Teaching II

4 hours recitation, weekly supervised teaching (total 20 days, I 50 hours); 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 newly adopted 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. 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 4402 and permission of head of the program in Social Studies.

## SEED 4409 Advanced Seminar on Methods of Teaching Mathematics, Student Teaching II

3 hours recitation, weekly supervised teaching (total 20 days, 150 hours); 4 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 newly adopted mathematics 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 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 44 II Advanced Seminar on Methods of Teaching a Modern Language, Student Teaching II

3 hours recitation, weekly supervised teaching (total 20 days, 150 hours); 4 credits
Advanced theories and methods of teaching a modern language 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 modern language 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 4405 and permission of the chairperson or deputy of the Department of Secondary Education

## 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 Physical Education and Exercise Science 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

I hour recitation, weekly supervised teaching (total 40 days, 300 hours); 6 credits
Supervised teaching in music in schools at two grade levels (pre K-6; 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 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: EDUC 450 I, Instructor's permission.

## English

Department office: 2308 Boylan Hall
Phone: 718.951.5195

## Full-time Faculty

Distinguished Professors: Alterman, Wellman
Distinguished Lecturer: Welish
Professors: Agoos, Bayoumi, Belton, Brooks, Brownstein, Elsky, Fairey, Fox, Gonsalves, Harrison, Henkin, Mancini, Moser, Moses, Natov, Patkowski, Pollard, Reeves, Tremper, Viscusi, Wellman
Visiting Professor: Di Maio
Associate Professors: Acosta, Davis, Entin, Howell, Lerner, Marks, Masciandaro, Nadell, Streiter
Assistant Professors: Frydman, Haley, King, Lutzkanova-Vassileva, Minter, Phillips, Rutkoski, Siegel, Steel
Lecturers: Burgess, Courtney, Goldman, Zanderer

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; a bachelor of arts in journalism, 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 I-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.

## Core curriculum

The Department of English participates in the College's core curriculum through upper-tier Core Curriculum courses.

## 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 I503; SED program code 02047

Program requirements (39 credits)
I. English 2120 and 2121 (6 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.
II. (9 credits) Three of the following: Comparative Literature $36|4,36| 5,36|6,36| 7,36 \mid 8$.
III. (9 credits) A total of three of the following courses chosen from at least two genres:

The novel: Comparative Literature 3606, 3607, 3609.
Drama: Comparative Literature 3610,3611 .
Other genres: Comparative Literature 3608, 3624, 3625, 360I, 3603, 3604, 3605, 3602, 36I2, 3613.
IV. (3 credits) One of the following: Comparative Literature 36I9, 362I, 3622, 3629, 3626, 3627.
V. (6 credits) Comparative Literature 460 I or 4602 and any course listed under interdisciplinary and thematic studies.
VI. (6 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 II or the approved equivalents for the latter automatically have the prerequisites for any advanced course in comparative literature.

## B.A. degree program in English HEGIS code I50I; SED program code 02043

Department requirements (39 credits)
I. English 2120 and 2I2I (6 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.
II. Fields of Study (15 credits)

One course from each of five of the following seven fields; at least two of the courses must be chosen from Fields I through 3:
I. Middle Ages: English 3520, $3|||, 3|| 2,4| 0 \mid$; Comparative Literature $36 \mid 4$.
2. Renaissance: English $3120,3121,3122,3123,3124,3125,4102$; Comparative Literature 3615 .
3. Eighteenth Century: English $3131,3|32,3| 33,4103$; Comparative Literature 3616.
4. Nineteenth Century and Romanticism: English 3I40, 3I4I, 3I42, 3I45, 3I5I, 4I04; Comparative Literature 3606, 3617 .
5. American Literature and Culture: English 2402, 3|58, 3|57, 3|59, 3|56, 3|5I, 3|52, 3|53, 3|54, 3|63, 3|64, 3|60, 3|6|, 3|62, 3|65, 4|05; Comparative Literature 3622, 3623.
6. Modernism: English $3|70,3| 7|, 3| 72,3|73,3| 93,3|53,3| 6|, 4| 10,4 \mid 08$; Comparative Literature 3608, 3607, 3624, 3625, 36I0, $36 \mid 8$.
7. Postmodernism and Contemporary Discourses: English 3I80, 3174, 3I93, 3194, 319I, 3I87, 3I66, 3I54, 3I62, 4I09; Comparative Literature 3609, 3625, 36II, 36I9, 362 I, 3622, 3623.
III. Electives (I8 credits)

Six 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, Speech Communication Arts and Sciences, or any other with permission of the chairperson).

## B.A. degree program in journalism HEGIS code 0602; SED program code 81099

Program requirements (39-45 credits)
I. (27 credits) All of the following: English 240I; 2402; 3403 or $3406 ; 340$ I or $4402 ; 3402$ or $3405 ; 3407 ; 440$ I; 4403.
II. (3-9 credits) English 3404 or 540 I, or the Summer Broadcast News Institute: Television and Radio 3729.
III. (9 credits) Nine credits, approved by the director of the Journalism Program, in any department. No journalism courses may be used to satisfy this requirement.

Students should note that the prerequisite of English 240 I is one of the following courses with a grade of B or better: English [2.7], $1012,21 \mathrm{I}, 2 \mathrm{I} \mid 6$ or 2302.

## B.A. degree program in adolescence education: English teacher HEGIS code I501.01; 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 I2. Additional information may be obtained from the Department of Secondary Education or the Department of English. Adolescence education (grades 7-I2) and special subject programs are writing intensive. Students should consult a counselor as early as possible to plan their program.

Program requirements
Students must complete the following English Department requirements for the B.A. degree program for English teacher (39 credits):

## English 206

I. English 2120 and 2121 (6 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.
II. Fields of Study (12 credits)

One course from each of four of the following seven fields; at least one course must be chosen from Fields I through 3:
I. Middle Ages: English 3520, 3 III, 3| I2, 4IOI; Comparative Literature $36 \mid 4$.
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 3I40, 314I, 3I42, 3I45, 3I5I, 4I04; Comparative Literature 3606, 3617.
 Literature 3622, 3623.
6. Modernism: English $3|7|, 3|72,3| 93,3|53,3| 6|, 4| I 0,4 \mid 08 ;$ Comparative Literature 3608, 3607, 3624, 3625, 36I0, $36 \mid 8,3622$.
7. Postmodernism and Contemporary Discourses: English 3180, 3174, 3193, 3194, 3191, 3187, 3166, 3154, 3162, 4109; Comparative Literature 3609, 3625, 3611 .
III. Field Concentration: English Teaching (12 credits)

Four courses, one from each of the following groups:
A. Language: English 3520, 352 I, 3522, 3524, 3523, or a course in linguistics.
B. Composition: English 21 I5, 230 I, 2302, 3I37, or any other writing-intensive course.
C. Literature of diversity: English $3180,3158,3194,3160,3161,3162,3189,4110$, Comparative Literature $3624,3625,3613,3619,3622,3623$, or any course in literature and culture.
D. Children's and Young Adult Literatures: English 3189
IV. English 3122 or 3123 (3 credits).
V. Two additional English Department electives (6 credits).

In addition, students must complete the following pedagogical courses: SEED 200I, 2002, 340I, 3402, 440I, 4407, 3456 ( 24 credits). These courses are described in the Secondary Education section of this Bulletin. Also consult that section for specific grade requirements for the degree program for English teacher.

This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.
SEED 200I, 2002, 340 I, 3402 (I2 credits)
The appropriate 5-credit course in student teaching:
SEED 440 I Seminar on Methods of Teaching English, Student Teaching I
The appropriate 4-credit course in student teaching:
SEED 4407 Advanced Seminar on Methods of Teaching English, Student Teaching II

Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking SEED 3454.

Students, except music education majors, must complete 24 credits in the School of Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take SEED 200 I and 2002 is required to continue to SEED 340 I and/or 3402; to take SEED 4413 or 440 I-4406, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take SEED 4407-4406, students must earn a B- or higher in SEED 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes SEED 4407-44I2 prior to SEED 4401-4406 must earn a B- or better grade in SEED 4407-44I2 to take SEED 4401-4406.

## B.F.A. degree program in creative writing HEGIS code I507; SED program code 87220

Program requirements (42 credits)
I. English 2120 and 212I (6 credits)

English 2120 and 2121 are both required. Creative writing majors should complete either English 2120 or 2121, or be enrolled in one or the other, before continuing in other electives.
II. Creative writing courses (15 credits)
a) English 2301 .
b) One of the following sequences:
I) English $3301,3302$.
2) English 3304, 3305.
3) English 3306, 3307.
c) Two additional creative writing courses in the English Department.
III. Fields of Study (I2 credits)

One course from each of four of the following seven fields; at least one course must be chosen from Fields I through 3:

2. Renaissance: English $3|20,3| 2|, 3| 22,3|23,3| 24,3|25,4| 02$; Comparative Literature $36 \mid 5$.
3. Eighteenth Century: English $3131,3132,3133,4103$; Comparative Literature 3616.
4. Nineteenth Century and Romanticism: @nglish $3140,3141,3142,3145,3151,4104$; Comparative Literature 3606, 3617.
5. American Literature and Culture: English 2402, 3|58, 3|57, 3|59, 3|56, 3|5I, 3|52, 3|53, 3|54, 3|63, 3|64, 3|60, 3|6|, 3|62, 3|65, 4I05; Comparative Literature 3622, 3623.

7. Postmodernism and Contemporary Discourses: English 3I80, 3I74, 3I93, 3I94, 3I9I, 3I87, 3I66, 3I54, 4IIO, 4I09; Comparative Literature 3609, 3625, 3611 .
IV. Additional course requirements (9 credits)

Nine additional credits in advanced English Department courses. Related courses offered by other departments may be substituted with the permission of the English Department chairperson.

## Departmental Minor(s)

## Minor in Comparative Literature

## Department Requirements

At least 12 credits in advanced electives in the Comparative Literature Program with a grade of $C$ or higher. Comparative literature minors should consult with the director for recommendations.

## Minor in English

## Department Requirements

A program of 12 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 Journalism

Department Requirements (12 credits)

## Minor in Linguistics

A program of 13-15 credits as follows:
Linguistics 200 I or Anthropology 2300.
One course from area 2 of the major.
Two more courses chosen freely from area 2 and/or area 3 of the major.
Each course must be completed with a grade of C or higher. 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) and childhood education teacher (grades I-6) programs are described in the "Education" section of the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in English must complete at least 30 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.

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Concentration requirements:
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English 1012 .
One course from each of the following four groups:
a) English 352 I, 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 30, 36I9, 362I, 3622, 3623.
d) English 3189

Fifteen credits of advanced English or comparative literature electives.

## Department recommendations

Students should consult the deputy chairperson for help in planning a course of study.

## Requirements for departmental honors in English

Fulfilment 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 460 I and 4602 with a grade of B or higher, completion of the Senior Thesis courses English 5103 , or 5104 and 5 I05, 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

## Division of 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. A Graduate Bulletin may be obtained in the Office of Admissions.

## 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, I 3 IO Boylan Hall, or by calling 95I-582I.

## Courses

*Courses marked with an asterisk ( $\left(^{*}\right.$ ) 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.

## Required literature sequence for all majors

## ENGL 2120 Overview of Literary Study I Representative Selections of World Literature

## 3 hours; 3 credits

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: I) 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

3 hours; 3 credits
Studies in literature and culture from nineteenth-century Romanticism to the modernist and postmodernist movements. Part II of a two-course general survey and overview with three principal focuses:
I) 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 [I] or 1.7

## Composition

## ENGL 1001 English Composition A

3 hours and conference; I $1 / 2$ 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 [I]. Students may not receive credit for both English 1010 [I] and English 100 [ [1.1 I].)

## ENGL 1002 English Composition B

3 hours and conference; $11 / 2$ credits
Continuation of English I001 [I.II]. 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 [I]. Students may not receive credit for both English 1010 [I] and English 1002 [I.I2].)

Prerequisite: Students must receive a grade of C- or above in English I00I [I.II] to be permitted to enroll in English 1002 [I.|2]. Students must pass English 1002 [1.12] with a grade of C- or higher to be credited with a course equivalent to English 1010 [I].

## 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 *I.5.

Prerequisite: permission of the chairperson of the Department of English.

## ENGL IOIO 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. (Not open to students who have completed English I.7.)

Prerequisite: placement in the course on the basis of the score of 480 or higher on the verbal SAT, or 75 on the New York State Regents Examination in English, or a score of 7 on the ACT Writing Examination.

## ENGL *1012 English Composition II: Seminar in Expository Writing

3 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 * O I2 [2] directly after completing English 1010 [I]. Topics include: The Fool in Literature; Reading the City; 1960s: Decade of Revolt; Novels of the Jazz Age; Cross-Cultural Writing and the Arts.

Prerequisite: Grade of C- or better in English 1010 [I] or placement in the course on the basis of transfer evaluation.

## ENGL 2115 Advanced Exposition and Peer Tutoring

2 hours lecture, 3 hours tutoring; 3 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

3 hours; 3 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 230I Introduction to Creative Writing

3 hours; 3 credits
Workshop in writing stories, poems, and short plays.
Prerequisite: English 1010 [1] or I.2 or I.7.

## ENGL 2302 Writing Prose Nonfiction

3 hours; 3 credits
Workshop in writing personal essays, biography, and criticism.
Prerequisite: English 1010 [I] or 1.2 or 1.7.

## ENGL 3301 Writing Fiction I

3 hours; 3 credits
Workshop in writing stories. Techniques of narrative. (Not open to students who have completed English I5.)

Prerequisite: English 230 I [ I . I ].

## ENGL 3302 Writing Fiction II

3 hours; 3 credits
Continuation of English 3301 [15.I].
Prerequisite: English 15 or 330 I [15.I].

## ENGL 3303 Creative Writing Workshop: Young Adult and Children's Fiction

## 3 hours; 3 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 230 I [ I . I].

## ENGL 3304 Writing Poetry I

## 3 hours; 3 credits

Workshop in writing poetry. Experiments in form and language. (Not open to students who have completed English 16.)

Prerequisite: English 230 I [ I . I].

## ENGL 3305 Writing Poetry II

3 hours; 3 credits
Continuation of English 3304 [16.1].
Prerequisite: English 16 or 3304 [16.1].

## ENGL 3306 Writing Plays I

## 3 hours; 3 credits

Workshop in writing plays. Dramatic construction and characterization.
(Not open to students who have completed English 17.)

Prerequisite: English 230 [ [ I . I].

## ENGL 3307 Writing Plays II

3 hours; 3 credits
Continuation of English 3306 [17.I].
Prerequisite: English 17 or 3306 [17.1].

## ENGL 3308 Writing for Musical Theater

3 hours; 3 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 230। [| I. I].

## ENGL 4301 Advanced Seminar in Creative Writing

3 Hours; 3 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 530I [69.3] with this topic.)

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 [I7.2] and permission of the instructor.

## Journalism

## ENGL 240I News Writing: An Introduction to Journalism

I hour recitation and conference, 2 hours lecture; 3 credits Technique of general news gathering and writing basic types of news stories; examination of the issues and problems confronted by reporters in their work.

Prerequisite: English 1012 [2] or 2.7 or 2115 [5] or 2116 [5.1] or 2302
[14] with a grade of B or higher.

## ENGL 2402 The Press in America

3 hours; 3 credits
Lectures and readings in the history of journalism from Colonial times to the present.

Prerequisite: English 1010 [I] or I.7, and either History 3402 [14] or Core Curriculum 1220 [2.2] or an equivalent course.

## ENGL 340 I Advanced News Writing

3 hours; 3 credits
Classroom drills, outside assignments, lectures, and field trips to expand organizational and writing skills.

Prerequisite: English 240 [ 18.1 I ].

I hour recitation and conference, 2 hours lecture; 3 credits Sources for feature articles. Technique of writing basic types of news features and editorials.

Prerequisite: English 240| [|8.1 I].

## ENGL 3403 Reporting

I hour recitation and conference, 2 hours lecture; 3 credits
Techniques of reporting a story in depth and organizing a large amount of material into a newspaper series or magazine story.

Prerequisite: English 240 I [18.1 I].

## ENGL 3404 Editing

I hour recitation and conference, 2 hours lecture; 3 credits Technique of handling copy, proofreading, assessing news values. Headline writing and layout.

Prerequisite: English 240 [ [18.1 I].

## ENGL 3405 Magazine Journalism

3 hours; 3 credits
Study of the great works of magazine journalism and technique of writing for magazines.

Prerequisite: English 240। [18.1 I].

## ENGL 3406 Business Journalism

3 hours; 3 credits
Emphasis is on reporting and writing about the world of business, with students learning the basics of covering Wall Street, the economy, workplace issues, and personal finance. The course will prepare students for entry-level jobs in business journalism or for graduate study.

Prerequisite: English 240 I [|8.| I] or permission of the journalism program.

## ENGL 3407 Introduction to Multimedia Journalism

3 hours; 3 credits
Students produce news stories based on study of techniques in multimedia journalism

Prerequisite: English 240 I [18.1 I] or Television and Radio 3728 [28] or permission of the Journalism Program.

## ENGL 440I News Laboratory

2 hours lecture, 8 hours laboratory; 6 credits
Students act as reporters, rewrite persons, and feature writers covering a day in the life of New York alongside members of the working press. Students' stories are examined in class and compared with those produced by dailies and wire services.

Prerequisite: Three of the following: English 3402 [18.13], 3403 [18.14], 340 [|8.| 6], 4402 [18.19], 3406 [|8.20], 4403 [|8.2|], 3405 [|8.22] or permission of the journalism program.

## ENGL 4402 Seminar: Topics in Journalism

3 hours; 3 credits
Study of a topic in journalism. Emphasis is on analyzing societal institutions from a journalist's point of view. Topic is selected by the instructor.

Prerequisite: English 240 I [|8.| I] or permission of the journalism program.

## ENGL 4403 Beat Reporting

3 hours; 3 credits
Students who have taken advanced journalism electives cover a beat, such as health, education, immigration, poverty, publishing, the arts or politics. Journalism majors are required to shape a specialty beat informed by their field of concentration. (Majors must complete a 9 credit concentration in nonjournalism courses.)

Prerequisite: Three of the following: English 3402 [18.13], 3403 [18.14], 340 [18.16], 440 I [18.18], 4402 [|8.19], 3406 [|8.20], 3405 [18.22] or permission of the journalism program.

## ENGL 540 I Journalism Internship

9 hours fieldwork, I hour conference; 3 credits
The internship requires working one day each week for a newspaper, magzine, Internet news site, or wire service in the New York metropolitan area. Weekly conference. Written work based on the internship experience. Students may take this course for credit twice.

Prerequisite: permission of the journalism program.

## The English language

## ENGL 3520 History of the English Language

3 hours; 3 credits
Origins of the English language and its development to the present.
This course is the same as Linguistics 3027 [28].
Prerequisite: English 1010 [I]

## ENGL 352 I Applied Linguistics

3 hours; 3 credits
Introduction to the nature of 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. This course is the same as Linguistics 3028 [29].

Prerequisite: English 1010 [1]

## ENGL 3522 Practical English Grammar

3 hours; 3 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 I.7.

## ENGL 3523 Introduction to Semiology

3 hours; 3 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 I.7.

## ENGL 3524 Sociolinguistics

3 hours; 3 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 and Archaeology 3390 [18] and Linguistics 3029 [30].

Prerequisite: English 1010 [I], I. 2 or I.7, and one of the following: Anthropology 230 I [2.3], Linguistics 200I [I], Sociology *। 101 [5] or 1005 [7]; or permission of the chairperson.

ENGL 3525 Introduction to Natural Language Processing

## 3 Hours; 3 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 [I I.5] and Linguistics 3023 [24].

Prerequisite: Computer and Information Science *|। 10 [1.5] (or co-requisite): Computer and Information Science 2210 [II] and Linguistics 200 [ 1$]$.

## English literature

## ENGL 3III Medieval English Literature

3 hours; 3 credits
Epic, chronicle, and romance. The Arthurian tradition. Development of allegorical writing. The lyric.

Prerequisite: English 1010 [I] or I.7.

## ENGL 3II2 Chaucer

3 hours; 3 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 I.7.
ENGL 3120 Poetry and Prose of the Sixteenth Century: The Early Renaissance

## 3 hours; 3 credits

English poetry from Wyatt through Shakespeare's sonnets. Edmund Spenser. English prose from Thomas More through Richard Hooker.

Prerequisite: English 1010 [I] or I.7.

## ENGL 3121 Poetry and Prose of the Seventeenth Century

3 hours; 3 credits
English poetry from Donne through Marvell. Prose from Francis Bacon through Thomas Hobbes.

Prerequisite: English 1010 [1] or I.7.

## ENGL 3122 Shakespeare I

3 hours; 3 credits
Major Shakespearean plays selected from the chronicles, comedies, and tragedies. Intensive reading.

Prerequisite: English 1010 [I] or I.7.

## ENGL 3I23 Shakespeare II

3 hours; 3 credits
Topics in Shakespeare in the plays and nondramatic writings.

Prerequisite: English 1010 [I] or 1.7.

## ENGL 3124 English Drama from the Beginnings to 1642, Exclusive of Shakespeare

3 hours; 3 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 I.7.

## ENGL 3125 Milton

3 hours; 3 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 [I] or I.7.

## ENGL 3131 English Literature of the Age of Reason

3 hours; 3 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 [I] or I.7.

## ENGL 3132 English Drama of the Restoration and the Eighteenth Century

3 hours; 3 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 I.7.

## ENGL 3133 The Eighteenth-Century Novel

3 hours; 3 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 [I] or I.7.

## ENGL 3140 Chief Romantic Poets

3 hours; 3 credits
Growth of romanticism in the poetry of Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats.

Prerequisite: English 1010 [1] or I.7.

## ENGL 3141 Chief Victorian Poets

3 hours; 3 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 I.7.
ENGL 3142 Major English Novels of the Nineteenth Century

## 3 hours; 3 credits

Artistic development and growth of the novel as social criticism. Such writers as Dickens, Thackeray, the Bront's, and George Eliot.

## ENGL 3145 British Literature in Transition from 1885 to 1914

3 hours; 3 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 [I] or I.7.

## ENGL 317I Modern British Fiction to 1950

3 hours; 3 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

3 hours; 3 credits
Poetry of such writers as Yeats, Graves, Auden, Lawrence, and Dylan Thomas.

Prerequisite: English 1010 [1] or I.7.

## ENGL 3173 Modern Irish Literature and Culture

3 hours; 3 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 [I] or I.7.

## ENGL 36I7W 3617 European Romanticism

4 hours; 3 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. (Not open to students who have completed Comparative Literature 35.)

Prerequisite: English 1012 [2]

## Postmodernism and contemporary discourses

## ENGL 3154 Contemporary American Writing

3 hours; 3 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 [I] or I.7.

## ENGL 3162 Black Women's Fiction

3 hours; 3 credits
Black women novelists, short story writers, and essayists. Cross-cultural comparisons with African and Caribbean novelists. Readings of selected essays in Black feminist criticism. This course is the same as Africana Studies 3260 [27] and Women Studies 31 I7 [46].

Prerequisite: English 1010 [1] or 1.7.

## ENGL 3166 Contemporary U.S. Women Writers: Diverse Cultural Perspectives

3 hours; 3 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 Women's Studies 3115 [33].
Prerequisite: Women's Studies 1001 [10.8] or I2; English 1010 [I] or I.7.

ENGL 3174 Contemporary British Writing from 1950 to the Present
3 hours; 3 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 [I] or 1.7.

## ENGL 3180 Literature and Cultural Diversity

3 hours; 3 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 [I] or I.7.

## ENGL 3187 Women and Literature

## 3 hours; 3 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.

Prerequisite: one of the following: English 1010 [I] or 1.7.

## ENGL 3191 Literature and Psychology

3 hours; 3 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 [45].

Prerequisite: one of the following: English 1010 [I] or I.7.

## ENGL 3193 Contemporary Literary Criticism and Theory

3 hours; 3 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 [50.12].

Prerequisite: English 1012 [2] or 2.7.
ENGL 3194 Introduction to Postcolonial Literature and Theory
3 hours; 3 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 [28.5] and Comparative Literature 3627 [50. 13].

Prerequisite: English 1012 [2] or 2.7.
ENGL 4109 Seminar in Postmodernism and Contemporary Discourses
3 hours; 3 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

3 hours; 3 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 [66].

Prerequisite: English 1010 [I] or I.7.

## 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 [23].

Prerequisite: English 1010 [I] or I.7.

## ENGL 3159 New York City Folklore

3 hours; 3 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 [6I].

Prerequisite: one of the following: English 1010 [I] or I.7.

## ENGL 3165 The Immigrant Experience in Literature, Film, and Photography

3 hours; 3 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 [67]. (Not open to students who have completed American Studies 70.)

Prerequisite: one of the following: English 1010 [I] or I.7.

## ENGL 3170 Modern Drama to $\mathbf{1 9 5 0}$

3 hours; 3 credits
Modern British and American drama. Continental influences.
Prerequisite: English 1010 [1] or I.7.

## ENGL 3177 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.

Prerequisite: English 1012 [2].

## ENGL 3181 From Epic Tradition to Epic Vision

3 hours; 3 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 360 I [18.I].

Prerequisite: English 1010 [1] or I.7.

## ENGL 3182 The Lyric Tradition: Imagery, Structure, and Meaning

3 hours; 3 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 I.7.

## ENGL 3183 The Bible as Literature

3 hours; 3 credits
Representative Biblical selections evaluated by literary criteria. Origin and development of the English Bible as a literary classic.

Prerequisite: English 1010 [1] or I.7.

## ENGL 3184 Comedy

3 hours; 3 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 [18.3].

Prerequisite: English 1010 [I] or I.7.

## ENGL 3185 Tragedy

3 hours; 3 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 [18.2].

Prerequisite: English 1010 [I] or I.7.

## ENGL 3186 Romance

3 hours; 3 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 [18.4].

Prerequisite: English 1010 [1] or I.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 [44] and Comparative Literature 3602 [18.5].

Prerequisite: English 1010 [I] or 1.7 or permission of the chairperson.

## ENGL 3189 Literature for Young People

3 hours; 3 credits
Literature appropriate for students in elementary and secondary schools. Fundamentals of literature and basic reading of interest to young people.

Prerequisite: English 1010 [I] or 1.7.

## ENGL 3190 The Literature of Fantasy

3 hours; 3 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 [19.1].

Prerequisite: English 1010 [I] or I.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 [I] or I.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 and Radio 3850 [50].

A course in dramatic literature or Television and Radio 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 [I0].)
Prerequisite: Communication 1001 [1] and English * 1012 [2].

## ENGL 5100 Internship

7 hours field work, I 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 5IOI 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 315I American Renaissance

3 hours; 3 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

3 hours; 3 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 [I] or 1.7.

## ENGL 3153 American Modernism

3 hours; 3 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 I.7.

## ENGL 3156 Private Lives: American Autobiography

3 hours; 3 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 [63].
Prerequisite: English 1010 [I] or I.7.

## ENGL 3160 African-American Literature to 1930

3 hours; 3 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 [24.1].

Prerequisite: English 1010 [I] or 1.7.

## ENGL 3161 Modern African-American Literature

3 hours; 3 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 322 I [24.2].

Prerequisite: English 1010 [1] or I.7.

## ENGL 3163 Brooklyn in Literature

3 hours; 3 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 [I] or I.7.

## ENGL 3164 Introduction to Italian American Literature

3 hours; 3 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 [I].

## ENGL 3167 Transnational America

3 hours; 3 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 .

## Seminars

## ENGL 4IOI Seminar in the Middle Ages

3 hours; 3 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

3 hours; 3 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

3 hours; 3 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

3 hours; 3 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

3 hours; 3 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

3 hours; 3 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

3 hours; 3 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

3 hours; 3 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

3 hours; 3 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 4III Seminar in Children's and Young Adult Literature

3 hours; 3 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 4II2 Interdepartmental Humanities Seminar

## 3 hours; 3 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 84.7, Comparative Literature 4602 [74.7], Philosophy 84.7.

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 4II3 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 [7I], 4112 [74.7], 4101 [79.1], 4102 [79.2], 4103 [79.3], 4104 [79.4], 4I05 [79.5], 4I 08 [79.6], 4109 [79.7], or Comparative Literature 460 [74], 74.9), and permission of the instructor and department chairperson.

## ENGL 5104 Senior Thesis I

Minimum of 9 hours conference and independent work§ Individual study and research under supervision of a faculty member. Students in English 5 I03 [89] or 5 I 04 [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 4I06 [70], 4I07 [7I], 4II2 [74.7], 4101 [79.1], 4102 [79.2], 4103 [79.3], 4104 [79.4], 4। 05 [79.5], 4108 [79.6], 4109 [79.7], or Comparative Literature 460। [74], 74.9), and permission of the instructor and department chairperson.

## ENGL 5105 Senior Thesis II

Minimum of 9 hours conference and independent work§ 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 5 I 05 [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

3 hours; 3 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 3 I8। [50.7]. (Not open to students who have completed Comparative Literature 55.)

Prerequisite: English 1010 [I] or I.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 [44] and English $3 \mid 88$ [50.91].

Prerequisite: English 1010 [I] or 1.7 or permission of the instructor.

## CMLT 3603 Tragedy

3 hours; 3 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 [50.5]. (Not open to students who have completed Comparative Literature 56.)

Prerequisite: English 1010 [I] or I.7.

## CMLT 3604 Comedy

3 hours; 3 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 3 I 84 [50.2]. (Not open to students who have completed English 58.)

Prerequisite: English 1010 [I] or I.7.

## CMLT 3605 Romance

3 hours; 3 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 3 I 86 [50.9]. (Not open to students who completed English 3192 [59] or Comparative Literature 3629 [40.2] in spring, |99 I, or spring, I993.)

Prerequisite: English 1010 [I] or I.7.

## CMLT 3606 European Novel of the Nineteenth Century

3 hours; 3 credits
Representative works of such authors as Stendhal, Balzac, Flaubert, Zola, Manzoni, Dostoevski, Tolstoi.

Prerequisite: one of the following: English 1010 [I] or I.7.

## CMLT 3607 Modern European Novel

3 hours; 3 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 [I] or I.7.

## CMLT 3608 Modern Short Story and Novella

3 hours; 3 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 I.7.

## CMLT 3610 Modern European Drama

3 hours; 3 credits
Development of the drama from I870 to 1935. Ibsen to the
post-World 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 I.7.

## CMLT 3612 Literature of Fantasy

3 hours; 3 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 [50.6].

Prerequisite: English 1010 [1] or I.7.

## Period courses

## CMLT 3614 Medieval Literature

## 3 hours; 3 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 [I] or I.7.

## CMLT 3615 Literature of the Renaissance

3 hours; 3 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 [I] or 1.7.

## CMLT 3616 Baroque and Classicism

3 hours; 3 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 I.7.

## CMLT 3617 European Romanticism

3 hours; 3 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 IOIO [I] or I.7.

## CMLT 3618 Modernist Movements in Twentieth-Century Literature

3 hours; 3 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 [I] or I.7.

## Postmodernism and contemporary discourses

## CMLT 3609 Contemporary European Novel

3 hours; 3 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 [I] or 1.7.

## CMLT 36II Contemporary European Drama

3 hours; 3 credits
Development of the drama from 1935 to the present. Plays by such authors as Brecht, Durrenmatt, Weiss; Anouilh, Sartre, Camus, Genet, Ghelderode, Beckett, lonesco, 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 [I] or I.7.

## CMLT 3619 African Literature

3 hours; 3 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 [24.8].

Prerequisite: English 1010 [I]

## CMLT 362 I Indian Literature

## 3 hours; 3 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 [I] or 1.7, or Core Studies 9.

## CMLT 3622 New Literature of Latin America

## 3 hours; 3 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 [I] or I.7, or Core Studies 9.

## CMLT 3623 Caribbean Literature

3 hours; 3 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 [29] and Puerto Rican and Latino Studies 3315 [38]. (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 [53.7].

Prerequisite: English 1010 [I] or I.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 [53.5].

Prerequisite: English 1010 [1] or the equivalent.

## Interdisciplinary \& thematic studies

## CMLT 3626 Contemporary Literary Criticism and Theory

3 hours; 3 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 [50.12]

Prerequisite: English 1012 [2] or 2.7.

## CMLT 3627 Introduction to Postcolonial Literature and Theory

3 hours; 3 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 [28.5] and English 3194 [50.13].

Prerequisite: English 1012 [2] or 2.7.

## CMLT 3628 Literature and Psychology

## 3 hours; 3 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 319| [50.3].

Prerequisite: one of the following: English 1010 [I] or 1.7.

## CMLT 3629 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. (Not open to students who have completed Comparative Literature 48 for credit
twice.)
Prerequisite: English 1010 [I] or I.7, or permission of the chairperson.

## Seminars

## CMLT 4601 Cross-Cultural Seminar

3 hours; 3 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

3 hours; 3 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 84.7, English 4112 [74.7], Philosophy 84.7.

Prerequisite: English 1012 [2] or 2.7; two of the following: English 2120
[5I];English 212 I [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 college-level
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 Level7 hours recitation, I 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, I 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, I 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, I 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; I 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 I 004 [14], I 005 [I4.I], 1006 [I5], I 007 [I5.I]; a passing score on the CUNY Writing Test but not on the CUNY Reading Test; and permission from the program.

## Oral communication

## ESLR 1009 Oral Communication I

3 hours; I 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 3309 Theater Workshop
ENGL 3130 British Folklore
CMLT 3613 Folk Literature and Fairy Tale
ESLR 1010 Oral Communication II

## Environmental Studies

Department office: 3438 Ingersoll Hall
Phone: 718.951 .5418
The Brooklyn College Program in Environmental Studies educates students to be fluent in the languages of the social and physical sciences related to the environment. We are a liberal arts interdisciplinary program. We offer a bachelor of arts degree in environmental studies that has two possible concentrations: environmental studies or environmental management. The major draws on courses from fourteen academic departments. A minor in environmental studies is also available. Both majors and minors take approximately half their credits in the social sciences and humanities and half in the physical sciences. Two new interdisciplinary courses serve to introduce the field of environmental studies and then apply the student's accumulated knowledge to a capstone seminar emphasizing specific case studies. We also offer a concentration for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades I-6).

Employment opportunities for graduates of the environmental studies program are plentiful and varied. Environmental studies can provide a direct path to such government service or business careers as resource management and environmental impact assessment or in such public interest work as legislation, lobbying, and policy development. It is useful preparation for careers in education, journalism, politics, and business. Many of our students go on to graduate or professional school in such fields as environmental science, biology, geography, public policy, law, public health, and other related fields. It is important to note that nationwide most graduate programs in environmental studies are individualized courses of study that are drafted by the graduate student in consultation with faculty advisers and approved by a faculty committee.

## B.A. degree program in environmental studies HEGIS code 4999; SED program code 21627

Program requirements (45-5 I credits) (these revised program requirements are pending New York State Education Department approval as of August 2012)

Students must complete both A and B below:
A. All of the following courses:

Economics 225I or Earth and environmental sciences 1500 or Sociology 2202.
Economics 325I or Earth and environmental sciences I50I or Sociology 2203.
Biology 3083, Earth and environmental sciences I 20 I, 3750, Economics 2200, 3254, Sociology II 0 I, 220 I, Philosophy 3309, Environmental Studies 400 IW.
Economics 3400 or Earth and environmental sciences 3800 or Sociology 2112.
B. Students must complete one of the three Options below:

Option I: Concentration in Environmental Science
Earth and environmental sciences $3600,3610,3675$.
Chemistry I040 or II 00 or Earth and environmental sciences 3100 .
Option 2: Concentration in Environmental Economics
Economics 3202, 3252, 3253, 4400W.
Option 3: Concentration in Environmental Sociology
Sociology 270I, 3202, 3204, 3205.

## Departmental Minor(s)

## Minor in Environmental Studies

Program Requirements
A minimum of 12 credits as specified below, each completed with grade of $C$ - or higher, plus any prerequisite of the courses, including Environmental Studies I00I.

Environmental Studies 400 IW.
Philosophy 3309
Sociology 220 I.
One of the following:
Earth and Environmental Science 3400W or Geology 3400W.
Health and Nutrition Sciences 2120.

## 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, 3I55; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 330I, [76.1], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3II0, 3344; Anthropology 3130, 3140, 3170, 3185; English 3194; Judaic Studies 3017 ; Philosophy 3702; Political Science 334I; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's 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 Studies 3328
d. Media and Communications in a Global Context

Anthropology 3I80; Film 2131; Philosophy 3315; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; 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

## Environmental Studies

The requirements for early childhood education teacher (birth-grade 2) and childhood education teacher (grades I-6) programs are described in the "Education" section of the Undergraduate Bulletin. Students who major in either of these programs and who elect a concentration in environmental studies must complete at least 30 credits in the Environmental Studies 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:
Environmental Studies IOOI.
One statistics course chosen from: Economics 3400, Health and Nutrition Sciences 3300, Mathematics I50I, Political Science 3422, Psychology 3400, Sociology 2 I 13.

One of the following courses: Economics 2200; Political Science [I.5], I002, 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 20I 0, 2020, 2030, 2040, 3050; Earth and Environmental Sciences I04I, 3525, 3400W, 3600, [38.1]; Health and Nutrition Sciences II 00, 2130, $2120,2131$.

Environmental Studies 400 IW.

## 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.

## ENST * 100 I Introduction to Environmental Studies

3 hours; 3 credits
Lectures and discussions of selected topics concerning the natural environment. Introduction to scientific and policy tools used to evaluate environmental and natural resource use. Case studies addressing global, transnational, regional, and local environmental issues.

## ENST 400IW Research Methods in Environmental Studies

2 hours lecture and 2 hours of independent work and conference per week§; 3 credits
Seminar or independent study in recent and current topics in environmental studies with focus on research methodology. Seminars by invited speakers; student seminars and discussions moderated by instructor. Selected individual research topics by students; research report and position paper required. Writing-intensive course.

Prerequisites: Environmental Studies *100| [I], advanced standing in environmental studies major or minor and permission of the director of the Environmental Studies Program; English *|012 [2].

## Film

Department office: 201 West End Building
Phone: 718.95I. 5664

## Full-time Faculty

Distinguished Lecturer: Reilly
Professors: Danto, Hanlon, Hirsch, Massood, Tutak, Weis
Associate Professor: Hornsby
Assistant Professors: Andersen, Christman, Parmar, Voelpel
Lecturer: MacDonald

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 IOIO; SED program code 02023

Students must complete one of the following concentrations.
A. Film studies ( 33 credits)

All of the following: Film $1101,310|\mathrm{~W}, 2| 15,2 \mid 16$.
One of the following: Film 3 I 22 or 3 I 30 .
Two of the following plus their prerequisites: Film $2||4,2| 20,2| 26,2|28,2| 29,2|3|$.
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 IIOI, I20I, 250I, 240I, 3300W, 3200, 3700, 260I, 270I, I30 I.
Three additional three-credit film studies courses plus their prerequisites.

## C. Documentary production (33 credits)

All of the following: Film II0I, I20I, I30I, 2120, 220।, 260I, 270।, 3I0IW, 320।, 370 I.
One of the following: Anthropology 3I 80, Art 3167, Film 3202, Philosophy 33I5, Sociology 2800.
$\qquad$
D. Screenwriting (33 credits)

Students must take two additional advanced film courses, one of which may be substituted from the following: English 330 I or 3306; Television and

Radio 2616 or 366 I or 3662 or 3850 ; Theater IIOI 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 $1|0|, 3|0| \mathrm{W}, 2|14,2||5,2||6,290|, 2902,120|, 280|,|30|$.
One of the following: Film 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, except in specific instances in which a grade of B or higher is stipulated.

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 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 IIOI, I20I, 250I, 240I, 3300W, 3200, 3700, 260I, 270I, and I30I.
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.

## Certificate program in film - screenwriting 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.

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Program requirements: Screenwriting track (30 credits)
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Students must complete a program consisting of Film $1101,2|15,2| 16,2901,120|, 130|, 2301,3301,4301$, 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 IIOI 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 *IIOI 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 2II2 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 *।।0। [।] or permission of the chairperson.

## FILM 2II4 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 *| 10 | [1] or permission of the chairperson.

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 *| 10 | [I] or permission of the chairperson.

## FILM 2116 History of Film II

4 hours; 3 credits
Motion pictures from 194 I 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 *|l0| [I] 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 *I।0। [I].

## FILM 2II 8 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 *। 10 [ [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 *|।0| [।] or permission of the chairperson.

## FILM 212I 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 [30.50]. Taught in Italian. (Not open to students who have completed Italian 21.)

Prerequisite: Film *।। 0 I [I] and Italian 36 IO [I7.50] or permission of the chairperson of the Modern Languages and Literatures Department.

## FILM 2I24 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.

Prerequisite: Film *| 10 | [1] or permission of the chairperson.

## FILM 2I26 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 *। 10 [ [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 *। 10 I [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 *। 10 I [1] or permission of the chairperson.

## FILM 2I29 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 *| 10 | [I] or permission of the chairperson.

## FILM 213I 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 IIOI [I].

## 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 IIOI or permission of the chairperson.

## FILM 214I 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 *|l0| [1]; English *|0|2 [2].

## FILM 3l22 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 Studies 3150 [48].

Prerequisite: Film *|l0| [I] 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 *।10। [I] 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 *।10। [I] and one advanced film studies course; or permission of the chairperson.

## General production

## FILM I20I 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 *| 101 [I] and I30| [6I], or permission of the chairperson.

## FILM 220I 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 and Radio 4827 [27.2].

Prerequisite: Film *| $10 \mid$ [I], 1201 [40.I], and $130 \mid$ [6I]; or Television and Radio 3871 [27.1]; or permission of the instructor.

## FILM 3200 The Qualifying Film: Production

2 hours lecture, 2 hours laboratory; 3 credits
Production of a short, intermediate-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 *| 10 | [I], | 20 | [40.1], 250 | [40.2], 240 | [43], 3300 W [46W], 260 I [48], 270 I [55.I], and I30। [6I].

## FILM 320I Documentary Production II

4 Hours; 3 Credits
Production of an intermediate-level documentary film from research and development through pre-production and principal photography.

Prerequisite: Film *| | 0 | [I], 2 | 20 [20], | 20 | [40. I], 260 | [48], 220 | [49], 270 I [55.1], and 1301 [6I].

## FILM 3202 International Documentary Production

I 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 and Radio 4849 [49.2].)

Prerequisite: Film *|।0| [I], I20। [40.I], 260 I [48], 220 I [49], 270 I
[55. I], I 30 I [6I]; or permission of the instructor.

## FILM 420I 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 *| 101 [I], I20। [40.I], 250। [40.2], 240। [43], 3200 [46. I], 3300W [46W], 3700 [46.2], 260 I [48], 270। [55. I], I30I [6I]; approval by the production faculty of the completed sound Qualifiying Film

## Screenwriting

## FILM I30I 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 *। 10 I [I].

## FILM 2301 Screenwriting II

4 hours; 3 credits
An examination of theories and approaches to writing the feature-length screenplay.

Prerequisite: Film *| 10 | [I], I20| [40.| ], and at least one upper-level film studies elective; Film 1301 [6I] with a grade of B or higher; permission of the instructor.

## FILM 3300W The Qualifying Film: Screenplay

4 hours; 3 credits
Workshop in writing short screenplays intended for production in Film 3200 [46. I]. Writing-intensive course.

Prerequisite: Film *||0| [I], I20| [40.|], I30| [6|]; English $10 \mid 2$ [2].
Prerequisite or corequisites: Film 250। [40.2], 240। [43], 260। [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 *| $10 \mid$ [I], $120 \mid$ [40.|], $130 \mid$ [6|], 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 *||0| [I], |20| [40.1], and at least two upper-level film studies courses; |30| [6|], 2301 [62.1],and 330| [62.2] with a grade of B or higher; or permission of the chairperson.

FILM 4304 Advanced Screenwriting: Writing the Genre Film

4 hours; 3 credits
Workshop in techniques and approaches to writing genre films.
Prerequisite: Film 330 I 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. Must be taken concurrently with Film 250 I [40.2].

Prerequisite: Film *||0| [|], |20| [40.|], |30| [6|], and permission of the instructor.

## FILM 340 I Film Directing Workshop II

## 4 hours; 3 credits

Continuation of Film 240। [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 *| 10 I [I], I 20 I [40. I], 250 [ [40.2], 240। [43], 3200 [46.I], 3700 [46.2], 260 I [48], 270 I [55.1], and I 301 [6I], 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 [12.1].

Prerequisite: Film *| | 0 | [|], | 20 | [40.| |], 250 | [40.2], 240 | [43], | 30 | [6I], 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. Must be taken concurrently with Film 2401 [43].

Prerequisite: Film *| 01 [I], | $20 \mid$ [40.|], and $130 \mid$ [6|], and permission of the instructor.

## FILM 350I Advanced Cinematography I

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 *| 10 I [I], I20| [40.| I], 250 I [40.2], 240 I [43], 260 I [48], 270 I [55.I], I 30 I [6|], and permission of the instructor.

## FILM 3502 Advanced Cinematography: Digital Formats

4 hours; 3 credits
Lectures, demonstrations, and workshops in equipment and materials used in digital format motion pictutes. Operation and characteristics of cameras, lenses, accessory camera equipment, and lighting.

Prerequisite: Film * $110 \mid$ [I], $120 \mid$ [40.|], $250 \mid$ [40.2], $240 \mid$ [43], | $30 \mid$ [6I], and permission of the instructor.

## Sound

## FILM 260 I 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 *| $10 \mid$ [I], $120 \mid$ [40.| $]$, and $130 \mid$ [6|], 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.
 [6।]; 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 *| 101 [I], 1201 [40.|], and 1301 [6|].

## FILM 3700 The Qualifying Film: Postproduction

2 hours lecture, 2 hours laboratory; 3 credits
Hands-on postproduction workshop enabling the student to complete the short, intermediate-level, synchronized sound film begun in Film 3200 [46. 1].

Prerequisite: Film *। 10 I [I], I20। [40.I], 250 I [40.2], 240 I [43], $3300 \mathrm{~W}[46 \mathrm{~W}$ ], 3200 [46.1], 260 I [48], 270 I [55.I], and 1301 [6I].

## FILM 370 I 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 intermediate-level documentary film begun in Film 3201 [49.3].

Prerequisite: Film *| $10 \mid$ [I], $2 \mid 20$ [20], $120 \mid$ [40.|], $260 \mid$ [48], 220 I
[49], 270 I [55.1], and I30। [6I].

## FILM 3702 Advanced Editing

4 hours; 3 credits
Advanced theory and practice in non-linear editing.
Prerequisite: Film *| | 0 I [I], I 20 I [40.|], 250 I [40.2], 240 I [43], 260 |
[48], 270 I [55.I], and 130 I [6I]; 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 *||0| [I], I20| [40.I], and $130 \mid$ [6|]; 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 like cable and home video.

Prerequisite: Film *। 101 [I].

## 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 *||0| [I]; $120 \mid$ [40.|] and $130 \mid$ [6|], or two film studies courses numbered 12 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 *||0| [I] 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 *||0| [I] or permission of the chairperson.

## FILM 490 I 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 2l9I Special Topics Mini-course

| hour; I 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 *|।O। [I]; 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 *|l0| [I]; 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 * 1 O| [I] 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; 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 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 4I91 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 4192 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.

## Independent studies

## FILM 508I Independent Research

| hour; I 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

| hour; I 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 508। [81.1], approval of a specific research project by the supervising faculty member, and permission of the chairperson.

## FILM 5083 Independent Research

| hour; I 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 508। [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. I], 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.

## FILM 5188 Independent Research II

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 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 4302 Advanced Screenwriting: Writing the Low Budget Film
FILM 3506 Animation II

# Finance and Business Management 

Department office: 218 Whitehead Hall
Phone: 718.95I.5154

## Full-time Faculty

Professors: Bell, Clarke, Connell, Davidoff, Fogel, Friedman, Queneau, Stone
Associate Professors: Amoo, Bhattacharya, Frankenstein, Hirakubo, Langbert, Lewis, Lopez-Pumarejo
Assistant Professors: Birnbaum, Hampton-Sosa, Lin, Lynch, Manlow, Porter, Raghupathi
Lecturers: Bassell, Reich, Weinstein

The business program at Brooklyn College produces well-rounded graduates with 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, and finance (B.M.F.) or a bachelor of business administration (B.B.A.) with concentrations in either business for health professions, finance, management, marketing, international business, or leadership and human resource management. 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 B.M.F. degree is general and allows students to choose a double major, such as business and accounting, or to select a minor.

The business program has pioneered several joint programs with other College departments. Business students may pursue a program in 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 and a bachelor of science-master of professional studies degree (B.S.-M.P.S.) in business information systems. Our graduates go on to pursue careers in information technology management or related fields, and work in government or private enterprise.

The departments of Accounting, Economics, and 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.

Graduates with professional degrees, such as business and accounting, may earn between 30 and 60 percent more than other graduates. In the corporate world, the business degree becomes even more valuable when earned 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

Department requirements (56-64 credits)

[^6]Accounting 200I and 3201, Computer and Information Science 1050 or Computer and Information Science IIIO, Business 2100 or Economics 2100 , Business 2200 or Economics 2200, Business 3400 or Economics 3400 or Mathematics 250 I or 3501 or Psychology 3400, Business 3410 or Economics 34 IO or Mathematics I20I, Business 3430 or Computer and Information Science 253I, Business 3100, 3200, 3310, 3170, 4200W, Philosophy 3314 or Classics 3233.

Concentration (12-18 credits)
Students must complete a minimum of 12 credits in one of the following eight concentrations:

REQUIRED COURSES (I5 credits): Any 15 credits from any combination of the following courses:
Any Biology or Chemistry courses except for courses in the college-wide Core Curriculum, Health and Nutrition Sciences 2111, 2120, 2300, 2301 , 3I60, 32I0, Physical Education and Exercise Science 304I, 3042, 3045, 327I, 3275, 328I, 3285, 425I, Psychology 2600, 3180, 3600, 3680.

A student specializing in this track may modify the Business Core above and may use a lesser number of credits to satisfy the Business Core. Specifically, Business 3170 and either Business 3430 or Computer and Information Science 253I are not required. The student may also substitute Business 3220 for Accounting 3201.

Business Law and Real Estate
REQUIRED COURSES (I5-16 credits): Accounting 420I, Business 2300, Business 3220, Business 3350, and Business 3360 or Accounting 3360 or Business 3182 or Philosophy 3740 or Accounting 3101.

## E-Business

REQUIRED COURSES (I5 credits): Business 3110 or Computer and Information Science 1597 or Television and Radio 3537; Business 3120 or Computer and Information Science I530; Business 3420 or Computer and Information Science I590; Business 3432 or Computer and Information Science 2532; and Business 3440 or Computer and Information Science I595.
A student specializing in this track may modify the Business Core above and should take Business 4202 W or Computer and Information Science I580W in lieu of Business 4200W; and may take Computer and Information Science 2820 W or Philosophy 3318 W in lieu of Philosophy 3314 or Classics 3233. Business 4200W will only be acceptable for students in this track with the permission of the deputy. Students may also substitute Computer and Information Sciences 1600 for Business 3170.

Finance and Investments
REQUIRED COURSES ( 18 credits): Business 3320 or Economics 3320 or Business 3377; Business 3330; Business 3340 or Business 4400 W or Economics 4400W; Business 2300, Business 3350 or Business 3373; Business 4300W or Business 331I.

International Business
REQUIRED COURSES (9 credits): Business 3I40, Business 3150 or Puerto Rican and Latino Studies 45I5, Business 3175 or Business 3377 .
ELECTIVE COURSES (a minimum of 3 credits): Africana Studies 3140; Business 3171; Business 3I78; Business 3245; Business 3250 or Women's Studies 3345; Economics 3352, 3362; Sociology 260I; 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 (I7 credits): Business 3240 or Psychology 3I72, Business 3024 or Business 3245 or Business 3250 or Women's Studies 3345 , Business 325 I or Philosophy 3335 or Business 3252, Business 3220, Business 3210 or Psychology 3171 or Economics 32 I2, Business 3260 .

## Management

REQUIRED COURSES (I2 credits): Business 3240 or Psychology 3I72; Business 3210 or Psychology 3I71; Business 3220; 3230.
ELECTIVE COURSES (a minimum of 2 credits): Africana Studies 3337; Business 2010 ; Business 3023; Business 3420 or Computer and Information Science 1590; Business 3250 or Women's Studies 3345; Business 325I or Philosophy 3335; Business 3252; Business 3260; Business 3440 or Computer and Information Science 1595; Business 3180; Business 4202W or Computer and Information Science I580W; Economics 32I2; Economics 3242; Sociology 3607.

## Marketing

REQUIRED COURSES ( 12 credits): Business 3130 or Television and Radio 2517, Business 3140, Business 3150 or Puerto Rican and Latino Studies 45 I 5 or Business 3160 or Business 3180, Business 4100 W .
ELECTIVE COURSES (a minimum of 3 credits): Business 3120 or Computer and Information Science 1530; Business 3110 or Television and Radio 3537 or Computer and Information Science I597; Sociology 2800; Television and Radio II65, 25 I9.

With permission of the Deputy Chairperson of the Department of Finance and Business Management, the student may substitute an appropriate course to replace one of the above courses for any of the BBA concentrations.

## Finance and Business Management 236

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, and finance 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 Mathematics 1201 ; Business 3400 or Economics 3400 or Mathematics 250 I or Mathematics 350 I; Business 3430 or Computer and Information Science 253I; Business 3240 or Psychology 3172; Business 3200; Business 3100; Business 3310; Accounting 2001; Accounting 3201; Philosophy 3314 or Classics 3233 or Speech 1618 or Speech 1619 or Speech 2623; Computer and Information Science 1050 or Computer and Information Science IIIO.

Business Electives:
Two 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 two 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 300I, 304I, 305I, 310 I, 420I, Computer and Information Science 3820, Economics 3202, 3342, 3352, 3362, Mathematics 260I,
Psychology 3171.
Capstone Seminar:
One of the following seminars: Business 4000 W , or Business 4100 W , or Business 4200 W or Business 4202 W or Computer and Information Science I580W, or Business 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 public accountancy and business, management and finance HEGIS code 0502; SED program code 35423

This interdepartmental program is described in the "Accounting" section of the Bulletin

## B.S.-M.P.S. degree program in business information systems HEGIS code 0799; SED program code 02104

This interdepartmental program is described in the "Computer and Information Science" section of the Bulletin

## 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 200 I, Accounting 320 I, Accounting 420I, Business 3220, Business 3310 or Business 2300, and Business 3350 .
Recommended courses: Philosophy 33I4, Philosophy 3740, and Accounting 3360 or Business 3360.

## Minor in Corporate Social Responsibility

An interdepartmental minor, offered by the Department of Finance and Business Management and the Department of Philosophy.
All of the following: Business 3245 or Business 3250 or Women's Studies 3345 ; Business 325 I or Philosophy 3335; Philosophy 33I4; Philosophy 3307 or Philosophy 3309 or Philosophy 33 IO.

Any two of the following: Accounting 320I, Business 3210, Business 3220, Classics 3233, Economics 3252, Business 3020 or Judaic Studies 3205; Philosophy 33I0, Philosophy 3315 or Communication 3200, Philosophy 33I8W 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 Finance

Department Requirements
The minor in finance requires 20 credits.
All of the following: Accounting 200I, Economics 2100 or Business 2100 , Economics 2200 or Business 2200, Mathematics 260 I.
Two of the following: Economics 3320 or Business 3320, Business 3310, Business 3330 .
(Mathematics majors may count Mathematics 2601 both for the major and for this minor.)
Note: Accounting, Business, and Economics majors are not eligible for this minor.

## Minor in Financial Planning

## Department Requirements

Required Courses (all of the following): Economics 2100 or Business 2100 , Accounting 200I, Business 3310, 3330, 3340, 2300.
Recommended courses: Accounting 3I0I; Business 3350; Business 3360/Accounting 3360; Economics 3320; Economics 3400/Business 3400; Economics 3352.

Recommended courses are optional. Financial planning minors should consult with departmental counselors for specific recommendations as to which of the above recommended courses will be most helpful.

## Minor in Marketing

This minor is not open to students who are pursuing the BBA with a concentration in marketing.
---------------------------------------
A grade of $C$ or higher in each of the six courses offered in the minor.
All of the following:
I) Business 3120 or Computer and Information Science 1530; Business 3100; Business 3140; Business 3170; and Television and Radio 2517 or Business 3130 .
2) One course chosen from the following: Business 3175 , Business 4 I 00W, Sociology 2800, or Television and Radio 2519 .

## Minor in Organizational Behavior

All of the following: Business 3200, Business 32 I 0, Business 3220, Business 325 I or Business 3252, Business 3260 or Psychology 3 I7I

## Minor in Small Business Management and Urban Entrepreneurship

Department Requirements
All of the following: Accounting 200I; Business 3240 or $3200 ; 3100 ; 3230 ; 3150 ; 3310$.

## Courses

## 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 [10.I].)

Prerequisite: Core Curriculum 1311 [3.11] or Core Studies 5 or 5.2, or passing Mathematics 101 I or higher, or sophomore status.

## 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 [20.1].)

Prerequisite: Core Curriculum 131। [3.11] or Core Studies 5 or 5.2, or passing Mathematics IOII, or higher, or sophomore status.

## 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 and Radio 2660 [60].

Prerequisite: English 1010 [I].

## 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 [20.5].)

Prerequisite: Judaic Studies 3012 [I2] 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.

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 Management

## 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 300 I [50.2].)

## BUSN 3IIO 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 and Radio 3537 [31.7] and Computer and Information Science 1597 [9.7].

Prerequisite: Sophomore status or permission of the chairperson.

## BUSN 3I20 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 *I530 [3.2].

Prerequisite: Core Curriculum 1312 [3.12] or Core Studies 5 or 5.1 or any course in computing.

## 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 and Radio 25 I7 [17].

Prerequisite: Business 3 I 00 [50.2] or Television and Radio II 65 [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 3I50 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, 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 Puerto Rican and Latino Studies 45 I 5 [56].)

Prerequisite: Business 3200 [50. I] 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 and Marketing

## 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 [IO.I] or Business 3100 [50.2].

## BUSN 317I 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 Asia-Pacific 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 [IO.I] or Business 3200 [50.1] or 3100 [50.2]. 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 318I 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 Non-Governmental Organizations (NGOs).

Prerequisite: Business 3100 [50.2] or Business 3180 [56]; Economics 2200 [20.1] or Business 2200 [20. I]; or departmental permission.

## BUSN 3182 Green Real Estate

2 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 Introduction to 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. I].)

## BUSN 3210 Organizational Behavior

## 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, total quality management, and social responsibility/ethics. (Not open to students who have completed Economics 3210 [50.4].)

Prerequisite: Business 3200 [50.I]

## 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 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
Practicum in which teams of students work in the field on real projects for entrepreneurs or small business owners. About half of class time will be allocated to in-class sessions while the other half will be used to work on a field project. 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, ethical issues, and resource requirements.

Prerequisite: Business 3230 [50.5] with at least a grade of " B ". Instructor authorization if grade is less than " B ".

## BUSN 3240 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 Psychology 3172 [I2.7].
(Not open to students who have completed Economics 3240 [40.3].)
Prerequisite: Sophomore status or Psychology 2100 [I0]

## 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 Gender Diversity in the Workplace: A Global Perspective

3 hours; 3 credits
Knowledge and skills that will enable students to effectively integrate gender considerations into business and human resource decisions both in the U.S. and global contexts. The course will: (I) Analyze the evolution of the relationship between sex, gender, 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 industrialized countries; and (3) Examine strategies for successfully managing gender diversity in organizations. Real life examples and cases will be used to illustrate and integrate the studied concepts. This course is the same as Women's Studies 3345 [40.7].

Prerequisite: Upper sophomore status or Business 3240 [40.3] or Psychology 3172 [12.7] or Women's Studies I001 [12].

## BUSN 325 I 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 [14.6].

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.

Prerequisite: sophomore status

## BUSN 3260 Leadership in Organizations

2 hours; 2 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 200। [I]; Business 2000 [20] or Business 3200 [50. I] or Business 3100 [50.2].

## BUSN 3310 Corporation Financial Management

3 hours; 3 credits
Basic problems faced by financial managers. Goals and functions of financial managers, tools of financial analysis, forecasting funds requirements, management of current assets, short-, intermediate-, and long-term financing. (Not open to students who have completed Economics 70.2.)

Prerequisite: Accounting 200। [1].

## BUSN 33II Advanced Corporate Finance

3 hours; 3 credits
Continues and expands on material taught in Business 33I0, Corporate Financial Management. Topics covered include: capital structure, dividend policy, mergers and acquisitions, financial derivates, behavioral finance, international finance, bankruptcy and corporate restructuring.

Prerequisite: Business 3310 .

## 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 [70.1].)

Prerequisite: Economics 2100 [IO.I].

## BUSN 3330 Investment and Securities Markets

3 hours; 3 credits
Existent markets including investment institutions and security exchanges. Technique of investment analysis. (Not open to students who have completed Economics 70.3.)

Prerequisite: Business 3310 [70.2] or Economics 3310 [70.2].

## BUSN 3340 Options, Futures, and Commodities Markets

3 hours; 3 credits
Discussion of current theory and research in options, futures, and commodities markets. Topics covered include how these markets have become an integral part of the investment community. Special attention will be paid to understanding the trading of options, futures, and commodities and how the movement in these markets link to current events in the world.

Prerequisite: Business 3310 [70.2].

## BUSN 3350 Real Estate Finance and 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 [70.2]
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 [45].)

Prerequisite: sophomore status.

## BUSN 3370 Investment Science

4 hours; 4 credits
Net present value, internal rate of return; yield, duration, immunization, and convexity of fixed-income securities; mean-variance 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 Economics 3370 [70.7] and Mathematics 360 [ [74.2].)

Prerequisite: Economics 3400 [30.2] or Business 3400 [30.2] or Mathematics *2501 [8.1] or Mathematics 350 I [51.1]; Economics 3410 [3I.I] with a grade of B- or better, Economics 3310 [70.2] or Business 3310 [70.2].

## 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: Business 3310 [70.2] (BUSN 3310) or Economics 3332 [70.8] (ECON 3332); Accounting 2001 [I] (ACCT 200I)

## BUSN 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 risk-neutral 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 Economics 3375 and Mathematics 460 I [74.3].)

Prerequisite: Mathematics 360 I [74.2] or Business 3370 [70.7] or Economics 3370 [70.7]

## BUSN 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.

Prerequisite: Business 3310 [70.2] or Economics 3332 [70.8].
BUSN 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 Economics 3378.

Prerequisite: Business 3310 [70.2] or Economics 3332 [70.8] or BUS 3330 [70.3]; Economics 2200 [20.1] or Business 2200 [20.1].

## BUSN 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 Economics 3400 [30.2]. (Not open to students who are enrolled in or have completed any of the following: Sociology 2113 [19.1], 2114 [20], 20.1; Political Science I2.5, 3422 [57]; Psychology 3400 [40. I], 2600 [50]; Mathematics *250। [8. I], 350 I [5I.I].)

Prerequisite: a score of 32 or higher on the CUNY Mathematics Skills Assessment Test or a grade of C or higher in Core Curriculum 1311 [3.1 I] or Core Studies 5 or passing Mathematics *IOII [2.9] or higher.

## 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 [3I.I]. Not open to students who have completed Mathematics 2101 [IO.I].)

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 e-commerce. 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 [9.2]. (Not open to students who have completed Computer and Information Science I 590 [9.2].).

Prerequisite: Computer and Information Science *I 050 [5.2] and at least sophomore standing; or permission of the chairperson.

## 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 253| [I0.3I]. (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 <br> 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 I595 [9.50].) (Not open to students who have completed Economics 50.8.)

Prerequisite: Business 3200 [50. I].

## 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 [30.3W]. 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.I] 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.I.)

Prerequisite: English 1012 [2], senior standing and at least 34 credits in departmental courses required for the B.S. degree in business, management, and finance.

## 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 350 I [5I. I]; and Business 3100
[50.2]; 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.I.)

Prerequisite: English 1012 [2].
Prerequisite or corequisite: Business 3200 [50.1] and senior standing, and at least 34 credits in departmental courses required for the B.S. degree in business, management, and finance.

## 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.) This course is the same as Computer and Information Science I580W [8.3W]

Prerequisite: English 1012 [2].
Prerequisite or corequisite: Business 3400 [30.2] or Mathematics *250। [8.1] or $5 \mathrm{I} . \mathrm{I}$; and Business 3430 [3I.4]; and Business 3200 [50.1] or Economics 50.1; and Computer and Information Science *I 050 [5.2] or 1 I 10 [1.5]; and senior standing; and at least 34 credits in departmental courses required for the B.S. degree in business, management, and finance

## BUSN 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.)

Prerequisite: English 1012 [2].
Prerequisite or corequisite: Business 3310 [70.2] and senior standing, and at least 34 credits in departmental courses required for the B.S. degree in business, management, and finance.

## Honors seminars

## BUSN 5000 Independent Research in Business Policy and

 Managerial EconomicsMinimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Research paper. (Students may not receive credit for more than two of the following courses: Business 5000 [85.3], 500 I [85.4]; Economics 85.3, 85.4.)

Prerequisite: Any Business or Economics class from 3400 [30.2] and higher, an overall GPA of at least 2.85; and departmental permission.

## BUSN 500I Independent Research in Business Policy and

## Managerial Economics

Minimum of 9 hours conference and independent work§; 3 credits Independent research supervised by a faculty member. Approved topic. Weekly conference. Research paper. (Students may not receive credit for more than two of the following courses: Business 5000 [85.3], 500 I
[85.4]; Economics 85.3, 85.4.)
Prerequisite: Any Business or Economics class from 3400 [30.2] and higher, an overall GPA of at least 2.85; and departmental permission.

## BUSN 5I00 Internship: Fieldwork I

9 hours field work; 3 credits
Off-campus internship or independent research project supervised by a faculty member. Final report. (Business 5 I 00 [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 510I Internship: Fieldwork II

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.

## General Science

Department office: 2606 James Hall
Phone: 718.95I.506I

## 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 I-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 3050 and 5050 or at least one additional course in science numbered 3000 or above and additional credits in science as described below:
At least three credits from each and at least 9 credits in one of the following strands:
Biology: Core Curriculum I32I, 3307; General Science 2020, 2030; Health and Nutrition Sciences 2300, 230I; Anthropology 3440; Anthropology 3275, 427I; or any course in biology.

Chemistry: Core Curriculum I322, General Science 2040, 2050; Environmental Studies I00 ; or any course in chemistry.
Earth and environmental science: Core Curriculum I332, 3302, 3304, 3309, 33 II; General Science 2030, 2040, 2050; or any course in geology or earth and environmental science.
Physics: Core Curriculum I33I, 330I, 3302, 3303, 3308; General Science 2040, 20 I 0 ; or any course in physics.
Core Curriculum 33 IO, 3305, and 3306 may be used to satisfy program requirements. New Core Curriculum courses numbered $33 \times x$, as developed and offered, may also be used to satisfy program requirements.
The course of study must include at least one of the following courses: General Science 2040, 20I0, 2020, 2030, 2050.

## Courses

## 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 *| 40 | [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 *| 40 | [1.95].

## GSCI 2030 Studies in Paleobiology

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 *140| [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 *। 40 I [1.95].

## GSCI 2050 GSCI 9.5

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 *140। [I.95].

## GSCI 3050 Natural Science in Early Childhood and Childhood Education

I 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 3 I07. Emphasis on laboratory experiences using non-toxic and familiar objects and materials.

Prerequisite: One course in General Science.
Corequisite: Childhood and Special Education 3207 or Early Childhood and Art Education 3107.

## GSCI 5050 Independent Research

I hour lecture, 2 hours laboratory or conference; 3 credits
Faculty-mentored independent library or laboratory research in one of

# General Science 246 

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: 4I23 Ingersoll Hall
Phone: 718.95I.5026

## Full-time Faculty

Professors: Axen, Balk, Eshel, Greene, Jacobson, Levin, Mirotznik, Oppenheimer
Associate Professors: Eastwood, Grassman, Greenberg, Grommet, Grov, McChesney, Schnoll, Sirota, Weston
Assistant Professors: Chu, Haley, Koizumi, Rouder

The Brooklyn College Department of Health and Nutrition Sciences offers a bachelor of arts degree as well a bachelor of science degree with two concentrations: health science 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 health concentration in the B.S. degree provides students with the conceptual foundation and factual knowledge necessary to analyze and apply current information concerning health and health care. Students are introduced to and expand their knowledge of the basic science of health; the philosophical underpinnings of health and health care in the U.S.; the multidimensional determinants of health; epidemiology and biostatistics; nutrition; and the organization and administration 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 communication, education and counseling. Students who concentrate in health science are required to complete an internship. Through independent study courses, students also have the opportunity to work on research with a faculty mentor.

The concentration is designed to provide students with the background to prepare for a variety of academic and career options. Students who complete the B.A. or B.S. degree program 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 nutrition concentration in the B.S. degree is an accredited program of the American Dietetic Association (ADA). Accreditation insures that students will graduate with the foundation knowledge and skills necessary for entry level practice as a registered dietitian (RD).

A solid grounding in the sciences enables our students 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.

Students who complete the nutrition concentration with a GPA of 2.00 or better are permitted to apply for a dietetic internship, the experiential training for registered dietitians (RD). After completion of the internship, with a passing score on the registration examination for dietitians, students are awarded the credential of RD. Students are then eligible for a variety of entry level positions in clinical, community, or food service settings. With experience, students have created opportunities in such diverse areas as sports nutrition, mass communication, and research.

Prospective health and nutrition sciences majors should consult an undergraduate deputy before choosing a program of study leading to a B.S. degree.

## B.A. degree program in health and nutrition sciences HEGIS code I299; SED program code 85300

## Department requirements (57 I/2-59 I/2 credits)

Health and Nutrition Sciences 1100.
All of the following: Health and Nutrition Sciences $2130,2109,2300,2301,2120,1200$ or $2210,2140,3300$, and one fieldwork course chosen from 4182,4180 , or 4181 .

A minimum of 12 credits from the following courses: Health and Nutrition Sciences $2111,2131,2|32,2| 50,2|70,2| 7|, 2| 80,2|8|, 2|82,22| 5$, 2220, 2221, 3110, 3161, 3170, 3171, 3230.

A minimum of 6 credits from the following courses: Health and Nutrition Sciences $4 I 50,22 I 2,4 I 5 I, 56.5,3 I 50,3 I 5 I, 4 I 52,2 I 83,4300$, and courses numbered in the 5000s.

Biology IO8I and Chemistry IIO0 or I040.

Department recommendation
Prospective health and nutrition sciences majors should consult a department counselor before choosing a program of study leading to a B.A. degree.

## B.S. degree program in health and nutrition sciences HEGIS code I299; SED program code 85301

Department requirements (67 I/2-73 credits)
Health and Nutrition Sciences II 00, 2300, 230I, 3300.
Biology 1002 or 108 I.
Biology 3003 and either 3005 or 3004
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: health science or foods and nutrition.

## Concentration in health science

Biology I00I or 1080 .
Chemistry 1040; or 1100 and 2100.
Chemistry 2500; or 35 I 0 and 3520 .
Health and Nutrition Sciences 1100.
All of the following: Health and Nutrition Sciences $2130,2109,2120,1200$ or $2210,26,3300$, and one fieldwork course chosen from 4182 or 4180 .
A minimum of 12 credits in Health and Nutrition Sciences courses numbered in the 3000s and/or 4000s.
A minimum of 6 credits from the following courses: Health and Nutrition Sciences $4|50,22| 2,4 I 5 I, 56.5,3|50,3 I 5 I, 4| 52,2 \mid 83,4300$, and courses numbered in the 5000 s.

## Concentration in foods and nutrition

Students who complete this concentration will meet the requirements for the Didactic Program in Dietetics (DPD) of the American Dietetic Association (ADA). DPD is a term used by the American Dietetic Association to describe the program [fulfilling the academic component of membership in the society, as well as the eligibility requirements for the registration examination that satisfies the academic requirements for becoming a registered dietitian. Students must also complete a Dietetic Internship (DI) to be eligible for the registration examination.
Chemistry 1040; or 1100 and 2100 .
Chemistry 2500; or 35 I 0 and 3520 .
All of the following: Health and Nutrition Sciences $2210,41.1$ and 41.2 ; or 2220 and 2221 and 2222 and $2223,3210,3230,3250,4210,4230,4240$, 424I, 4300, 5290W.

## Recommendation

Because ADA requirements are subject to change, students who wish to become members of the ADA or registered dietitians should consult with the DPD program director in the department to determine minimum academic requirements. For the purpose of ADA verification all required courses for the degree must be completed with a grade of C or better.

Prospective health and nutrition sciences majors should consult a department counselor before choosing a program of study leading to a B.S. degree.

## Departmental Minor(s)

## Minor in Health and Nutrition Sciences

## Department Requirements

A minimum of 12 credits in at least four courses of advanced electives in health and nutrition sciences, each completed with a grade of C or higher. Courses numbered below 2000 may not be used; at least one course must be from the following: Health and Nutrition Sciences 2109 , 2 IIOW, 2 I20, 2 I30, 2 I40, 22 IO, 2300, 230 I.

## 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 3I60, 3155 ; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 330I, [76. I], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110 , 3344; Anthropology 3130, 3140, 3170, 3185 ; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 334।; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 22I5, 3130 , 3395; Children and Youth Studies 3110 ; Health and Nutrition Science 2130; Judaic Studies 4I95; Philosophy 3307; Political Science 3240, 3242, 3243; Women's Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; 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) and childhood education teacher (grades I-6) programs are described in the "Education" section of 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 IIOO.
Health and Nutrition Sciences 1200, or 2210; 2170; 2150.
Five courses from the following: Health and Nutrition Sciences $1180,2130,2110 W, 2104,2111,3160,2180,2181,3170,3161,2182,2131,2171$, $3110,3230$.

One of the following courses: Health and Nutrition Sciences 4I50, 4I5I, 4I82, 3I50, 4I80, 3I5I, 4I52, 2 I 83.

## Division of 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 public health in community health with concentrations in community health, health care
policy and administration, and health care management; master of science in nutrition; master of science in health and nutrition sciences: health teacher (all grades). The department also offers a dietetic internship (DI) accredited by the American Dietetic Association. For information, students should consult the department's deputy chairperson for graduate studies or the DI program director.

## Courses

*Courses marked with an asterisk $\left({ }^{*}\right)$ 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, and the interdepartmental major in science. 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 \#*II 100 Personal and Community Health

3 hours; 3 credits
Basic health concepts. Personal responsibility for health maintenance and improvement for individuals, families, and communities.

## HNSC \#* I 70 Contemporary Health Problems of Children and Youth

3 hours; 3 credits
Factors influencing health throughout the school years. Identification of basic issues. Alternative and conflicting approaches to solving health problems. The School of Education recommends that prospective teachers take Health and Nutrition Sciences 1170 [I2] in conjunction with all education sequences (early, elementary, and secondary). (Not open to students majoring in health and nutrition sciences or health science.)

Prerequisite: candidacy for New York State teacher certification.

## HNSC \#* 180 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 \#| 200 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].)

## 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.

## Intermediate courses

## HNSC \#2 109 Principles in Health Science

3 hours; 3 credits
Scientific and philosophical bases of health principles. Social conditions influencing health. Principles affecting health programs.

Prerequisite: Health and Nutrition Sciences 1100 [6.1].

## HNSC \#2IIOW Principles in Health Science

2 hours lecture, 2 hours laboratory; 3 credits
Scientific and philosophical health principles. Social conditions influencing health. Principles affecting health programs. Writing-intensive section.

Prerequisite: Health and Nutrition Sciences I 100 [6.1] and English
*IOI2 [2].

## HNSC 2III Psychological Aspects of Health

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 [16].)

Prerequisite: Health and Nutrition Sciences II 00 [6. I]; or Psychology
*1000 [1.1] and one of the following: Psychology *2 100 [IO], 2300 [30.2], or 3600 [65.1].

## HNSC \#2I20 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. I].

## 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 \#213I 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 IIOO [6.1].

## HNSC \#2l32 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.

Prerequisite: Health and Nutrition Sciences IIOO [6.1].

## HNSC 2140 Introduction to the U.S. Health System

3 hours, 3 credits
Examination of problems in health care delivery in the United States. Study of the historical, political, and economic aspects of the public and private health systems. Critical evaluation of the quality, organization, and accessibility of health care services. Comparison of health care systems in different countries. (Not open to students who have completed Health and Nutrition Sciences 26.)

Prerequisite: Health and Nutrition Sciences IIOO [6.1].

## HNSC \#2l50 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 IIOO [6. I]; or permission of the chairperson.

## HNSC 2170 Child Development: Typical and Atypical

3 hours lecture, 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 IIO0, or Early Childhood and
Art Education 2003, or Education 2002 completed in Spring 2012 or earlier, or
Psychology *I000.

## HNSC 217I 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 IIOO [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 Studies 3606 [35].

Prerequisite: Health and Nutrition Sciences IIOO [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 IIOO [6.1].

## HNSC \#2 182 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 IIOO [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 Speech 4666 [66].

Prerequisite: Health and Nutrition Sciences IIOO [6.1] or equivalent.

## HNSC 2184 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.

Prerequisite: Health and Nutrition Sciences IIOO [6.1] or permission of the chairperson.

## HNSC \#22l0 Human Nutrition

4 hours; 4 credits
Utilization of food by the body. Nutrient requirements under varying conditions of growth, occupation, and climate. Energy metabolism and weight control. Calculation and computation of nutrient composition of selected foods, food groups, and diets.

Prerequisite: Biology 1001 or 1080 , and 1002 or 1081 .

## HNSC \#22l2 Geriatric Nutrition

3 hours; 3 credits
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 I200 [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 4I, or both 41.1 and 4I.2.

Prerequisite: Health and Nutrition Sciences I200 [25.I] or 2210 [29]. Prerequisite or corequisite: Chemistry *। 040 [5]. Corequisite: Health and Nutrition Sciences 2221 [41.4].

## HNSC 222I Food Science Laboratory

2 laboratory hours; I 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 4I, 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 *। 040 [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. (Not open to students who have completed Health and Nutrition Sciences 41 or both 41.1 and 41.2.)

Prerequisite: Health and Nutrition Sciences I200 [25.1] or 2210 [29]; Corequisite: Health and Nutrition Sciences 2223 [4I.6].

## HNSC 2223 Foods of Diverse Populations Laboratory

2 laboratory hours; I credit
Laboratory experience that provides food preparation activities designed to complement Health and Nutrition Sciences 2222 [41.5],
Foods of Diverse Populations. (Not open to students who have taken Health and Nutrition Sciences 2222 [41.5] prior to Fall 20IO.)

Prerequisite: Health and Nutrition Sciences 1100 or 2210
Corequisite: Health and Nutrition Sciences 2222 [4I.5].

## HNSC \#2230 Introduction to Experimental Foods

I 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 [4I.3], 222I [4I.4], 2222 [41.5] and 2223 [4I.6].
Prerequisite or corequisite: Chemistry *2500 [50] or 3250 [5।].

## 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 Physical Education 3271
[22.71]. (Not open to students who are enrolled in or have completed Biology 6.I or 6.2.)

Prerequisite: Biology I00I or I080, and I002 or I08।.

## HNSC \#2301 Physiology Laboratory

I 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 [22.7I]. (Not open to students who are enrolled in or have completed Biology 6.I or 6.2.)

Prerequisite or corequisite: Health and Nutrition Sciencies 2300 [22.7।]

## HNSC \#2302 Human Anatomy and Physiology I

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 and Archaeology 3265, Biology I50I, and Physical Education and Exercise Science 328I.

Prerequisite: I) 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 and Archaeology 3266, Biology I502, and Physical Education and Exercise Science 3285.

Prerequisite: One of the following: Anthropology and Archaeology 3265, Biology I50I, Health and Nutrition Sciences 2302, or Physical Education and Exercise Science 328।.

## 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 II 00 [6. I].

## HNSC 3III 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 [34.5].)

Prerequisite: Health and Nutrition Sciences 2109 [21].

## HNSC \#3I50 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 II 00 [6.1]; and completion of 6 credits in advanced courses in health and nutrition sciences.

## HNSC 315I Internet Community Health Education

## 3 hours; 3 credits

This is a project-oriented course that introduces the student to community health education on the Internet. The theoretical basis for Internet community health education is discussed. Traditional program planning and evaluation models are adapted to the Internet, and skills unique to Internet community health education are developed.

Prerequisite: Health and Nutrition Sciences II 00 [6.1] and completion of six credits in advanced courses in the department.

## 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 Science 2300 [22.7I] or Health and Nutrition Sciences 2300 [22.71] or Physical Education 327 [ [22.71].

## 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 II 00 [6.1] and Health Science 2300 [22.7I] or Physical Education 3271 [22.71].

## HNSC \#3I70 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. (Not open to students who have completed Health Science 3170 [36].)

Prerequisite: twelve credits in the department, including Health and Nutrition Sciences II 00 [6.1]. A course in developmental psychology or child development is recommended.

## HNSC \#3I7I 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: twelve credits in the department, including Health and Nutrition Sciences 1100 [6. 1].

## HNSC \#3210 Nutritional Chemistry

4 hours; 4 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 2580.)

Prerequisite: Health and Nutrition Sciences 2210 and Chemistry *2500 or 35 I 0 .

## HNSC \#3230 Life Cycle Nutrition

3 hours; 3 credits
Basic nutrition concepts as they apply to the stages of the life cycle: pregnancy, infancy, childhood, adolescence, adulthood, and old age.

Prerequisite: Health and Nutrition Sciences I 100 [6.1]; and I200 [25.1] or 2210 [29].

## HNSC $\mathbf{3 2 5 0}$ 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.I 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 222। [41.4].

## 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 3075 [75].)

Prerequisite: 12 credits in advanced health and nutrition sciences courses.

## 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: fifteen credits in advanced courses in the department, including one fieldwork course.

## HNSC \#4I5 I 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: fifteen credits in advanced courses in the department; and a grade of C or higher in Health and Nutrition Sciences 218। [35].

## HNSC \#4 52 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: Health and Nutrition Sciences 2130 [20], 2109 [2I], 2120
[24], and six credits chosen from the following courses: Health and
Nutrition Sciences 2111 , 2131, 2132, 2150, 2170, 2180, 218।, 2182,


## 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 \#418I 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 \#4210 Advanced Nutrition

3 hours; 3 credits
Biochemical and physiological functions of the nutrients. Metabolic interrelationships applied to the study of human nutrition. Nutrient requirements of individuals in various environments and stages of life. Nutritional status of individuals and population groups. Dietary, biochemical, and clinical methods of appraisal. Programs for improvement of nutritional status.

Prerequisite: Health and Nutrition Sciences 3210 [54.1] and 3300 [60].

## HNSC 42II Advanced Nutrition I

3 hours; 3 credits
Biochemical and physiological functions of the nutrients with an emphasis on the interaction between micronutrient function and macronutrient metabolism, including the roles of vitamin $D$ and $B 6$ in protein metabolism, and the $B$ vitamins in energy metabolism. Nutrient-gene interactions in humans. Metabolic interrelationships
applied to the study of human nutrition. Nutrient requirements of individuals in various environments and, where feasible, stages of life; dietary, biochemical, and clinical methods of appraisal, and mechanisms responsible for clinical symptoms of deficiency.

Prerequisites: Health and Nutrition Sciences 22I0, 3210, 3300.

## HNSC 4212 Advanced Nutrition II

3 hours; 3 credits
Biochemical and physiological functions of the nutrients with an emphasis on the interaction between micronutrient function and macronutrient metabolism, including the role of thiamin in carbohydrate metabolism, and iron and copper in lipid metabolism. Nutrient-gene interactions in humans. Metabolic interrelationships applied to the study of human nutrition. Nutrient requirements of individuals in various environments and, where feasible, stages of life; dietary, biochemical, and clinical methods of appraisal, and mechanisms responsible for clinical symptoms of deficiency.

Prerequisites: Health and Nutrition Sciences 22I0, 32I0, 3300, 42II.

## 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 Medical Nutrition Therapy

4 hours; 4 credits
Pathophysiological basis for nutritional care in specific diseases; theoretical basis for therapeutic diets. (Not open to students who have completed Health and Nutrition Sciences 54.5.)

Prerequisite: Health and Nutrition Sciences 2300 [22.7I], 2210 [29], and 3230 [47]; or permission of the chairperson.
Corequisite: Health and Nutrition Sciences 424 I [54.7].

## HNSC \#424I Applied Medical Nutrition

3 hours lecture, 2 hours supervised fieldwork; 4 credits
An introduction to the profession and practice of dietetics. Topics include: interpersonal communication skills; counseling theory and methods; screening for nutritional risk; nutritional assessment and evaluation; documentation methods; medical terminology; laboratory parameters; ethics of care; reimbursement issues; calculation of diets; enteral and parenteral nutrition; nutrient-nutrient and drug-nutrient interactions.

Prerequisite: Health and Nutrition Sciences 2300 [22.71] and 3230
[47]; or permission of the chairperson.
Corequisite: Health and Nutrition Sciences 4240 [54.6].

## HNSC \#4300 Organization, Administration, and Supervision of Health Services

3 hours; 3 credits
Increasing demands for health services; determinants of health policy making; utilization of health care resources; health expenditures in the total economy; structuring health care systems; quality controls of services.

Prerequisite: Health and Nutrition Sciences 2109 [2I] or 2140 [26. I]; Prerequisite or corequisite: 4230 [53.1]

## Seminars and independent study

## HNSC \#5 190 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 lecture; 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 *। 012 [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 \#539I 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 539| [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 539। [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.

## History

Department office: 524 Whitehead Hall
Phone: 718.95I. 5303

## Full-time Faculty

Distinguished Professor: Burrows
Professors: Burrows, Johnson, SenGupta, Troyansky
Associate Professors: Banerjee, Ebert, Meyer, Rawson, Remy, Warren, Wills
Assistant Professors: Fishman, Napoli, O'Keeffe, Stern

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 I-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.

## Core curriculum

The Department of History participates in the college's core curriculum through Core Curriculum 1220.

## 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 (33 credits)
History 200 IW. History 200 IW is a prerequisite of all history courses numbered in the 4000s.
Twenty-four credits in lower-division courses including at least three credits in each of the following groups:
a) Ancient, medieval, and early modern history
b) European history
c) Transnational and comparative history
d) United States history
e) African, Asian, Caribbean, Latin American, and Middle Eastern history.

Six credits in upper-division 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 $7-12$ ) and special subject programs are writing intensive.

## Program requirements

Students who wish to pursue a bachelor of arts degree in adolescence 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.

The following pedagogical courses in the Department of Secondary Education: SEED 200I, 2002, 340I, 3402, 4402, 4408,3456 (total of 24 credits):
This four-term sequence may be started in the lower-sophomore term or upper-sophomore term.
SEED 200I, 2002, 340I, 3402 (12 credits).
The appropriate 5-credit course in student teaching:
SEED 4402 Seminar on Methods of Teaching Social Studies, Student Teaching I
The appropriate 4-credit course in student teaching:
SEED 4408 Advanced Seminar on Methods of Teaching Social Studies, Student Teaching II
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department.
Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking Education 3454.

Students, except music education majors, must complete 24 credits in the School of Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take SEED 200 I, 2002, 340I or 3402; an average of 2.75 in SEED 200 I and 2002 is required to continue to SEED 3401 and/or 3402; to take SEED 4413 or 4401-4406, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take SEED 4407-4406, students must earn a B- or higher in SEED 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes SEED 4407-44I2 prior to SEED 4401-4406 must earn a B- or better grade in SEED 4407-44I2 to take SEED 4401-4406.

## Departmental Minor(s)

## Minor in Archival Studies and Community Documentation

The minor in archival studies and community documentation is offered by the History Department in conjunction with the Department of the Library.

## Department Requirements (15 credits)

History 4100 and either 4200 or 3460 .
One course from a department other than the student's major chosen from the following:
Africana Studies 3324, American Studies 3404, Anthropology and Archaeology 2402 or 3130 , Art 3066, History 3455, 3480, or 3485, Judaic

Studies 3485, Music 2103, Political Science 3140 or 3150 or 3143 , Psychology 2100, Puerto Rican and Latino Studies 3325, Sociology 3204.
History 5100 and 5101.

## 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 3140, 3260, 3155, 3185
Business 3I70, 3I75, 5000, 500 I.
Film 2128, 3202.
Health and Nutrition Sciences $7162 \times$ (can be taken for undergraduate credit with permission of chairperson).
History 3534, 3530, 3536, 3538, 3532, 3543.
Modern Languages: Modern Languages 28I0, 2020, 2030, 243I-2437, 36IO, 36I5, 36I6, 3640, 3645, 37IO, 3662, 5070
Chinese 3910 or English 3192
Philosophy 3307, 3722
Political Science 3308.
Religion 3020, 3040
Sociology 2601
Speech 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 3I60, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 330I, [76.I], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 31 IO, 3344; Anthropology 3130, 3140, 3170, 3185 ; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 334I; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's 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 Studies 3328
d. Media and Communications in a Global Context

Anthropology 3I80; Film 213I; Philosophy 3315; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; 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) and childhood education teacher (grades I-6) programs are described in the "Education" section of 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 and either History 3480 or 3485 .
One course in ancient, medieval, and early modern European history chosen from the following: History 30I0, 3020, 3033, $3101,3040,3050$, 3090.

One course in modern European history chosen from the following: History 3220, 323I, 3252, 324I, 3230, 3208, 3209, 3332, 3207, 3206, 32I2, 3290.

Two courses in transnational and comparative history chosen from the following: History 3360, 33I5, 33I0, 3335, 3330.
Three courses in United States history chosen from the following: History 340I, 3402, 3323, 3420, 3430, 3440, 344I, 3442, 3450, 34I0, 3404, $3412,3470,3405,3406,3490,3416,3435,3418,3455,3485$.

One course in African, Asian, Caribbean, Latin American, and Middle Eastern history chosen from the following: History 3I00, 35I5, 35I7, 3534, 3538, 3543, 3550, 3560, 3561, 3590.

## 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.

## Division of 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

§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.

## Required courses for history majors

## HIST 200 IW Introduction to the Study of History

3 hours; 3 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 200 IW [I0.W] or History 10 is a prerequisite of all history courses numbered in the 4000s and 5000s with the exception of History 4 I 00 [69.I], 4200 [69.2], 5 I 00 [78.1], and 5 IO I [78.2]. Writing-intensive course.

Prerequisite: English 1012 [2]; and Core Studies 4 or Core Curriculum 1220 [2.2].

## Lower division courses

## Ancient, medieval \& early modern European history

## HIST 300 I Western Civilization to $\mathbf{I} 500$

3 hours; 3 credits
Development of Western Civilization from ancient origins to the opening of the age of exploration. Classical, Jewish, and Christian influences; the Germanic invasions; rural environment and its economy, women's roles. Christianity and the Crusades; arts, literature, and philosophy; classical revivals.

Prerequisite: Core Studies 4 or Core Curriculum I220 [2.2] or permission of the chairperson.

## HIST $\mathbf{3 0 0 2}$ Women in Europe: to $\mathbf{1 8 0 0}$

3 hours; 3 credits
History of women in Europe from antiquity through the early modern era based on literary, humanist, and theoretical texts from the Bible to Mary Wollstonecraft. Women as mothers, goddesses, prostitutes, priestesses, nuns, queens, warriors, scholars, reformers, and authors. Misogynist themes and defenses of female capacity. Origins of feminism.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2], or permission of the chairperson.

## 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 foot-soldiers; philosophical, historical, and literary discussions of war; foundations of pacifist theories and theories of limited war.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2], or permission of the chairperson.

## HIST 3010 Ancient Greece

3 hours; 3 credits
Greek civilization from the Mycenaean age to the death of Alexander the Great. Development of artistic, literary, moral, and social values from Homer to Aristotle. Myth, science, and philosophy in the Greek vision of the cosmos. The city, the family, roles of women and children.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 3015 The Rise of Macedon

3 hours; 3 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 401 I.

Prerequisite: English 1012 or permission of the chairperson.

## HIST 3020 Rome and the Mediterranean World

## 3 hours; 3 credits

Civilization of the Mediterranean world from the death of Alexander the Great to the fall of Rome in the West. Diffusion of Hellenistic art, literature, and thought and their appropriation by Rome. Roman society, women and family, war and politics from Republic to Empire. Roman civilization at its height. Interaction of Christian and classical values in late antiquity.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Curriculum I220 [2.2] or premission of the chairperson.

## HIST 3033 Christianity and the Church in Medieval Europe

3 hours; 3 credits
Life and spirituality of Christian communities and their impact on Western society from the third century through the Middle Ages. Martyrs, monks, relics, pilgrims, crusaders, mystics. Papacy and kingship, faith and reason, heresy and inquisition, art and architecture. Multi-disciplinary focus on historical, literary, and artistic records.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 3040 The European Renaissance

## 3 hours; 3 credits

Society and culture of the European Renaissance from I 300 to 1650.
Topics include the emergence of the northern Italian city-states and consequent cultural renewal; courtly and civic culture; neighborhoods, guilds, and confraternities; women's roles and private life; the papacy, lay piety, heresy; medicine, law, and the universities; humanism and the arts; printing, literacy, and education; the cultural effects of religious reform and absolute monarchy.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

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HIST 3042 Kings, Courts, and Society in Early Modern Europe
3 hours; 3 credits
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The role of monarchs, their courts, and their armies in the shaping of European politics from 1500 to 1750 . Theories of kingship, the education and self-image of royalty, management of nobility, changes in military technology and organization, and the development of bureaucracy, taxation strategies, and mercantilist policies.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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 .

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST $\mathbf{3 0 7 0}$ 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 3090 Special Topics in Ancient, Medieval, and Early Modern European History

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 for credit twice, but may not repeat topics.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 310I 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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; Jewish-Christian 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 [36].

Prerequisite: Core Curriculum 1220, or permission of the chairperson.

## 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 [34].

## HIST 3104 The Hasidic Movement: Its History and 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 [37].

## Modern European history

## HIST 3206 Women in Modern Europe

3 hours; 3 credits
History of women in Europe from the Industrial and French Revolutions to the present. Change in and interaction of women's economic, social, and political roles, and relationship of these to contemporary concepts of women's nature. This course is the same as Women's Studies 3224 [42].

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 3207 Socialism, Anarchism, and Marxism in Europe, 1789 to the Present

3 hours; 3 credits
The ideas, leading figures, and movements of the Left. Emergence of the Left in the French Revolution, utopian socialism, Marxism, anarchism, revolutionary syndicalism, Fabian socialism, national Left parties, the Internationals, revisionism, communism, and contemporary socialism.

Prerequisite: Core Studies 4 or Core Curriculum I220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

HIST 3210 Terror and 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 3230 Age of the French Revolution and Its Aftermath

3 hours; 3 credits
The old regime in the 1780 s. French revolutions of 1789 and 1792 .
Struggles and compromises between revolutionary and
counterrevolutionary forces to 1815 . The Restoration.
Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 323 I France from Napoleon to the Present

3 hours; 3 credits
Heritage of the Revolution and Napoleon. Changing meaning of Left and Right; their struggles. Revolutions, authoritarianism, republics in the nineteenth century. Impact of wars and industrialism in the twentieth century. Continuing political transformations.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 324 I 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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.

Prerequisite or corequisite: Core 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 3243 The 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 [50].

Prerequisite: Core Curriculum 1220, Judaic Studies 3013 [I3], or permission of the chairperson.

## HIST 3252 Russia from the Era of Reforms

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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 326 I Modern Italy

3 hours; 3 credits
Major economic, social, political, and cultural events of Italian history from the Risorgimento to the present. Emphasis on Italian cultural heritage and contributions. Eighteenth-century and nineteenth-century background to unification. Italy as a national state. Italy and the Great War, Fascism, and the new Italy.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permisssion of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## Transnational and comparative history

## HIST 3310 Pagans, Christians, and Jews

3 hours; 3 credits
Religious conflict in the Roman Empire. Relation of Judaism and Christianity to their pagan environment. This course is the same as Classics 4021.

Prerequisite: Core Curriculum I| | 0 or 1220 or Religion 3003 [I.I] or permission of the chairperson.

## HIST 3315 Jesus and the Christian Tradition

3 hours; 3 credits
A cultural history of Christianity from the first century to the present; quest for the historical Jesus; images of Jesus in major eras of world history in scripture, theology, literature, art, and music; the place of Christian culture in the history of world civilization. This course is the same as Studies in Religion 3050.

Prerequisite: Core Curriculum 1220 [2.2] or Studies in Religion 3003 [I.I], or permission of the chairperson and/or the director of the Program of Studies in Religion.

## HIST 3320 Childhood in the Western World

3 hours; 3 credits
Children's place in society and thought from antiquity to the present with emphasis on the preindustrial Western world. Child-rearing practices, childhood disease and mortality, the education of children, literary reflections of childhood experiences in relation to the history of society and culture of the family, and of women.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 3323 The Atlantic World I492-I7I3

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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 3325 Slavery in the Atlantic World

3 hours lecture, 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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 Studies 3238 [64].

Prerequisite: Core Curriculum 1220 or premission of the chairperson.
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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 3332 Comparative Industrialization, Late I8th 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST $\mathbf{3 3 3 5}$ 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 Studies 3230 [5I].

Prerequisite: Core Studies 4 or Core Curriculum I220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 or Women's and Gender Studies 100 I, or permission of the chairperson.

## 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, I88I-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.

Prerequisite: Core Curriculum 1220 or permission of the chairperson.

## HIST $\mathbf{3 3 6 0}$ 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.

Prerequisite: Core 4 or Core Curriculum I220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## United States history

## HIST 340I America 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 3402 America since 1865

## 3 hours; 3 credits

American history from the Civil War to the present. The
Reconstruction era, emergence of big business, populism, progressivism, imperialism, the new freedom, World War I, the 1920s, the New Deal, World War II, and the postwar decades.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 3403 American Social History through the Civil War

3 hours; 3 credits
Colonial period through the Civil War. Origins and growth of American society during the colonial and early national eras. Population, immigration, and migration. Races, religions and nationalities. Class, status, and mobility. The family and other social institutions.

Prerequisite: Core 4 or Core Curriculum I220 [2.2] or permission of the chairperson.

## HIST 3404 American Social History from Reconstruction

## 3 hours; 3 credits

Causes and effects of social changes including problems of Reconstruction, rise of big business, role of the courts, Jim Crow, immigration and migration, progressivism, prohibition, patriotism, personal liberties in time of war, major issues in the Great Depression
and New Deal, affluent society, and increased social concerns.
Prerequisite: Core Studies 4 or Core Curriculum I220 [2.2] or permission of the chairperson.

## HIST 3405 Ideas That Made America, 1607-I 865

3 hours; 3 credits
Major ideas shaping American society from the colonial age to the civil war. Puritanism, entrepreneurship, and the idea of success; republicanism; America vs. Europe; democracy; reform.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 3406 American Thought from the Civil War

3 hours; 3 credits
American thought in the industrial age. The idea of America and Europe from 1865 to 1920. Reformist perception in the populist and progressive eras. Immigration and acculturation. Concepts of America in the New Era and in the New Deal. Changing perspectives of postwar and contemporary America.

Prerequisite: Core Studies 4 or Core Curriculum I220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 34 I2 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 3416 Religious Experience in America

3 hours; 3 credits
Development of the major American traditions of Protestantism, Catholicism, and Judaism. Puritanism and its legacy; the Great Awakening; Christianity, slavery and the Civil War; the religious experience of Black Americans. Interaction between religious thought and such other aspects of American culture as ethnicity, social change, sexual mores, intellectual life. This course is the same as American Studies 3106 [62].

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST $\mathbf{3 4 3 0}$ 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."

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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 [20.3].

Core Curriculum 1220 [2.2] or permission of the program director.

## HIST 3440 The Long Gilded Age, I865-1930

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."

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 344I 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.

Prerequisite: Core Studies 4 or Core Curriculum I220 [2.2] or the permission of the chairperson.

## 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; I968 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST $\mathbf{3 4 5 0}$ 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 3452 Americans at War in the 20th and 21 st Century

3 hours, 3 credits
Exploration of the relationship between war and American society and culture in the 20th and 21 st 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## HIST 3457 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 Children and Youth Studies 3120 [40.1].)

## 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 [68].

## HIST $\mathbf{3 4 7 0}$ 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or Economics 2100 [ 10.1 ] or permission of the instructor.

## HIST 3472 American Dreams and Realities

## 3 hours; 3 credits

Interdisciplinary exploration of the "American Dream" and research into the lives of ordinary Americans. Historical background, changing definitions, and various dreams that shape the American economic, social and cultural experience; capitalism, competition, and the myth of the "self-made" American; collision of ideals and realities; psychological consequences of "failing" in American society; class, ethnic, gender, and racial boundaries guiding American life; status consciousness/anxiety and the over-worked, over-extended, and sleep-deprived American. This course is the same as American Studies 3108. (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.)

Prerequisite: Core Studies 3 or 4; or Core Curriculum 1220 or 1230 , or permission of the chairperson.

## HIST 3475 American Environmental History

3 hours; 3 credits
Interactions among humans and natural environments from pre-contact 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.

Prerequisite: Core Curriculum I220 or permission of the chairperson.

## 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 (I840-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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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 Il 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum I220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Curriculum 1220 or permission of the chairperson.

## HIST 3512 Modern Latin America

3 hours; 2 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.

Prerequisite: one of the following: History I, 2, 3, 4, 4I.8, 4I.9, or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

HIST $\mathbf{3 5 2 0}$ History of Social Movements in Latin America
3 Hours; 3 credits
This course will examine the changing nature of social movements in Latin America from the nineteenth century to the present. Topics include social movements concerning citizenship, religion, unions, feminism, torture, poverty, indigenous rights, and environmentalism. This course is the same as Puerto Rican and Latino Studies 3225 [28].

Prerequisite: Core Studies 4 or Core Curriculum I220 [2.2] or permission of the chairperson.

## HIST 352 I W History of Social Movements in Latin

## America

4 Hours; 3 credits
This course will examine the changing nature of social movements in Latin America from the nineteenth century to the present. Topics include social movements concerning citizenship, religion, unions, feminism, torture, poverty, indigenous rights, and environmentalism. Writing-intensive section.

Prerequisites: English * 1012 [2]; and Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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 I 84 C.E. Magic and ritual practices of the Daoist church. Medieval Chinese alchemy. This course is the same as Religion 3040 [18].

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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 I9|I. 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum I220 [2.2] or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum I220 [2.2] or permission of the chairperson.

## 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 3546 India and Vietnam: The Struggle for Freedom

3 hours; 3 credits
Comparisons of British rule in India and French rule in Indochina in the nineteenth century. The rise of nationalism in the two areas in the later nineteenth century. Comparative historical analysis of these
movements, especially the development of leadership, organization, and ideology, and the interplay of violent and nonviolent techniques of struggle. Impact of World War II on European imperial rule in Asia and on nationalist movements. Independence in the postwar generation and consequences for the new nations. Extensive use of slides and films of both areas.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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 Arab-Israeli 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. (Not open to students who have completed History 57.3 or 57.4.) Alternatively, may satisfy credit requirements in Transnational and Comparative History

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## 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 [40.5]. (Not open to students who have completed Judaic Studies 475 I [75.I], "The Sephardic Heritage.")

Prerequisite: Judaic Studies 301 I [II] or permission of the chairperson.

## 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.

Prerequisite: Core Cuurriculum 1220 or permission of the chairperson.

## 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.

Prerequisite: Sophomore status; and either Core Curriculum 1220, English * 1012 [2], or permission of the chairperson.

## HIST $\mathbf{3 5 6 0}$ States, Kingdoms and Trade: Africa to $\mathbf{I} 800$

## 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.

Prerequisite: one of the following: Africana Studies I00 I, Core Studies 4 or 9 , Core Curriculum 1220, or permission of the chairperson.

HIST 356 I 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 [||.2].
Alternatively, may satisfy credit requirements in Transnational and Comparative History.

Prerequisite: one of the following: Africana Studies 100 I [0.12], Core Studies 4 or 9 , Core Curriculum I220 [2.2], or permission of the chairperson.

## 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.

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the chairperson.

## Upper-division courses

## HIST 4001 Colloquium in the History of Religion

3 hours; 3 credits
Religious beliefs, organizations, and communities in historical context. Cross-cultural influences in religious history. Use of historical, literary, and artistic records. Topics may include martyrdom, gender and the body, monasticism, and mysticism in early and medieval Christianity, Jewish-Christian encounters, and revivalism in America and Europe.

Prerequisite: History 200 IW; junior or senior standing; and permission of the chairperson.

## HIST 4002 Colloquium in History and Biography

3 hours; 3 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 200 IW; junior or senior standing; and permission of the chairperson.

## HIST 4003 Colloquium in Social History

3 hours; 3 credits
Classes, groups, and mass movements in history. Topics may include the European nobility, growth of the modern labor movement, immigration and migration, the history of childhood and the family, the bourgeoisie, frontiers in history, urbanization, and industrialization.

Prerequisite: History 200 IW; junior or senior standing; and permission of the chairperson.

## HIST 4004 Colloquium on Historians and Historical Writing

3 hours; 3 credits
Historical scholarship since Herodotus. Topics may include narration and the problem of historical knowledge, the American patrician historians, the Renaissance idea of history, and revisionism in recent historical thought.

Prerequisite: History 200 IW; junior or senior standing; and permission of the chairperson.

## HIST 4005 Colloquium in Political History

3 hours; 3 credits
States, governments, and people in human history. Topics may include imperialism, the growth of the American presidency, nationalism and nation-building in the early modern period, and comparative revolutions.

Prerequisite: History 200 IW; junior or senior standing; and permission of the chairperson.

## HIST 4006 Colloquium in Cultural and Intellectual History

3 hours; 3 credits
Ideas, ideologies, and mentalities in their social and cultural context.
Topics may include utopias and dystopias, ancient and modern humanism, the history of historical preservation, and the idea of American uniqueness.

Prerequisite: History 200 IW; junior or senior standing; and permission of the chairperson.

## HIST 4007 Colloquium in Women's History

3 hours; 3 credits
Womens lives and experiences in the context of western history. Topics may include the history of feminism, women and Fascism, women and revolution, and medieval and Renaissance women.

Prerequisite: History 200 IW; junior or senior standing; and permission of the chairperson.

## HIST 4100 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 and I 230 or permission of the chairperson.

## HIST 4190 Conservation and Preservation of Library and Archival Materials

3 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

Prerequisite: History 4100 , with permission of instructor. Open only to declared minors in Archival Studies and Community Documentation

## HIST 4200 Oral History Theory and Practice

3 hours; 3 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: Core Curriculum I220 and I 230 or permission of the chairperson.

## Seminars, internships and independent studies

## HIST 5000 Seminar

2 hours and independent work; 3 credits
Techniques of historical research and writing. Topics vary from term to term. Course description may be obtained in the department office before registration. Research paper. Limited enrollment. Completion with a grade of B or higher carries honors credit.

Prerequisite: History 200 IW; junior or senior standing; and permission of the chairperson.

## HIST 5100 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 4100 and either 4200 or 3460 or permission of the chairperson.

## HIST 5 IOI 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 4100 and either 4200 or 3460 or permission of the chairperson.

## HIST 5105 Internship

9 Fieldwork
Applied training in history at historical sites other than archives specifically associated with the Brooklyn College Minor in Archival Studies and Community Documentation (ASCD). 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: Core Curriculum 1220 [2.2], History 200 IW, and permission of the instructor, the chair of the History Department, and the cooperating institution.

## HIST 5200 Independent Study

Minimum of 9 hours conference and independent work; 3 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 200 IW; junior or senior standing; and permission of the chairperson.

## Honors courses

## HIST 5300 Independent Research

Minimum of 9 hours conference and independent work§; 3 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 200 IW; junior or senior standing; and permission of the chairperson.

## Honors Academy

Department office: 223I Boylan Hall
Phone: 718.95I.4II4
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.

## Courses

## 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.

## HARC 4074 Knowledge and Society

## 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.

## 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. Equivalent to English *1012 [2] and satisfies the second course requirement in the two-course composition sequence for graduation from Brooklyn College.

Prerequisite: acceptance into the CUNY 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.

Prerequisite: CHCl , Seminar I.

## MCHC 200 I 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.

Prerequisite: CHCl , Seminar I and CHC , Seminar II.

## 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.

Prerequisite: CHC I, Seminar I; CHC 2, Seminar II; and CHC 3, Seminar III.

## 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 descriptionsmay 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.

## SPCM 3185 Colloquium

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.

## 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

## SBPC * 1201 Seminar for Adults

Two terms. I hour recitation, 3 hours lecture, conference, and independent work§; 4 credits
Principles and practice of reading, writing, listening, and speaking. Communication skills studied in connection with papers and reports prepared in the adult seminars in humanities, social science, and science. Orientation to college study, written and oral communication, and detailed analysis of principles of effective reading and listening. Conducted in conjunction with Humanities $10.3,10.4$, Social Science I0.3, I 0.4 , and Science I $0.3,10.4,10.5,10.6$. Students may take each course for credit once.

Prerequisite: enrollment in the Special Baccalaureate Degree Program for Adults.

## SBPC * $\mathbf{2 0 2}$ Seminar for Adults

Two terms. I hour recitation, 3 hours lecture, conference, and independent work§; 4 credits
Principles and practice of reading, writing, listening, and speaking. Communication skills studied in connection with papers and reports prepared in the adult seminars in humanities, social science, and science. Orientation to college study, written and oral communication, and detailed analysis of principles of effective reading and listening.
Conducted in conjunction with Humanities $10.3,10.4$, Social Science $10.3,10.4$, and Science $10.3,10.4,10.5,10.6$. Students may take each course for credit once.

Prerequisite: enrollment in the Special Baccalaureate Degree Program for Adults.

## SBPH *I203 An Integrated Study of the Arts and Literature

Two terms. I hour recitation, 7 hours lecture, conference, and independent work§; 8 credits
Examples of painting, sculpture, architecture, music, andliterature are used to illustrate the following topics: the quality of individuality, the role of emotion, the idea in the humanities, the pleasures of order, aesthetic logic, the sense of evolution, symbolism, self-extension, vision, and the sense of history

Prerequisite: enrollment in the Special Baccalaureate Degree Program for Adults

## SBPH *I 204 An Integrated Study of the Arts and Literature

Two terms. I hour recitation, 7 hours lecture, conference, and independent work§; 8 credits
Examples of painting, sculpture, architecture, music, and literature are used to illustrate the following topics: the quality of individuality, the role of emotion, the idea in the humanities, the pleasures of order, aesthetic logic, the sense of evolution, symbolism, self-extension, vision, and the sense of history.

Prerequisite: enrollment in the Special Baccalaureate Degree Program for Adults.

## SBPH 1205 Studies in the Arts of America

Two terms. 4 hours and independent work§; 4 credits Intensive study of American arts as they express the values of American culture. Four credits may be counted toward the requirement of no fewer than 18 credits in advanced courses in one of the following departments: Departments of Art, Classics, Comparative Literature, Speech, Theater, Television and Radio. Students may take each course for credit once. Prerequisite: Special Baccalaureate Communication 1202 [I0.4], Special Baccalaureate Humanities *। 204 [I0.4], Special Baccalaureate Social Science *I 208 [I0.4], Special Baccalaureate Science *I2I4 [10.6], and nine credits in advanced courses in art, classics, comparative literature, English, modern languages and literatures, music, philosophy, speech, theater, or television and radio.

Prerequisite: enrollment in the Special Baccalaureate Degree Program for Adults.

## SBPH 1206 Studies in the Arts of America

Two terms. 4 hours and independent work§; 4 credits Intensive study of American arts as they express the values of American culture. Four credits may be counted toward the requirement of no fewer than 18 credits in advanced courses in one of the following departments: Departments of Art, Classics, Comparative Literature, Speech, Theater, Television and Radio. Students may take each course for credit once. Prerequisite: Special Baccalaureate Communication I202 [I0.4], Special Baccalaureate Humanities *I 204 [I0.4], Special Baccalaureate Social Science *I208 [I 0.4], Special Baccalaureate Science *1214 [10.6], and nine credits in advanced courses in art, classics, comparative literature, English, modern languages and literatures, music, philosophy, speech, theater, or television and radio.

Prerequisite: enrollment in the Special Baccalaureate Degree Program for Adults.

## SBSS * 1207 Seminar for Adults

Two terms. I hour recitation, 7 hours lecture, conference, andindependent work§; 8 credits
Functional, historically oriented analysis of social phenomena. Basis for understanding social phenomena past and presentand the cultural roots of their values. Introduction to social science. Nature of personality. Nature of society. Contemporary American society. Nature of socialization in the United States. The individual in society. Critical issues.

Prerequisite: enrollment in the Special Baccalaureate Degree Program for Adults

## SBSS * 1208 Seminar for Adults

Two terms. I hour recitation, 7 hours lecture, conference,
andindependent work§; 8 credits
Functional, historically oriented analysis of social phenomena. Basis for understanding social phenomena past and present and the cultural roots of their values. Introduction to social science. Nature of personality. Nature of society. Contemporary American society. Nature of socialization in the United States. The individual in society. Critical issues.

Prerequisite: enrollment in the Special Baccalaureate Degree Program for Adults.

## SBSS 1210 Studies in Social Science Investigations

4 hours and independent work§; 4 credits
Intensive study of scholarly approaches to the individual's basic problems in the social science disciplines. Four credits may be counted toward the requirement of no fewer than 18 credits in advanced courses in one of the following departments: Departments of Anthropology, History, Political Science, Sociology.

Prerequisite: Special Baccalaureate Social Science *I 208 [I0.4],Special Baccalaureate Communication *I 202 [I 0.4], Special Baccalaureate Humanities *I204 [I0.4], Special Baccalaureate Science *I2|4 [I0.6], and nine credits in advanced coursesin the sciences.

## SBSM * $\mathbf{I} 2 \mathrm{II}$ Seminar for Adults $\mathbf{1 0} \mathbf{0} \mathbf{3 - 1 0 . 4 , 1 0 . 5 - 1 0 . 6}$

Two terms. Five hours of combined lecture, recitation, workshop and laboratory work and 9 hours of individual supervised study each week; 6 credits
Content, methodology, and interplay of the natural sciences. Interaction of the natural sciences, mathematics, and philosophy. Mathematical concepts and techniques. Physical and chemical properties of matter. History and structure of the earth. Motion, forces, and energy. Atomic structure and chemical properties. Carbon compounds. Structure and functions of living organisms. The human body. Inheritance and evolution. History of organic development.

Prerequisite: enrollment in the Special Baccalaureate Degree Program for Adults.

## SBSM * I2I2 Seminar for Adults I0.3-I0.4, I0.5-I 0.6

Two terms. Five hours of combined lecture, recitation, workshop and laboratory work and 9 hours of individual supervised study each week; 6 credits
Content, methodology, and interplay of the natural sciences. Interaction of the natural sciences, mathematics, and philosophy. Mathematical concepts and techniques. Physical and chemical properties of matter. History and structure of the earth. Motion, forces, and energy. Atomic structure and chemical properties. Carbon compounds. Structure and functions of living organisms. The human body. Inheritance and evolution. History of organic development.

Prerequisite: enrollment in the Special Baccalaureate Degree Program for Adults.

## SBSM * $\mathbf{2 l} \mathbf{I} 3$ Seminar for Adults $\mathbf{1 0 . 3 - 1 0 . 4 , 1 0 . 5 - 1 0 . 6}$

Two terms. Five hours of combined lecture, recitation, workshop and laboratory work and 9 hours of individual supervised study each week; 6 credits
Content, methodology, and interplay of the natural sciences. Interaction of the natural sciences, mathematics, and philosophy. Mathematical concepts and techniques. Physical and chemical properties of matter. History and structure of the earth. Motion, forces, and energy. Atomic structure and chemical properties. Carbon compounds. Structure and functions of living organisms. The human body. Inheritance and evolution. History of organic development.

Prerequisite: enrollment in the Special Baccalaureate Degree Program
for Adults.

## SBSM * $\mathbf{2 I I} 4$ Seminar for Adults $\mathbf{1 0 . 3 - 1 0 . 4 , 1 0 . 5 - 1 0 . 6}$

Two terms. Five hours of combined lecture, recitation, workshop and laboratory work and 9 hours of individual supervised study each week; 6 credits
Content, methodology, and interplay of the natural sciences. Interaction of the natural sciences, mathematics, and philosophy. Mathematical concepts and techniques. Physical and chemical properties of matter. History and structure of the earth. Motion, forces, and energy. Atomic structure and chemical properties. Carbon compounds. Structure and functions of living organisms. The human body. Inheritance and evolution. History of organic development.

Prerequisite: enrollment in the Special Baccalaureate Degree Program for Adults.

The following inactive course(s) will only be offered if there is sufficient demand: INDS 3200

Post-Sophomore Summer Community Internship and Seminar

## Interdisciplinary Studies

Department office: 3208 James Hall
Phone: 718.951.577।
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 particular programs in the Honors Academy or 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

| hour; | 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 101 I Foundations for College Success and Lifelong

 LearningI hour lecture, I hour activity; I 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.

## INDS 2012 Italians in America

3 hours; 3 credits
Examination of the role of Italian-Americans in American society. Processes of acculturation, assimilation, and integration. Analysis of principle patterns of economic, social, and political behavior of the Italian-Americans. (Not open to students who have completed Interdisciplinary Studies 9.)

Prerequisite: Core Studies 3 or 4; or Core Curriculum 1220 [2.2] or 1230 [2.3].

## INDS 2025 Italian-American Relations: Foreign Relations, Migration, Commerce

3 hours; 3 credits
Introduction to basic patterns of economic, cultural, and political interaction between Italy and the United States since the end of World War II. Central features of institutional life in both countries as well as an overview of the basic patterns of contact between these two societies in the postwar period.

Prerequisite: Core Studies 4; or permission of the chairperson of the Department of Modern Languages and Literatures.

## INDS 4IOI Biomedical Research Experience I

| 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 *| 100
[I] (or 1050 [I.I] and 2050 [I.2]) and 2100 [2]; or Chemistry *I040
[5]; Biology *2073 [17], 2074 [|7.1], 1072 [29], 207 [29.1], and 107 |
[34.I] or Biology *I 080 [3] and I08I [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 4IOI [73] and permission of the program coordinator.

## Judaic Studies

Department office: 3111 James Hall
Phone: 718.95I. 5229

## Full-time Faculty

Professors: Helfand, Reguer, Shapiro
Associate Professor: Flatto

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 I-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 HEGIS code 0309; SED program code 01977

Department requirements (22 credits)
A. Judaic Studies 301 I.
B. Two courses chosen from the ancient and medieval periods: Judaic Studies $3012,30|4,30| 5,30|7,3023,3033,3035,3| 35,3206,40 \mid 8,4022$, 4024, 4034, 4435.
C. Two courses chosen from the modern period: Judaic Studies $2537,30 I 0,30|3,30| 6,303 I, 3036,3037,3046,3047,3050,3 \mid I 5,3205,32 I 5,3405$, 3485, 3489, 3535, 4020, 4054, 4I95.
D. One of the following: Judaic Studies 407I, 475I, 4752 (or one additional course chosen from B or $C$ with permission of the department chair).
E. One of the following: Judaic Studies 553 IW, 5532W, 558I, 5582.

With permission of the chairperson of the Department of Judaic Studies, the student may substitute an appropriate course to replace one of the above courses.

## Departmental Minor(s)

## Minor in Hebrew

## Department Requirements

Twelve credits in courses in Hebrew numbered 3III 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 3I60, 3I55; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 330I, [76.I], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 3140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 334।; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 22 15, 3130 , 3395; Children and Youth Studies 31 I 0; Health and Nutrition Science 2130 ; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's Studies 3328
d. Media and Communications in a Global Context

Anthropology 3I 80; Film 2131; Philosophy 3315; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; 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) and childhood education teacher (grades I-6) programs are described in the "Education" section of 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:

One of the following courses: Judaic Studies 3010,3016 , or 3535.
Nine of the following courses: Judaic Studies $3017,4195,3037,3405,3047,3485,3050,475 \mathrm{I}, 4752$; Art I 3.40; History 3 I 0 I, 32 I2, 3 I 00; Music 2103 ; Political Science 3307, 49.5; Sociology 27.2; Theater 4I.2; Judaic Studies 475 I and 4752. (Judaic Studies 4751 and 4752 change topics each semester. Students must confer with the chairperson as to whether the course offering fulfills either the literature or the social studies requirements for this 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 553 IW or 5532 W or 558 I or 5582 with a grade of B or higher.

## Division of 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. A Graduate Bulletin may be obtained in the Office of Admissions

## Courses

*Courses marked with an asterisk $\left(^{*}\right)$ 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.

## 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 [12], 3013 [13], or the equivalent.)

## JUST 2537 Yiddish Short Stories and Poetry in Translation

3 hours lecture; 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 Comparative Literature 3624 [14.5].

Prerequisite: English 1010 [I] or I.7.

## JUST 301I 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 $\mathbf{3 0 1 2}$ 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 through the medieval period in Europe. Ethical teachings of the prophets. Rabbinic Judaism. Jewish sectarianism; the impact of Christianity and Islam on Jewish life.

## JUST $\mathbf{3 0 1 3}$ From Ghetto to Emancipation

## 3 hours; 3 credits

Study of major developments in early modern Jewish culture, tradition, and history from the early modern period through the twentieth century. Analysis of the impact of modernity on traditional Jewish life. Sabbatianism. Hasidism. Haskalah. Zionism. Emergence of Reform and

Conservative movements.

## 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 Talmudic Rabbis. Men and women. Jew and non-Jew. Good and evil. Reward and punishment.

## JUST 3016 Modern Jewish Biographies

3 hours; 3 credits
Biographical studies of modern Jewish personalities who made major contributions in the fields of politics, science, literature, the arts, and finance. Focusing on the relationship between Jews and Western culture, the course will explore how Jews confronted modernity. Personalities to be studied include Einstein, Freud, Marx, Szold, Rothschild, Kafka, Chagall, and others. Biographical works as historical sources.

## 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 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. (Not open to students who completed Judaic Studies 4751 [75.1] in Fall 1995 or Spring 1998.)

## JUST 303I 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 I8.2 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 3IOI [23.3].

## 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 Jewish-Christian 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 [23.4].

## JUST 3037 The Hasidic Movement: Its History and 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 [23.6].

## 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 3047 History of the Jews in the United States

3 hours; 3 credits
Survey of the history of American Jewry from the 1650s to the present. Personalities who have played an integral part in the American experience. American Jewish contribution to establishment of Israel. Relations of American Jewish community to Jewish communities throughout the world.

## JUST $\mathbf{3 0 5 0}$ 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 [25.I 0 ].

## 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 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. (Not open to students who have completed Judaic Studies 4752 [75.2] in spring, I99I, or Judaic Studies 475 I [75. I] in spring, 1992.)

## 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 [50.6].)

## JUST 3206 Making a Living: Jews, Business, and Professions

 from Antiquity up to the Modern World3 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 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 History 3552 [54. I ])

## JUST 3485 The Jews of New York

## 3 hours; 3 credits

Study of the history and structure of New York's Jewish communities from the seventeenth century to the present. Contributions to New York's political, cultural and economic life.

## JUST 3489 The 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.

## JUST 3535 Holocaust Literature

3 hours; 3 credits
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 Comparative Literature 3625 [14.6].

Prerequisite: English 1010 [I] 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 [IO].

## 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 [23.5].

## JUST 4054 The Holocaust and Halakhah

3 hours; 3 credits
Analysis of rabbinic responsa dealing with legal and religious questions that arose as a result of the Nazi persecution.

## JUST 407 I 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 4I95 Anti-Semitism

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.

## 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 470 I 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 [70. I 2]. (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 [I2], Anthropology 240I [2.2], Art 2.1, Classics 3210 [26], Core Studies I, 2.1, 9, a course in archaeological theory and methodology.

## JUST 475I 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 Judaic Studies 475 I [75. I] 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 each term
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 475 I [75.I] and 4752 [75.2] for credit once each, but may not repeat topics.

Prerequisite: permission of the chairperson.

## JUST 553 IW 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 558I 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 *100I Elementary Hebrew I

3 hours recitation, I 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.)

## HEBR * 1002 Elementary Hebrew II

3 hours recitation, I hour laboratory; 3 credits
Continuation of Hebrew *I00I [I]. (Not open to students who have completed Hebrew 0.6 and 0.7 or have completed the Hebrew
Regents or the equivalent.)
Prerequisite: Hebrew *100। [I] or one year of high school Hebrew.

## HEBR * 1003 Intermediate Hebrew I

3 hours recitation, I 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.)

Prerequisite: Hebrew * 1002 [2] or two years of high school Hebrew or permission of the chairperson.

## HEBR *I 004 Intermediate Hebrew II

3 hours recitation, I hour laboratory; 3 credits
Continuation of Hebrew *1003 [3]. Reading and discussion in Hebrew. (Not open to students who have completed Hebrew *204I [4.I].)

Prerequisite: Hebrew *I 003 [3] or three years of high school Hebrew or permission of the chairperson.

## HEBR *204I 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 *I 004 [4] or 2045 [4.5].)

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.)

Prerequisite or corequisite: Hebrew *। 004 [4].

## HEBR 3 I I I Advanced Grammar and Composition

## 3 hours; 3 credits

Critical and historical review of grammar and style. Writing original narratives and essays.

Prerequisite: Hebrew *I004 [4] or 204| [4.I] or permission of the chairperson.

## Hebrew literature in translation

## HEBR *209I 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.)

## HEBR 402I Poetry of the Hebrew Renaissance

3 hours; 3 credits
Readings from the poetry of Bialik, Tchernichovsky, and some of their contemporaries.

Prerequisite: Hebrew *|004 [4] or 204| [4.I] or permission of the chairperson.

## HEBR 4025 Prose of the Hebrew Renaissance

3 hours; 3 credits
Novels and short stories of Mendele Mokher Sefarim, Berditchevsky, Brenner, Frischmann, and Peretz.

Prerequisite: Hebrew *I004 [4] or 204| [4.I] or permission of the chairperson.

## HEBR 404I 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.

Prerequisite: Hebrew *1004 [4] or 204I [4. I] or permission of the chairperson.

## HEBR 4047 Prose of Modern Israel

3 hours; 3 credits
Prose fiction since World War I. Burla, Shenhar, Shamir, Meged, and Yizhar.

Prerequisite: Hebrew *I004 [4] or 204I [4.I] or permission of the chairperson.

## HEBR 4048 Agnon and Hazaz

3 hours; 3 credits
Their novels and short stories.
Prerequisite: Hebrew *I004 [4] or 204I [4.I] or permission of the chairperson.

## 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.

Prerequisite: Hebrew *|004 [4] or 204| [4.I] or permission of the chairperson.

## HEBR 405I Medieval Literature

3 hours; 3 credits
Prose and poetry of the Middle Ages, particularly that of the Golden Age in Spain.

Prerequisite: Hebrew *I004 [4] or 204| [4.I] or permission of the chairperson.

## HEBR 4052 Literature of the Haskalah

## 3 hours; 3 credits

Growth of modern Hebrew literature in the eighteenth and nineteenth centuries. Representative authors. (Not open to students who have completed Hebrew 16.)

Prerequisite: Hebrew *I004 [4] or 204| [4.1] or permission of the chairperson.

## HEBR 4070 Tutorial in Literature and Culture

I 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.

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 445 I Bible: The Prophets and the Psalms

3 hours; 3 credits

Prerequisite: Hebrew *I004 [4] or 204| [4.1] or permission of the chairperson.

## Honors courses

## HEBR 504I Seminar

I 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].

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

I 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 504। [84.1].

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 475 I [75.I] Special Topics: Yiddish as a Tool for Understanding Jewish Literature and History.) Heritage speakers who know some Yiddish will be examined for placement.

## YIDM 1002 Elementary Yiddish II

3 Hours; 3 Credits
Further development of skills acquired in Yiddish I001 [I].
Yiddish 100 I [I] or the equivalent.

## YIDM 1003 Intermediate Yiddish I

3 Hours; 3 Credits
Further development of skills acquired in Yiddish I002 [2].
Yiddish 1002 [2] or the equivalent.

## YIDM I004 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.

Yiddish 1003 [3] or the equivalent.

## YIDM 204 I 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.

Yiddish 1004 [4] or the equivalent.

## The following inactive course(s) will only be offered if there is sufficient demand:

JUST 3014 Introduction to the Talmud
JUST 3215 Religious Controversy in Israel

## Library

Department office: 412 Library
Phone: 718.95I. 5342

## Full-time Faculty

Professors: Gargan, Vaughn, Walker, Wild
Associate Professors: Cramer, Deutch, Evans, Iskenderian, Raphael, Regalado
Assistant Professors: Albarillo, Bowdoin, Cirasella, Dazet, Georgas, Yu
Instructor: Sellie

The library serves as the intellectual and creative center of academic life at Brooklyn College. Each day between three and four thousand students and faculty enter the library to use the online catalog, ask a reference question, borrow a book, listen to a sonata, examine a manuscript, or explore the Internet. As one of the largest and most technologically advanced academic libraries in New York State, the Brooklyn College Library leads the way in information access and dissemination in Brooklyn, the City University of New York, and beyond.

The recent $\$ 73$ million renovation of the library houses our substantial physical and digital collections, the Brooklyn College archives, and a new media center. The library boasts 277,650 square feet ( 6.5 acres) of space; 2,317 student seats; 21.5 miles of shelving; 22 group study rooms; 5 computer classrooms; and more than 400 computers for student and faculty use.

The faculty and staff of the Brooklyn College Library support the academic work of the College's students and faculty and their freedom of inquiry. Our commitment is reflected in the care with which we build and preserve our physical and digital collections, provide students and faculty with information literacy and research instruction, facilitate interlibrary loan and document supply; and link faculty and students to global information resources through the library's pages on the Brooklyn College Web site.

A safe, inviting study and research environment, the library is tailored to suit the Brooklyn College community and is responsive to the needs of persons with disabilities. As a member of the community, the library is proud to preserve the cultural heritage of the College and the borough in its special collections. A rich program of cultural events, presented in the Brooklyn College Library Woody Tanger Auditorium, rounds out our offerings.

## Interdepartmental Minor(s)

## Minor in Archival Studies and Community Documentation

The minor in archival studies and community documentation is offered by the History Department in conjunction with the Department of the Library.

Department Requirements ( 15 credits)

History 4100 and either 4200 or 3460 .
One course from a department other than the student's major chosen from the following:
Africana Studies 3324, American Studies 3404, Anthropology and Archaeology 2402 or 3130 , Art 3066, History 3455, 3480, or 3485, Judaic Studies 3485, Music 2103 , Political Science 3140 or 3150 or 3143 , Psychology 2100 , Puerto Rican and Latino Studies 3325, Sociology 3204.

History 5I00 and 5IOI.

## Linguistics Program

Department office: I420 Ingersoll Hall
Phone: 718.95I. 5928
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 dual major.

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. By studying pragmatics, our students learn how language is used to accomplish goals. 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 HEGIS code 1505 ; SED program code 0205 I

Department requirements for major (31-34 credits)
Students must complete parts I through 5.
I. Linguistics 200 I or Anthropology 2300.
2. Three of the following: Linguistics $3019,3020,3021,3022$.
3. Two of the following: Anthropology 330 I, 3392, English 3520, 352I, 3524, Linguistics 3023, Philosophy 3203 or 3204, 3530, Psychology 3540, 354I, Speech 1113,2231 ; plus any prerequisites of the courses. Other appropriate courses may be substituted for either or both of the courses with permission of the Linguistics Program director.
4. Two of the following: Anthropology 33I0, 3320, 3360; Computer Science 22I0, $3110,3130,3410$; English 3196, 3522, 3523; Philosophy 3I23, 3220, 3420, 3422; Puerto Rican and Latino Studies 44I0, 4420; Psychology 2600, 3530, 3580; Speech II78, II79; course in the Department of Modern Languages and Literatures numbered 202 I or above, or Greek 403 I or above, or Latin 4 I 3 I or above, or Hebrew 31 II or above, or the equivalent; any unused courses from parts 2 and 3 above; plus any prerequisites of the courses.
5. Linguistics 400 IW , a capstone seminar to be taken in the senior year.

Note: When linguistics is a student's second major, up to three courses in parts 3 and 4 which are applicable toward the requirements of the student's first major may also be applied toward the requirements of the second major in linguistics.

## Interdepartmental Minor(s)

## Minor in Linguistics

A program of $13-15$ credits as follows:
Linguistics 200 I or Anthropology 2300.
One course from area 2 of the major.
Two more courses chosen freely from area 2 and/or area 3 of the major.
Each course must be completed with a grade of $C$ or higher. Students should meet with the program director to plan a program suited to their interests and career plans.

## Courses

## LING 2001 Introduction to Linguistics

## 3 hours; 3 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 2301 [2.3].)

## 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 Speech 2720 [20].

Prerequisite: Linguistics 200 I [1] or Anthropology 230 I [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 230 I [2.3]

## LING 302I 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 200 I [I] or Anthropology 230 I [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 200 I [1] or Anthropology 230 I [2.3].

## LING 3023 Introduction to Natural Language Processing

3 hours; 3 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 [I I.5] and English 3525 [24.81].

Prerequisite: Computer and Information Science *। I IO [1.5]
Prerequisites or co-requisites): Computer and Information Science 2210 [ I I] and Linguistics 200 [ [1].

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 [17].

Prerequisite: Anthropology 230 I [2.3] or Linguistics 200 I [I] or permission of the chairperson.

## LING 3027 History of the English Language

3 hours; 3 credits
Origins of the English language and its development to the present.
This course is the same as English 3520 [24.3].
Prerequisite: English 1010 [I].

## LING 3028 Applied Linguistics

3 hours; 3 credits
Introduction to the nature of 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. This course is the same as English 352 I [24.61].

Prerequisite: English 1010 [I].

## LING 3029 Sociolinguistics

3 hours; 3 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 and Archaeology 3390 [18] and English 3524 [24.8].

Prerequisite: English 1010 [I] and either Anthropology 230 I [2.3] or Linguistics 200I [I]; or permission of the chairperson.

## LING 400 IW 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 *) 012 [2].

## LING 3026 Historical Linguistics

## Mathematics

Department office: | | 56 Ingersoll Hall
Phone: 718.951 .5246

## Full-time Faculty

Professors: Finston, Halpern, Hu, Marathe, Mate, Sibner, Stone, Velling
Associate Professors: Cooley, Godino, Hadjiliadis, Hochberg, Suzuki
Assistant Professors: Benes, Chamanara, Clement, Kingan
Lecturer: Gindes

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 I-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, pre-engineering, 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.

## Placement examination in mathematics

Students who plan to take calculus (Mathematics I20I) without having taken precalculus (Mathematics IOII) should take the Brooklyn College Calculus Placement Test, which is routinely offered to incoming students by the Office of Testing.

## B.A. degree program in mathematics HEGIS code I70I; SED program code 02064

Department requirements (36-39 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.

MATH I2OI [3.3] and MATH I 206 [3.4], and MATH 220I. Transfer students may also need to take MATH I2II - see math department chair.
Mathematics 2001, 2101, 4201, and 3101.
Two of the following: Mathematics 4206, 42II, 4IOI, 42I6, 4I06, 4302, 4306, 470I, 450I, 4506, 45II, 500I, 5002, 5003, 5004.
Computer and Information Science IIIO.

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.A. degree program in adolescence education: mathematics teacher HEGIS code I701.01; 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 ( 63 credits)
MATH I201 [3.3] and MATH I 206 [3.4], and MATH 2201. Transfer students may also need to take MATH 12II - see math department chair.
All of the following: Mathematics 200I, 2I0I, 420I, 3I0I, 4302, 20IIW, 440I, 350I, 4406.
Computer and Information Science IIIO.
The following pedagogical courses in the Department of Secondary Education: SEED 200 I, 2002, 340I, 3402, 4403, 4409, 3456 (total of 24 credits):
This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.
SEED 200I, 2002, 340 I, 3402 (I2 credits).
The appropriate 5 -credit course in student teaching:
SEED 4403 Seminar on Methods of Teaching Mathematics, Student Teaching I
The appropriate 4-credit course in student teaching:
SEED 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 adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking SEED 3454.

Students, except music education majors, must complete 24 credits in the Department of Secondary Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take SEED 2001, 2002, 340 I or 3402; an average of 2.75 in SEED 200 I and 2002 is required to continue to SEED 340 I and/or Education 3402; to take SEED 4413 or 440I-4406, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take SEED 4407-4406, students must earn a B- or higher in SEED 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes SEED 4407-44I2 prior to SEED 4401-4406 must earn a B- or better grade in SEED 4407-44I2 to take SEED 4401-4406.

## B.S. degree program in actuarial mathematics HEGIS code I70I; SED program code 34143

MATH I20I [3.3] and MATH I206 [3.4], and MATH 2201. Transfer students may also need to take MATH I21| - see math department chair.
Mathematics 2001, 2101, and 420I.
Computer and Information Science IIIO.
Accounting 200I.
All of the following: Mathematics 2206, 350 I, 450 I, 4506, 260I, and 360I.
All of the following: Business 2100 or Economics 2100 ; Business 2200 or Economics 2200; Business 4400 W or Economics 4400 W ; and Business 33 I 0 .

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 Cor 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.
C) ---Anthropology and Archaeology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470, 4665.
---Core Studies 5, 5.I, 5.2, 7.I, 7.2, 8.I, 8.2.
----Core Curriculum 1300 through 1399
----Core Curriculum 330I through 3399
---Economics 3400, 44I0, 34I0, 4422.
---Philosophy 3203, 3204, 3231, 3232, 3422, 3423, 3601, 3605, 3610.
---Physical Education 3023, 327I, 3275, 328I, 3285, 4229, 425 I.
---Sociology 2701.

## B.S. degree program in financial mathematics HEGIS code I70I; SED program code 34144

Department requirements (62 credits)

One of the following mathematics sequences, a) or b)
a) Mathematics I20I and I206 and 2201 .
b) Mathematics 3.20 and 4.20 and 1211 and 2201 .

Mathematics 200I, 210I, and 420I.
Computer and Information Science IIIO and 3820.
All of the following: Mathematics 2206, 350 I, 450 I, 4506, 260I, 360 I, and 460 I.
All of the following: Business 2100 or Economics 2 I 00; Business 2200 or Economics 2200; Business 4400W or Economics 4400W.

## 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 Cor 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.
C) ---Anthropology and Archaeology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470, 4665.
----Core Studies 5, 5.I, 5.2, 7.I, 7.2, 8.I, 8.2.
---Core Curriculum I 300 through I 399
----Core Curriculum 330I through 3399
---Economics 3400, 44I0, 34I0, 4422.
---Philosophy 3203, 3204, 323I, 3232, 3422, 3423, 360I, 3605, 3610.
---Physical Education 3023, 327I, 3275, 328I, 3285, 4229, 425 I.
---Sociology 2701.

## B.S. degree program in mathematics HEGIS code 1701 ; SED program code 02065

## Department requirements (42-45 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.

MATH I20I [3.3] and MATH I 206 [3.4], and MATH 2201. Transfer students may also need to take MATH I2II - see math department chair.
Mathematics 2001, 2101, and 4201.
Computer and Information Science 1 I 10 .

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 ( 42 credits)

Mathematics 3101
Two of the following: Mathematics 4206, 42II, 4IOI, 42I6, 4I06, 4302, 4306, 470I, 450I, 4506, 45II, 500I, 5002, 5003, 5004.
b) Concentration in theoretical mathematics ( 42 credits)

Mathematics 2206 and 3101
Three of the following: Mathematics $4206,4101,4216,3106,4106,4302,4306,500 \times$ (the $500 \times$ must be in theoretical mathematics)
c) Concentration in applied mathematics (42-45 credits)

All of the following: Mathematics 2206, 3202, 470I, 350 I
Two of the following: Mathematics 421 I, 4216, 3107, 2706, 450I, 500x (the $500 \times$ 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:
a) All courses in the departments of Biology, Chemistry, Computer and Information Science, Geology, Mathematics, Physics, and Psychology.
b) Courses marked with a number sign(\#) in the Department of Health and Nutrition Sciences.
C) ---Anthropology and Archaeology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470, 4665.
----Core Studies 5, 5.I, 5.2, 7.I, 7.2, 8.I, 8.2.
---Core Curriculum 1300 through 1399
---Core Curriculum 3301 through 3399
----Economics 3400, 44I0, 34I0, 4422.
---Philosophy 3203, 3204, 323I, 3232, 3422, 3423, 360I, 3605, 3610.
---Physical Education 3023, 327I, 3275, 328I, 3285, 4229, 425 I .
---Sociology 2701.

## B.S. degree program in computational mathematics

HEGIS code I70I; SED program code 02067
This interdepartmental program is described in the "Computer and Information Science" section of the Bulletin

## Departmental Minor(s)

## Minor in Mathematics

## Department Requirements

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.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Mathematics

The requirements for early childhood education teacher (birth-grade 2) and childhood education teacher (grades $1-6$ ) programs are described in the "Education" section of 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:

Core Studies 5 or 5.1 or Core Curriculum 1312. Students exempted from Core Studies 5 or 5 .I or Core Curriculum 1312. must take a computer and information science course numbered I .5 or higher other than the course used to satisfy the computer and information science requirement below.

Mathematics 1401 . Students exempted from Mathematics 1401 must take an additional 3 credits of mathematics besides those listed below.

Mathematics 1406.

Mathematics I0 I I or Mathematics I02I and I026. Students permitted to enroll in Mathematics I20I without taking precalculus must take an additional 3 credits of mathematics besides the courses listed below.

All of the following courses: Mathematics I20I, I206, 250I, 210 I, 20 IIW. Computer and Information Science 1035 or 1600 .

## Department recommendation

Majors should consult with a Mathematics Department counselor concerning substitutions for core science courses.

## Computational mathematics program

The Department of Mathematics and the Department of Computer and Information Science offer an interdepartmental major in computational mathematics. The program is described in the Department of Computer and Information Science section.

## Division of Graduate Studies

The Mathematics Department offers a master of arts degree program in mathematics and a master of arts degree program for mathematics teachers (grades 7 through 12). 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.

The following courses have been divided into five categories to assist students in selecting the appropriate mathematics courses. The first category is self-explanatory. Levels I through 4 contain courses for mathematics and science majors, with level I the least advanced and level 4 the most advanced.


Level 2: 2201, 270।, 250।, 210I, 2206, 2706, 4I, 260।, 360 I.
Level 3: 2208, I3.I, 3IOI, 3I06, 4302, 470I, 350I, 3606.
Level 4: 7.2, 420I, 4206I, 42II, 4IOI, 42I6, 4I06, 24, 4306, 43, 440I, 450I, 45II, 4406, 500I, 5002, 5003, 5004.

## MATH I00I 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 and public key cryptography. Integers, rational numbers, real numbers and the sizes of various infinite sets. Additional topic chosen from: geometry, elementary topology, chaos and fractals, probability. (Not open to students who are enrolled in or have completed Core Studies 5 or 5.2 or any mathematics course numbered 3 or higher.)

Prerequisite: two years of Sequential Mathematics or the equivalent.

## MATH * IOII Precalculus Mathematics

4 hours; 3 credits
Preparation for calculus. Trigonometry. The concept of function, including exponential, logarithmic, trigonometric, and inverse trigonometric functions. Introduction to limit ideas. (Not open to students who are enrolled in or have completed a Mathematics Department course numbered I02I [2.9I] or higher.)

Prerequisite: Course 3 of the New York State Sequential Mathematics Curriculum, or a grade of C - or higher in Mathematics 0.47 , or the equivalent, and assignment on the basis of a placement test.

## MATH *102I Precalculus Mathematics A

3 hours lecture, I hour recitation; 2 credits
Preparation for calculus with more introductory material than Mathematics * 101 | [2.9]. Mathematics *102| [2.9|] and *|026 [2.92] constitute a two-term sequence for students who are not prepared for Mathematics *IOII [2.9] or who wish a review. Real numbers. Complex numbers. Graphs. Functions, especially linear and quadratic functions. Polynomials and rational functions. Trigonometry. (Not open to students who are enrolled in or have completed Mathematics *|0|| [2.9] or any mathematics course numbered 3 or higher.)

Prerequisite: Course 2 of the New York State Sequential Mathematics Curriculum or the equivalent.

## MATH * 1026 Precalculus Mathematics B

3 hours lecture, I hour recitation; 2 credits
Continuation of Mathematics *|02| [2.9|]. More extensive study of functions; composition of functions, inverse functions. Logarithmic and exponential functions. Trigonometric and inverse trigonometric functions. Conic sections. Binomial theorem. (Not open to students who are enrolled in or have completed Mathematics *101| [2.9] or any mathematics course numbered 3 or higher.)

Prerequisite: A grade of C- or higher in Mathematics *। 021 [2.91] or permission of the chairperson.

MATH * 103 I 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 I0II [2.9] or higher. Not open to entering freshmen.)

Prerequisite: two years of sequential mathematics or mathematics $A$ in high school.

## MATH IIOI 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 a Mathematics Department course numbered 5 or higher or Computer and Information Science 2210 [II] may not take Mathematics I 101 [I.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 * 102 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 I.I for credit. A student who is enrolled in or has completed a Mathematics Department course numbered 5 or higher may not take Mathematics * I 102 [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 * 20 I Calculus I

## 3 hours; 3 credits

Mathematics *I20I [3.3] and 4.3 and 5.3 constitute a three-term sequence. Mathematics *I20। [3.3] is an introduction to calculus: derivatives and integrals of algebraic, exponential, logarithmic, and trigonometric functions of one variable, and applications. (Not open to students who have completed Mathematics 3.20 or 4.10 .)

Prerequisite: three years of high school mathematics including geometry and intermediate algebra and trigonometry or Course 3 of the New York State Sequential Mathematics Curriculum, and assignment on the basis of a placement test; or a grade of $C$ or higher
in Mathematics *101 I [2.9] or 1026 [2.92].

## MATH * $\mathbf{2 0 6}$ Calculus II

4 hours; 4 credits
Continuation of Mathematics *I20I [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 I20| [3.3].

## MATH *I2II Infinite Series

| hour; I 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 *I 206 [4.3] or 5.10 or 5.20).

Prerequisite: Mathematics 4.20 with a grade of C - or higher; or permission of the chairperson.

## MATH I30I 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 a Mathematics Department course numbered 5 or higher may not take Mathematics I30। [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 *140I Elementary Mathematics from an Advanced Standpoint

4 hours; 4 credits
Mathematics content needed for teaching major strands in the early childhood and elementary school mathematics curriculum. Various concrete and abstract representations of mathematical concepts, inductive and deductive thinking, and applications and problem solving. (A student who is enrolled in or has completed Mathematics 1.9 or any Mathematics Department course numbered 4 or higher or who has completed Calculus I with a grade of B or higher may not take Mathematics *140। [1.95] for credit except with permission of the chairperson. Mathematics *। 40 I [1.95] may be credited toward a baccalaureate degree only by students who have completed at least five credits in Education.)

Prerequisite: Core Curriculum 1311 [3.11] or Core Studies 5 or 5.2 or a course which is acceptable for at least three credits in mathematics at Brooklyn College.

## MATH *I406 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 * 140 I [1.95]; or a higher level mathematics course and a passing score on a placement test.

Corequisite: Education 3206 [44].

## MATH * 150 I 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: a Mathematics Department course numbered 5 or higher, Biology I6.1, Business 3400 [30.2], Economics 3400 [30.2], Political Science I2.5, 3422 [57], Psychology 3400 [40. I], 2600 [50].)

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 1601 Modern Mathematics for the Social Sciences

3 hours; 3 credits
Mathematics 160 I [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 Mathematics 2.4 or a Mathematics Department course numbered 5 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 * I 70I Symbolic Manipulation in Calculus II

| hour; I 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 *|206 [4.3] or 12 | | [4.3|].

## MATH I7II Mathematical Fundamentals of Computer

 Graphics I4 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 $210 \mid$ [10.1] will receive only 3 credits for Mathematics 171। [8.5] and only 2 credits for Mathematics 2101 [10.1].)

Prerequisites: Computer and Information Science 3110 [15] and Mathematics *120| [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 I7I| [8.5].

## MATH *200I 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.

Prerequisite: Mathematics *|206 [4.3] or | 2 | | [4.3|].

## 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 *I206 [4.3] or higher, permission of the chairperson.

## MATH 20IIW 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 *|206 [4.3] or I2 | | [4.3 I]; and English *) 012 [2].

## MATH 210I Linear Algebra I

3 hours; 3 credits
Introduction to the concepts of linear algebra. Vector geometry of three dimensions. (Not open to students who are enrolled in or have completed Mathematics 410 I [14.5].) Students who have completed both Mathematics 1711 [8.5] and Mathematics $210 \mid$ [IO.I] will receive only 3 credits for Mathematics 171। [8.5] and only 2 credits for Mathematics 2101 [ 10.1$]$ )

Prerequisite: Mathematics 4.10 or 4.20 or 1206 [4.3].

## MATH *220I Multivariable Calculus

4 hours; 4 credits
Continuation of Mathematics *I 206 [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 *|206 [4.3]; or prerequisite or corequisite: Mathematics *12|| [4.3I].

## MATH 2206 Elementary Differential Equations

## 3 hours; 3 credits

Standard methods of solving ordinary differential equations; geometric interpretations; problems in physics leading to differential equations.

Prerequisite or corequisite: Mathematics *220। [5.3].

## MATH *2208 Actuarial Mathematics I

70 minutes a week for II weeks; I 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 [IO.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 350 [ 51.1 ].)

Prerequisite: Mathematics *|206 [4.3] or 1211 [4.3|] or 5.10 or 5.20.

## MATH 2601 Mathematics of Compound Interest and Finance

3 hours; 3 credits
Measurement of interest; annuities-certain; yield rates; amortization schedules and sinking funds; bonds and related securities.

Prerequisite: Mathematics *|206 [4.3] or |2 | | [4.3|].

## MATH *270I Symbolic Manipulation in Multivariate <br> Calculus

I hour; I 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 *220। [5.3].

## MATH 2706 Chaos and Structural Stability in

 One-Dimensional Dynamics3 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 *I206 [4.3].

## MATH 3IOI 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 *200। [9.5] and 2101 [IO.I].

## MATH 3106 Theory of Numbers

3 hours; 3 credits
Congruences; quadratic residues; diophantine equations;factorization.
Prerequisite: Mathematics 3101 [|4.|].

## 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 [18.5].
Prequisite: : Mathematics 2102 [10.1].

## MATH 3202 Mathematical Modeling

4 hours; 4 credits
An introduction to constructing, solving, and testing mathematical models of real-life problems. Case-study approach. Topics include the valve problem for hydroelectric power, models of interests in finance, dimensional analysis, predator-prey systems, optimization in fishery management, mathematical models in formal justice, microscopic and macroscopic models for traffic problems, and crystallization dynamics in physical chemistry.

Prequisite: Mathematics $210 \mid$ [|0.|], 2206 [|3] and $350 \mid$ [5|.I].

## MATH 350 I Introduction to Probability and Statistics

3 hours; 3 credits
Sample spaces; combinatorial theory; elementary probability; random variables; discrete and continuous probability distributions; moments and moment-generating functions; applications. (Not open to students who are enrolled in or have completed Mathematics *2501 [8.1].)

Prerequisite: Mathematics 5.10 or 5.20 or 2201 [5.3].

## MATH 360I Investment Science

4 hours; 4 credits
Net present value, internal rate of return; yield, duration, immunization, and convexity of fixed-income securities; mean-variance 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 Business 3370 [70.7] and Economics 3370 [70.7].)

Prerequisite: Economics 3400 [30.2] or Business 3400 [30.2] or Mathematics *2501 [8.1] or Mathematics 3501 [51. I]; Mathematics *220। [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 350 [ [51.I].

## MATH 410I 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 $210 \mid$ [|0.|] and $310 \mid$ [|4.|].

## MATH 4106 Abstract Algebra II

4 hours, 4 credits
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 $310 \mid$ [|4.I].

## MATH 420I Advanced Calculus I

3 hours; 3 credits
Advanced calculus of functions of one variable. Relevant properties of the real number system. Properties of continuous functions and uniform continuity. Differentiable functions, mean-value theorems. L'Hopital's rule, Taylor's theorem. Sequences, series, and improper integrals.

Prerequisite: Mathematics 5.10 or 5.20 or 220 I [5.3]; and Mathematics *2001 [9.5], and at least 6 credits in advanced Mathematics Department courses or permission of the chairperson.

## MATH 42 II 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 [I3].

## MATH 4216 Introduction to Functions of a Complex

 Variable4 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 420। [II.I] 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 *200 [ [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 420 [ I I.1] and permission of the chairperson.

## MATH 440 I 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.

Prerequisite: Mathematics 3101 [14.1] and Computer and Information Science *। 110 [1.5].

## MATH 4406 Seminar in Problem Solving and Selected Topics

I hour; I 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 Statistics

4 hours; 4 credits
Theory of estimators; distributions of functions of random variables, including chi-square, t and F distributions; confidence intervals; tests of hypotheses.

Prerequisite: Mathematics 350 I [51.I].

## 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 450 I [52].

## MATH 45 II 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 350 I [51.I].

## MATH 460 I 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 risk-neutral 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 Business 3375 and Economics 3375.)

Prerequisite: Mathematics 360 I [74.2] or Business 3370 [70.7] or Economics 3370 [70.7]

## MATH 470 I 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. (Not open to students who are enrolled in or have completed Mathematics 37.)

Prerequisite: Mathematics 2101 [ 10.1 ]; and Mathematics 5.10 or 5.20 or 1206 [4.3] or 12 I I [4.3I]; and one of the following: Computer and Information Science $1.10,1.20,1 \mid 10[1.5]$, the ability to use a scientific programming language.

## MATH 500I 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 4206 Advanced Calculus II
MATH 4521 Actuarial Mathematics II

## Modern Languages and Literatures

Department office: 4239 Boylan Hall
Phone: 718.95I.545।

## Full-time Faculty

Professors: Barran, Bonaffini, Fernandez Olmos, Filer, Girelli-Carasi, Huffman, Mbom, Renner
Associate Professor: Childers
Assistant Professors: Alonso, Chang, 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 I-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.

## Core curriculum

The Department of Modern Languages and Literatures participates in the college's core curriculum through the foreign language requirement. The department shares responsibility for Core Curriculum 3101-3199 and 3201-3299 with other departments. All baccalaureate students are required to complete one course in a foreign language at course-level 3 (the third semester of study at the college level) or to demonstrate an equivalent proficiency by examination, except as modified below.
I. This requirement presupposes two years of secondary school language study. If only one year of language study (or none at all) is offered, one or two semesters of college study (course-levels IOI and/or I02) are required before course-level I 03 can be taken. A student who has studied language in high school for at least two years but wants to study a different language at the college level may do so, but this student must complete a minimum of two terms of the new language at the college level to fulfill the core requirement.
2. Students who have completed three years of one language in high school and passed the level 3 Regents examination are exempted from the core language requirement.
3. Students whose native language is not English may be exempted from this requirement by passing one of the competency examinations administered by the Department of Modern Languages and Literatures.
4. Neither blanket nor equivalent credit will be given for introductory courses in a foreign language from which a student has been exempted by examination.

## 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 I01, 102, I03 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 IOI 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 I03. Any questions regarding placement should be directed to the department office.
B.A. degree program in French

HEGIS code IIO2; SED program code 02025
Department requirements for majors in French (24-------------------------------------------16 credits)
There are two options for the major:

Option I: French (24 credits)
The following are required ( 24 credits in advanced courses): French 2030W and 3610.
At least one of the following culture courses: French $3515,3520,35$ I 0 , or 3520.
The remaining courses are to be selected from French 202I, 2024, 2432, 2I20, 35I5,3525, 35I0, or 3520. 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: French 2024 or 2030W; 2432; 3610; 35 I 5 or 3525.
Four additional courses to be selected from French 202I, 2432 or 2030W, 2 I 20 or 2 I $20 \mathrm{~W}, 35 \mathrm{I} 5,3525,35 \mathrm{I} 0$, 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 Italian HEGIS code I IO4; SED program code 02033

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Department requirements for majors in Italian (24-36 credits)
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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 $35 \mathrm{I} 5,35 \mathrm{I} 0$, or 35 I 8 .
The remaining courses are to be selected from Italian 2024, 202I, 2432, 2I20,35I5,3525,35I0, or 3518 . Tier III, 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

## Modern Languages and Literatures

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, in 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; 36I 0; 3515 or 3525.
Four additional courses to be selected from Italian 202I, 2030 or $2030 \mathrm{~W}, 2 \mathrm{I} 20$ or $2 \mathrm{I} 20 \mathrm{~W}, 35 \mathrm{I} 5,3525,35 \mathrm{I} 0$, or 35 I , 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 I I06; 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 2120 W .
At least one of the following culture courses: Russian 3515 or 3510 .
The remaining courses are to be selected from Russian 202I, 2024, 2I20, 2432, 35I5,3525, 35 I 0 or 35 I8. Tier II, Tier III, and/or Tier IV.
A knowledge of Latin and/or another Language Other Than English is also helpful.

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Option II: Language and Business (36 credits)
All of the following:Russian 2024 or 2030, 2432,36।0,35I5 or 3525.
Four additional courses to be selected from Russian 202I, 2030 or \(2030 \mathrm{~W}, 2\) I 20 or 2 I \(20 \mathrm{~W} 35 \mathrm{I} 5,3525,35 \mathrm{I} 0\), 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.
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Department requirements for majors in Spanish (24-36 credits)
There are two options for the major:

Option I: Spanish (24 credits)
The following are required (24 credits in advanced courses): Spanish 2030W and 3610 .
At least one of the following culture courses: Spanish $35 \mathrm{I} 5,3520,35 \mathrm{I} 0$, or 3520.
The remaining courses are to be selected from Spanish 202I, 2024, 2432, 2I20, 35I5, 3525, 35I0, or 3520. 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: Spanish 2024 or 2030W; 2432; 36I0; 35 I 5 or 3525.
Four additional courses to be selected from Spanish 202I, 2432 or $2030 \mathrm{~W}, 2120$ or $2120 \mathrm{~W}, 35 \mathrm{I} 5,3525,3510$, 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, 3I30, 3140.
The "W" designates a writing intensive course.

## B.A. degree program in adolescence education: French teacher HEGIS code IIO2.0I; 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 ( 54 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 2030 W and 3610.
Two of the following culture courses: French $35 \mathrm{I} 5,3525,35 \mathrm{I} 0$, or 3520.
Twelve credits to be selected from French 2024, 202I, 2432, 2I 20,35 I5, 3525, 35IO, 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, 340 I, 3402, 4405, 44II, 3456 (total of 24 credits).
This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.
Secondary Education 200I, 2002, 340 I, 3402 (I2 credits).
The appropriate 5 -credit course in student teaching:
Secondary Education 4405 Seminar on Methods of Teaching Modern Languages, Student Teaching I
The appropriate 4-credit course in student teaching:
Secondary Education 44II Advanced Seminar on Methods of Teaching Modern Languages, Student Teaching II.
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department.
Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

Students, except music education majors, must complete 24 credits in the School of Education as specified above.

Admission requirements and academic standing
Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 200I, 2002, 340 I or 3402; an average of 2.75 in Secondary Education 200 I and 2002 is required to continue to Secondary Education 340 I and/or Secondary Education 3402; to take Secondary Education 4413 or 4401-4406, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take Secondary Education 4407-4406, students must earn a B- or higher in Secondary Education 440 I-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes Secondary Education 4407-44I2 prior to Secondary Education 4401-4406 must earn a B- or better grade in Secondary Education 4407-44I2 to take Secondary Education 4401-4406.

## B.A. degree program in adolescence education: Italian teacher HEGIS code IIO4.0I; 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-I2) 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 (54 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 202I, 2024, 2432, 2I20,35I5, 3525, 35I0,35I8. 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 ( 24 credits): Secondary Education 200I, 2002, 340I, 3402, 4405, 44II, 3456.

This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.
SEED 200I, 2002, 340 I, 3402 (I2 credits).
The appropriate 5-credit course in student teaching:
Education 4405 Seminar on Methods of Teaching Modern Languages, Student Teaching I
The appropriate 4-credit course in student teaching:
Secondary Education 44II Advanced Seminar on Methods of Teaching Modern Languages, Student Teaching II.
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.

Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

Students, except music education majors, must complete 24 credits in the School of Education as specified above.

[^7]Education 3402; to take Secondary Education 4413 or 440 I-4406, students must have an overall GPA of 2.75 or higher and permission of the chair or deputy of the Department of Secondary Education; to take Secondary Education 4407-4406, students must earn a B- or higher in Secondary Education 440I-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes Secondary Education 4407-44I2 prior to Secondary Education 440I-4406 must earn a B- or better grade in Secondary Education 4407-44I2 to take Secondary Education 4401-4406.

## B.A. degree program in adolescence education: Spanish teacher HEGIS code II05.01; 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 (54 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 $35 \mathrm{I} 5,3525,35 \mathrm{I} 0$, or 3520.
Twelve credits to be selected from Spanish 2021,
2024, 2432, 2I 20, 35 I5, 3525, 35 I 0,3520 . Tier III, 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 ( 24 credits): Secondary Education 200I, 2002, 340I, 3402, 4405, 44II, 3456.

This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.
Secondary Education 200 I, 2002, 340 I, 3402 (I2 credits).
The appropriate 5-credit course in student teaching:
Secondary Education 4405 Seminar on Methods of Teaching Modern Languages, Student Teaching I
The appropriate 4-credit course in student teaching:
Secondary Education 44|I Advanced Seminar on Methods of Teaching Modern Languages, Student Teaching II
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.

Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking Secondary Education 3454.

Students, except music education majors, must complete 24 credits in the School of Education as specified above.

[^8]
## Departmental Minor(s)

## Minor in Chinese

Department Requirements
A minimum of 12 credits in advanced courses in Chinese 2021 and above.

## Minor in French

## Department Requirements

A minimum of 12 credits in advanced courses in French 2021 and above.

## Minor in German

## Department Requirements

A minimum of 12 credits in advanced courses in German 2021 and above.

## Minor in Italian

Department Requirements
A minimum of 12 credits in advanced courses in Italian 2021 and above.

## Minor in Italian American Studies

Requirements for a minor in Italian American studies
A grade of $C$ or higher in each of the four courses taken to satisfy the minor.
Both of the following: Interdisciplinary Studies 2012, English 3164.
Two of the following: Italian 2444, Italian 35I5, Italian 3525, Italian 35 IO, Italian 3240, Italian 39I0, Italian 5070, Interdisciplinary Studies 2025, English 3192, History 326I. The approval of the program director is required for Italian 3910, Italian 5070, Interdisciplinary Studies 70, English 40.2, and English 3192.

## Minor in Italian International Studies

## Department Requirements

A grade of $C$ or higher in each of the five courses offered for the minor.
All of the following: Italian 2444, 3240,
Interdisciplinary Studies 2012 or 2025.
Two of the following: Art 3030 or 3038; English 3192 with the approval of the Modern Languages chairperson when the topic is relevant to this minor; History 326I; Interdisciplinary Studies 2012, with the approval of the Modern Languages chairperson when the topic is relevant to this minor; Italian 3510 or 3910 ; Political Science 3302.

## Minor in Russian

## Department Requirements

A minimum of 12 credits in advanced courses in Russian 2020 and above.

## Minor in Spanish

Department Requirements
A minimum of 12 credits in advanced courses in Spanish 2021 and above.

## 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 3I60, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 330I, [76.I], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3II0, 3344; Anthropology 3130, 3140, 3170, 3185 ; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 334I; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's 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 Studies 3328
d. Media and Communications in a Global Context

Anthropology 3I 80; Film 213I; Philosophy 33 I5; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; 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) and childhood education teacher (grades 1-6) programs are described in the "Education" section of 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) and childhood education teacher (grades 1-6) programs are described in the "Education" section of 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.

## Italian

The requirements for early childhood education teacher (birth-grade 2) and childhood education teacher (grades I-6) programs are described in the "Education" section of 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.

## Russian

The requirements for early childhood education teacher (birth-grade 2) and childhood education teacher (grades I-6) programs are described in the "Education" section of 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) and childhood education teacher (grades $1-6$ ) programs are described in the "Education" section of 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.

Tier I Introductory Courses include basic culture and civilization courses and two core courses that provide a basis for future electives: 2 I 20 Understanding Texts teaches students how to read, analyze, and write about texts from a diversity of genres; 3610 Landmarks of Literature presents an established core of representative texts in chronological order.
Tier II Genre Courses include courses titled Thematic Readings in five major literary genres (poetry, the novel, short fiction, theater, and the essay). The content of these courses varies from semester to semester and it is always presented in chronological order to help students develop a sense of literary history.
Tier III Multidisciplinary Courses expand the study of literature beyond the traditional fields, focusing on special areas of interest in the contemporary world; women; autobiography; moral and religious concerns; historical and social concerns; and the arts.
Tier IV Pivotal and Monographic Courses offer the intensive study of a major author or body of literary works at an advanced level. Their in-depth nature makes them suitable for students toward the end of their course of study.

## GRKM 1038 Basic Writing and Reading Skills for Heritage Speakers

3 hours, I 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.

Prerequisite: permission of the chair
GRKM 2048 Intermediate Writing and Reading Skills for Heritage Speakers
3 hours, I 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.

Prerequisite: Modern Greek 1038 [3.8] or permission of the chairperson.

## 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 *I 003 [1.5].

Prerequisite: permission of the chairperson of the Departmentof Modern Languages and Literatures

## Arabic

## ARAB 1010 Intensive Elementary Arabic I

5 hours, I hour multimedia 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. 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 I or more than one year of high school Arabic.)

Prerequisite: none.

## ARAB 1020 Intensive Elementary Arabic II

5 hours, I hour multimedia laboratory; 4 credits
Second in a two-semester intensive sequence. Expanded acquisition of phonetics and writing systems. Developmentof communicative skills and cultural awareness through extensive classroom interaction and a variety of multimediamaterials. Designed to prepare students for Arabic I 030 [3.I].(Not open to heritage speakers or to students who have enrolled in or have completed Arabic I or 2.)

Prerequisite: Arabic 1010 [1.1] or permission of the chairperson

## ARAB 1030 Intensive Intermediate Arabic I

4 hours, I hour multimedia laboratory; 4 credits
First in a two-semester intensive sequence for students who have completed Arabic 1010 [I.I] and 2.1 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 are enrolled in or have completed Arabic 3.)

Prerequisite: Arabic 1020 [2.1] or permission of the chairperson.

## ARAB 1038 Basic Writing and Reading Skills for Heritage

 Speakers3 hours, I 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.

Prerequisite: permission of the chairperson.

## ARAB 2010 Intensive Intermediate Arabic II

4 hours, I hour multimedia laboratory; 4 credits
Second in a two-semester intensive sequence for students who have completed Arabic IO30 [3.1] 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 or students who have completed Arabic 4.)

Prerequisite: Arabic 1030 [3.1] or permission of the chairperson.

## ARAB 2018 Intermediate Writing and Reading Skills for Heritage Speakers

3 hours, I 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.

Prerequisite: Arabic 1038 [3.8] or permission of the chairperson.

## ARAB 2310 Peer Tutoring I Arabic

2 hours tutoring, I hour conference; I 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.

Prerequisite: permission of the chairperson.

## ARAB 2320 Peer Tutoring II Arabic

2 hours tutoring, I hour conference; I 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.

Prerequisite: Arabic 2310 and permission of the chairperson.

## Chinese

## CHIN * 1010 Intensive Elementary Chinese I

5 hours, I hour multimedia 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. 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 Chinese I or more than one year of high school Chinese.)

Prerequisite: none.

## CHIN 1020 Intensive Elementary Chinese II

5 hours, I hour multimedia laboratory; 4 credits
Second in a two-semester intensive 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 * 030 [3.1]. (Not open to heritage speakers or to students who have enrolled in or have completed Chinese I or 2.)

Prerequisite: Chinese * 1010 [1.1] or permission of the chairperson.

## CHIN * 1030 Intensive Intermediate Chinese I

5 hours, I hour multimedia laboratory; 4 credits
First in a two-semester intensive sequence for students who have completed Chinese *IOIO [I.I] and 2.I 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 are enrolled in or have completed Chinese 3.)

Prerequisite: Chinese 1020 [2.1] or permission of the chairperson.

## CHIN *1038 Basic Writing and Reading Skills for Heritage Speakers

4 hours, I 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.
Prerequisite: permission of the chairperson.

## CHIN *IIII Calligraphy

2 hours; I credit
Esthetics and practice of Chinese calligraphy for students with or without Chinese language background.

## CHIN *1910 T'ai-chi Ch'Yan: Theory and Practice

2 hours laboratory; I 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 *+ 007 [I7.20].) To be taught in English.

Prerequisite: none.

## CHIN 2018 Intermediate Writing and Reading Skills for Heritage Speakers

3 hours, I 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.

Prerequisite: Chinese *I038 [3.8] or permission of the chairperson.

## CHIN 202 I Intensive Intermediate Chinese II

4 hours, I multimedia laboratory hour; 4 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. (Not open to students who have completed a course in Chinese numbered 2024 or above. The Department therefore recommends that 2020 be taken before any courses with a higher number.)

Prerequisite: Chinese I030 or permission of the chairperson.

## CHIN 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. (Not open to heritage speakers.)

Prerequisite: Chinese 1030 or 2018 or permission of the chairperson.

## CHIN 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.

Prerequisite: Chinese 2018 [4.8] or permission of the chairperson.

## CHIN 24I0 Fieldwork in Communities and Professional Environments I

9 hours fieldwork, I 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.

Prerequisite: 15 credits of advanced courses in the target language and
permission of the chairperson

## CHIN 243I 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].

Prerequisite: Chinese 2030 [1|.|2] or permission of the chairperson.

## CHIN $\mathbf{2 4 3 2}$ 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 24IO [60.02].

Prerequisite: Chinese 2030 [ 1 |. | 2 ] 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].

Prerequisite: Chinese 2030 [ I |. | 2] 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].

Prerequisite: Chinese 2030 [ 1 . . 2 ] 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].

Prerequisite: Chinese 2030 [ 1 | . | 2] 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].

Prerequisite: Chinese 2030 [ 1 . . 2 ] or permission of the chairperson.

## CHIN 28IO 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.

Prerequisite: Chinese 1030 or 2018 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.

## CHIN 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.

Prerequisite: CHIN 2030 [1 |. 12 ] or permission of the chairperson.

## CHIN 3360 Language and Technology

3 hours, 2 hours multimedia laboratory; 3 credits
A systematic approach to multimedia resources for students and teachers of Languages Other Than English. Audiovisual materials (audio documents, films, and videos), software programs, electronic dictionaries. Audio, video, CD-ROM format, and the Web. Informational materials, news, and other original texts in foreign languages in formats other than printed media. Use of e-mail as a teaching tool. Use of the Web as an environment for learning and teaching foreign languages. Development of classroom activities using multimedia technologies. To be taught in English.

Prerequisite: Language 4 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.

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.

Prerequisite: Chinese 2010 [I0] or permission of the chairperson.

## CHIN 3616 Modern Chinese Literature from 1949 to the

 Present3 hours; 3 credits
Readings from postwar literature of the People's Republic, Taiwan, and overseas Chinese communities.

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.

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.
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.

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.

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.

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.

Prerequisite: Language 2020 [II.I] or 2030 [II.|2] or 3610 [17.50] or permission
of the chairperson.

I 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.

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

## CHIN 5084 Seminar

I 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].

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

I hour conference, minimum 8 hours independent work§; 3 credits Research thesis, written in Chinese, on a literary, linguistic, or cultural topic. May not be taken concurrently with Chinese 5084 [84.I].

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.

## Haitian Creole

## CREO 1038 Basic Writing and Reading Skills for Heritage Speakers

3 hours, I 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.

Prerequisite: permission of the chairperson.

## CREO *2048 Intermediate Writing and Reading Skills for Heritage Speakers <br> 3 hours, I 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.

Prerequisite: Haitian Creole 1038 [3.8] or permission of the chairperson.

## French

## FREN *1010 Basic Language Skills I

3 hours, I hour multimedia laboratory; 3 credits
The first in a three-semester introductory sequence for beginners and those who have had one year or less of high school study. Emphasis on basic social functions, simple conversation, readings, and writing. Introduction to the cultures where French is spoken. (Not open to heritage speakers or to students who have completed French I. 5 or more than one year of high school French.)

5 hours, I 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 *IOIO [I], French 1.5, or more than one year of high school French.)

Prerequisite: None.

## FREN * 1020 Basic Language Skills II

3 hours, I 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. (Not open to heritage speakers or to students who have completed French *1310 [1.5].)

Prerequisite: French * 1010 [I], or two years of high school French, or permission of the chairperson.

## FREN *I 030 Basic Language Skills III

3 hours recitation, I hour 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. (Not open to heritage speakers or to students who have completed French 3.7.)

Prerequisite: French *IO20 [2], or three years of high school French without passing the level 3 Regents examination, or permission of the chairperson.

## FREN 1034 Fundamentals of Reading and Writing for Nonheritage Speakers

2 hours, I 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 201I [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 *IO35 [3.2].)

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, I 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 *IOIO [I], I 020 [2], or 1030 [3].)

Prerequisite: French 1015 [1.2] or permission of the chairperson.

3 hours, I 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.

Prerequisite: permission of the chairperson.

## FREN 201I Basic Conversation Workshop

I hour, 2 hours multimedia laboratory; I 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 *I030 [3], I035 [3.2], or their equivalent. May be taken concurrently with or independently of French I034 [3.4]. (Not open to heritage speakers.)

Prerequisite: French *। 030 [3] or I 035 [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].)

Prerequisite: French *IO30 [3].

## FREN 2018 Intermediate Writing and Reading Skills for Heritage Speakers

3 hours, I 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.

Prerequisite: French 1038 [3.8] or permission of the chairperson

## FREN 2021 Integrated Language Skills

3 hours, I 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.)

Prerequisite: Recent completion of French 1030 or the level 3

## FREN 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.

Prerequisite: French 1030 or 2018 or permission of the chairperson.

## FREN 2030W Advanced Language Skills II

3 hours; 3 credits
Continued practice in advanced written expression and in textual and linguistic analysis for heritage and nonheritage speakers; composition modeled on selected literary texts. Writing-intensive course.

Prerequisite: English 1012 [2], French 1030 or 2018 [4.8] 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.

Prerequisite: French 1030 or permission of the chairperson.

## FREN 243I 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. May be taken before or concurrently with French 60.02 .

Prerequisite: French 2030 [11.12] 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. May be taken before or concurrently with French 60.02 .

Prerequisite: French 2030 [ 11.12 ] 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. May be taken before or concurrently with French 60.02 .

Prerequisite: French 2030 [ 1 . 12] 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. May be taken before or concurrently with French 60.02 .

Prerequisite: French 2030W [11.12W] 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. May be taken before or concurrently with French 60.02 .

Prerequisite: French 2030 [ I . | 2] 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. May be taken before or concurrently with French 60.02 .

Prerequisite: French 2030 [ I . . 2 ] or permission of the chairperson.

## FREN 2910 Exploring French Cultures Through Film

2 hours lecture, I hour multimedia laboratory; 2 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. This course does not satisfy the Brooklyn College foreign language requirement.

Prerequisite: French *IOIO [I], IO20 [2], or 1030 [3].

## FREN 2915 Exploring French and Francophone Cultures Through the Press

2 hours lecture, I 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.

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.)

Prerequisite: Language 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.)

Prerequisite: FREN 2030 [ ||.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.

Prerequisite: French 3240 or 3260 or permission of the chairperson.

## FREN 3360 Language and Technology

3 hours, 2 hours multimedia laboratory; 3 credits
A systematic approach to multimedia resources for students and teachers of Languages Other Than English. Audiovisual materials (audio documents, films, and videos), software programs, electronic dictionaries. Audio, video, CD-ROM format, and the Web. Informational materials, news, and other original texts in foreign languages in formats other than printed media. Use of e-mail as a teaching tool. Use of the Web as an environment for learning and teaching foreign languages. Development of classroom activities using multimedia technologies. To be taught in English.

Prerequisite: French 2010 [4] 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

Prerequisite: French 1030 or permission of the chairperson.

## FREN 35I5 Contemporary France

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.

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 French-speaking 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.

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.

Prerequisite: French 1030 or permission of the chairperson.

## FREN 3610 Landmarks of French and Francophone <br> 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.

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.

Prerequisite: French 2020 [ I I.I] or 2030 W 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.

Prerequisite: French 2020 [II.I] 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.

Prerequisite: French 2020 [ I I.I] 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.

Prerequisite: French 2020 [II.I] 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.

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.

Prerequisite: French 2020 [II.I] or 2030 W or 3610 [17.50] or permission of the chairperson.

FREN 363 I 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.

Prerequisite: French 2020 [II.I] or 2030 W or 3610 [17.50] or permission of the chairperson.

## FREN 3632 Thematic Readings in Francophone Short

 Fiction3 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.

Prerequisite: French 2020 [ I I.I] or 2030 W 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.

Prerequisite: French 2020 [II.I] or 2030 W 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.
Prerequisite: French 2020 [II.I] or 2030 W or 3610 [I7.50] 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.

Prerequisite: French 2020 [II.I] or 2030 W or 3610 [I7.50] 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.

Prerequisite: French 2020 [II.I] or 2030 W or 3610 [I7.50] 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.

Prerequisite: French 2020 [II.I] or 2030 W or 3610 [I7.50] 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.

Prerequisite: French 2020 [II.I] or 2030 W or 3610 [I7.50] 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.

Prerequisite: French 2020 [II.I] or 2030 W or 3610 [I7.50] 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.

Prerequisite: Language 2020 [II.I] or 2030 W or 3610 [I7.50] 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.

Prerequisite: French 2020 [II.I] or 2030 W or 3610 [I7.50] 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.

Prerequisite: French 2020 [II.I] or 2030 W or 3610 [I7.50] 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.

Prerequisite: French 2020 [II.I] or 2030 W or 3610 [I7.50] and two courses from Tiers II and/or III, or permission of the chairperson.

## FREN 5070 Tutorial in Literature and Culture

I 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.

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

I 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].

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

I 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.I].

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.

## GERM 202 I Integrated Language Skills

3 hours, I 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.)

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

## German

## GERM*IOI5 Intensive Elementary German I

5 hours, I hour multimedia 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. 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 German I or more than one year of high school German.)

## GERM 1035 Intensive Elementary German II

5 hours, I 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 German *20I0 [4]. (Not open to heritage speakers or to students who are enrolled in or have completed German I, 2, or 3.)

Prerequisite: German *I0I5 [1.2] 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.)

Prerequisite: German I035 [3.2] 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.

Prerequisite: German I035 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.

Prerequisite: German 2020 [ I . I] or permission of the chairperson.

## GERM 243I 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. May be taken before or concurrently with German 60.02 .

Prerequisite: German 2030 [11.|2] 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. May be taken before or concurrently with German 60.02.

Prerequisite: German 2030 [I I. | 2 ] 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. May be taken before or concurrently with German 60.02 .

Prerequisite: German 2030 [11.|2] 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. May be taken before or concurrently with German 60.02.

Prerequisite: German 2030 [ I . | 2] 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. May be taken before or concurrently with German 60.02.

Prerequisite: German 2030 [| I. 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. May be taken before or concurrently with German 60.02.

Prerequisite: German 2030 [I I. |2] 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.

Prerequisite: Language 2030W or permission of the chairperson.

## GERM 5070 Tutorial in Literature and Culture

I 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.

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

I 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].

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

I 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.I].

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.

## Italian

## ITAL *1010 Basic Language Skills I

3 hours, I hour multimedia laboratory; 3 credits
The first in a three-semester introductory sequence for beginners and those who have had one year or less of high school study. Emphasis on basic social functions, simple conversation, readings, and writing. Introduction to the cultures where Italian is spoken. (Not open to heritage speakers or to students who have completed Italian I. 5 or more than one year of high school Italian.)

## ITAL * 101 I 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 *IOIO [I], I.5, IO20 [2], or 1030 [3] at Brooklyn College.)

Prerequisite: permission of the director of the Conservatory of Music.

## ITAL 1015 Intensive Elementary Italian I

5 hours, I 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 *IOIO [I], Italian I.5, or more than one year of high school Italian.)

Prerequisite: none.

## ITAL *1020 Basic Language Skills II

3 hours, I 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. (Not open to heritage speakers or to students who have completed Italian *1310 [1.5].)

Prerequisite: Italian *I010 [I], or two years of high school Italian, or permission of the chairperson

## ITAL *1030 Basic Language Skills III

3 hours, I 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. (Not open to heritage speakers or to students who have completed Italian 3.7.)

Prerequisite: Italian *IO20 [2], or three years of high school Italian without passing the level 3 Regents examination, or permission of the chairperson.

## ITAL I03I Basic Conversation Workshop

I hour, 2 hours multimedia laboratory; I 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 *I 030 [3], I 035 [3.2], or their equivalent. May be taken concurrently with or independently of Italian I 034 [3.4]. (Not open to heritage speakers.)

Prerequisite: Italian *। 030 [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, I 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 I031 [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 I 035 [3.2].)

Prerequisite: Italian *I 030 [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 I 035 Intensive Elementary Italian II

5 hours, I 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 *IOIO [I], I 020 [2], or 1030 [3].)

Prerequisite: Italian IOI5 [I.2] or permission of the chairperson.

## ITAL 1038 Basic Writing and Reading Skills for Heritage Speakers

3 hours, I 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.

Prerequisite: Permission of the chairperson.

## ITAL I5IO The Italian Cultural Heritage

3 hours; 3 credits
The cultural and ethnic experience of Italy and the Italian people. Conducted in English. Readings in English. (Not open to students who are enrolled in or have completed Italian 50.)

## 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 *20I0 [4]. (Not open to heritage speakers.)

Prerequisite: Italian I035 [3.2], I 034 [3.4], or 103 I [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.

Prerequisite: Italian 1030 or department permission.
ITAL *2018 Intermediate Writing and Reading Skills for Heritage Speakers
3 hours, I 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.

Prerequisite: Italian 1038 [3.8] or permission of the chairperson.

## ITAL 202 I Integrated Language Skills

3 hours, I 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.)

Prerequisite: Recent completion of Italian 1030, or the level 3 Regents examination with a passing grade, or four years of high school Italian, or Italian I035 or I034, or permission of the chairperson.

## ITAL 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. (Not open to heritage speakers.)

Prerequisite: Italian 1030 or permission of the chairperson

## ITAL 2030W Advanced Language Skills II

3 hours; 3 credits
Continued practice in advanced written expression and in textual and linguistic analysis for heritage and nonheritage speakers; composition modeled on selected literary texts. Writing-intensive course.

Prerequisite: English 1012 [2], Italian 1030 or 2018 [4.8] 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.)

Prerequisite: Italian 1030 or permission of the chairperson. Corequisite: Italian *20I8 [4.8], 2024, 2030W or permission of the chairperson.

## ITAL 243 I 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. May be taken before or concurrently with Italian 60.02.

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. May be taken before or concurrently with Italian 60.02.

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. May be taken before or concurrently with Italian 60.02 .

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. May be taken before or concurrently with Italian 60.02.

Prerequisite: Italian 2030W or permission of the chairperson.

## ITAL $\mathbf{2 4 3 6}$ 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. May be taken before or concurrently with Italian 60.02.

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. May be taken before or concurrently with Italian 60.02 .

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.
Prerequisite: Italian 1030 or permission of the chairperson.

## 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.)

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.

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.

Prerequisite: Italian 3240 or 3260 or
permission of the chairperson.

## ITAL 3360 Language and Technology

3 hours, 2 hours multimedia laboratory; 3 credits
A systematic approach to multimedia resources for students and teachers of Languages Other Than English. Audiovisual materials (audio documents, films, and videos), software programs, electronic dictionaries. Audio, video, CD-ROM format, and the Web. Informational materials, news, and other original texts in foreign languages in formats other than printed media. Use of e-mail as a teaching tool. Use of the Web as an environment for learning and teaching foreign languages. Development of classroom activities using multimedia technologies. To be taught in English.

Prerequisite: Italian 2010 [4] or permission of the chairperson.

## ITAL 35 I 0 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 *20 I 8 [4.8], 2024, or 2030W.

Prerequisite: Italian 1030 or permission of the chairperson.

## ITAL 35 I5 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 .
Prerequisite: Italian I030 or permission of the chairperson.

## ITAL 35 I 8 Italy's Cities - A Multimedia Journey

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.

Prerequisite: Italian I030 or permission of the chairperson.

## ITAL $\mathbf{3 5 2 5}$ 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 2030 W .

Prerequisite: Italian I030 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 I8.)

Prerequisite or corequisite: Italian 2120 [15.50] or permission of the chairperson.

## ITAL $\mathbf{3 6 2 0}$ 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.

Prerequisite: Italian 2020 [ I I.I] or 2030 W [II.12W] or 3610 [I7.50] 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.

Prerequisite: Italian 2020 [II.I] or 2030W [II.I2W] or 3610 [I7.50] or permission of the chairperson.

## ITAL $\mathbf{3 6 2 2}$ 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.

Prerequisite: Italian 2020 [II.I] or 2030W [II.I2W] or 3610 [I7.50] 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.

Prerequisite: Italian 2020 [II.I] or 2030W [II.I2W] or 3610 [I7.50] 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.

Prerequisite: Italian 2020 [II.I] or 2030W [II.I2W] or 3610 [I7.50] 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.

Prerequisite: Italian 2020 [II.I] or 2030W [II.I2W] or 3610 [17.50] or permission of the chairperson.

## ITAL $\mathbf{3 7 2 0}$ 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.

Prerequisite: Italian 2020 [II.I] or 2030W or 3610 [I7.50] or permission of the chairperson.

## ITAL $\mathbf{3 7 3 0}$ 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.

Prerequisite: Italian 2020 [II.I] or 2030W or 3610 [I7.50] or permission of the chairperson.

## ITAL $\mathbf{3 7 4 0}$ 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.

Prerequisite: Italian 2020 [II.I] 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 [21.2].

Prerequisite: Italian 2020 [II.I] 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.

Prerequisite: Italian 2020 [II.I] or 2030 W or 3610 [I7.50] 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.

Prerequisite: Italian 2020 [II.I] or 2030W or 3610 [I7.50] and two courses from Tiers II and/or III, or permission of the chairperson.

## ITAL 47I5 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 .)

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

I 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.

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.

## ITAL 5085 Seminar and Senior Thesis

I 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.I].

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

## Honors courses

## ITAL 5084 Seminar

I 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].

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.

## Japanese

## JAPN 1010 Intensive Elementary Japanese I

5 hours, I hour multimedia 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. 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 Japanese I or more than one year of high school Japanese.)

Prerequisite: none.

## JAPN 1020 Intensive Elementary Japanese II

5 hours, I hour multimedia laboratory; 4 credits
Second in a two-semester intensive 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 [3.1]. (Not open to heritage speakers or to students who have completed Japanese I or 2.)

Prerequisite: Japanese 1010 [I.I] or permission of the chairperson.

## JAPN 1030 Intensive Intermediate Japanese I

4 hours, I hour multimedia laboratory; 4 credits
First in a two-semester intensive sequence for students who have completed Japanese 1010 [I.I] and 2 . I 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.)

Prerequisite: Japanese 1020 [2.1] or permission of the chairperson.

## JAPN 2010 Intensive Intermediate Japanese II

4 hours, I hour multimedia laboratory; 4 credits
Second in a two-semester intensive sequence for students who have completed Japanese 1030 [3.1] 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 or students who have completed Japanese 4.)

Prerequisite: Japanese 1030 [3.1] or permission of the chairperson.

## Portuguese

## PORT 1015 Intensive Elementary Portuguese I

5 hours, I 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 Portuguese I 035 [3.2]. (Not open to heritage speakers or to students who have completed Portuguese I, Portuguese I.5, or more than one year of high school Portuguese.)

Prerequisite: none.

## PORT I 035 Intensive Elementary Portuguese II

5 hours, I 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 Portuguese 2010 [4]. (Not open to heritage speakers or to students who have completed Portuguese I, 2, or 3.)

Prerequisite: Portuguese 1015 [I.2] or permission of the chairperson.

## PORT 2010 Intermediate Language Skills for Nonheritage Speakers

3 hours, I 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.)

Prerequisite: Portuguese I035 [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.)

Prerequisite: Portuguese 1035 [3.2] or permission of the chairperson.

## Russian

## RUSS 1010 Intensive Elementary Russian I

5 hours, I hour multimedia 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. 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 Russian I or more than one year of high school Russian.)

Prerequisite: none.

## RUSS 1020 Intensive Elementary Russian II

5 hours, I hour multimedia laboratory; 4 credits
Second in a two-semester intensive 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 [3. I]. (Not open to heritage speakers or to students who have completed Russian I or 2.)

Prerequisite: Russian 1010 [I.I] or permission of the chairperson.

## RUSS $\mathbf{1 0 3 0}$ Intensive Intermediate Russian I

4 hours, I hour multimedia laboratory; 4 credits
First in a two-semester intensive sequence for students who have completed Russian 1010 [I.I] and IO20 [2.I] 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 Russian 3.)

Prerequisite: Russian 1020 [2.1] or permission of the chairperson.

## RUSS *1038 Basic Writing and Reading Skills for Heritage

 Speakers4 hours, I hour multimedia laboratory; 4 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 self-expression

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.

## RUSS 2018 Intermediate Writing and Reading Skills for Heritage Speakers

3 hours, I 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.

Prerequisite: Russian 1038 [3.8] or permission of the chairperson.

## RUSS 202I Intensive Intermediate Russian II

4 hours, I multimedia laboratory hour; 4 credits
Second in a two-semester intensive sequence for students who have completed Russian 3 .I 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 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.)

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.

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.

Prerequisite: English 1012, Russian 2018 [4.8] or permission of the chairperson.

## RUSS 2l20W 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.

Prerequisite: English 1012 [2], Russian 1030 or permission of the chairperson.
Corequisite: Russian 2018 [4.8] or 2024 or permission of the chairperson

## RUSS 243I Russian 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 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.

Prerequisite: Russian 2030W [ I . . |2] 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. May be taken before or concurrently with Russian 60.02 .

Prerequisite: Russian 2030W [| |. |2] 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.

Prerequisite: Russian 2030W [1 |. |2] 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. May be taken before or concurrently with Russian 60.02 .

Prerequisite: Russian 2030W [ I . . 2] 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. May be taken before or concurrently with Russian 60.02 .

Prerequisite: Russian 2030W [ I . . 2] or permission of the chairperson.

## RUSS $\mathbf{2 4 3 7}$ 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.

Prerequisite: Russian 2030W [1 |. | 2] 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. (French 3240 [20.03] not open to students who have completed French 54. Italian 3240 [20.07] not open to students who have completed Italian I2.1. Spanish 3240 [20.1 I] not open to students who have completed Spanish 54.)

Prerequisite: Russian 2030W [ I . . 2] or permission of the chairperson.

## RUSS $\mathbf{3 2 6 0}$ 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.

Prerequisite: Russian 2030W or permission of the chairperson.

## RUSS $\mathbf{3 2 9 0}$ 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.

Prerequisite: Russian 3240 or 3260 or
permission of the chairperson.

## RUSS 3360 Language and Technology

3 hours, 2 hours multimedia laboratory; 3 credits
A systematic approach to multimedia resources for students and teachers of Languages Other Than English. Audiovisual materials (audio documents, films, and videos), software programs, electronic dictionaries. Audio, video, CD-ROM format, and the Web. Informational materials, news, and other original texts in foreign languages in formats other than printed media. Use of e-mail as a teaching tool. Use of the Web as an environment for learning and teaching foreign languages. Development of classroom activities using
multimedia technologies. To be taught in English.
Prerequisite: Language 4 or permission of the chairperson.

## RUSS $\mathbf{3 5 1 0}$ 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.

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.

Prerequisite: Russian 1030 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.

Prerequisite: Russian 1030 or 2018 [4.8] or permission of the chairperson.

## RUSS $\mathbf{3 6 2 0}$ 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.

Prerequisite: Russian 2020 [II.I] or 2030W or 3610 [17.50] or permission of the chairperson.

## RUSS 362 I 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.

Prerequisite: Russian 2020 [11.1] or 2030W or 3610 [17.50] or permission ofthe chairperson

## RUSS $\mathbf{3 6 2 2}$ 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.

Prerequisite: Russian 2020 [II.I] or 2030 W 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.

Prerequisite: Russian 2020 [II.I] or 2030W or 3610 [I7.50] 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.

Prerequisite: Russian 2020 [II.I] or 2030W or 3610 [I7.50] 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.

Prerequisite: Russian 2020 [II.I] or 2030W or 3610 [I7.50] or permission of the chairperson.

## RUSS $\mathbf{3 7 2 0}$ 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.

Prerequisite: Russian 2020 [II.I] or 2030 W or 3610 [17.50] or permission of the chairperson

## RUSS $\mathbf{3 7 3 0}$ 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.

Prerequisite: Russian 2020 [II.I] or 2030 W or 3610 [I7.50] or permission of the chairperson.

## RUSS $\mathbf{3 7 4 0}$ 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.

Prerequisite: Russian 2020 [II.I] or 2030W or 3610 [I7.50] or permission of the chairperson.

3 hours; 3 credits
The relationship between Russian literary works and the films they inspired. Course description available in department office prior to registration.

Prerequisite: Russian 2020 [11.1] or 2030W 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.

## 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.

Prerequisite: Russian 2020 [II.I] or 2030 W or 3610 [I7.50] 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.

Prerequisite: Russian 2020 [II.I] or 2030W or 3610 [I7.50] 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.
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

I 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.

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

I 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].

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

I 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.I].

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, I hour multimedia laboratory; 3 credits
The first in a three-semester introductory sequence for beginners and those who have had one year or less of high school study. Emphasis on basic social functions, simple conversation, readings, and writing. Introduction to the cultures where Spanish is spoken. (Not open to heritage speakers or to students who have completed Spanish *1310 [1.5] or more than one year of high school Spanish.)

## SPAN IOII Basic Language Skills I

3 hours, I 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.

## SPAN 1012 Basic Language Skills I

3 hours, I 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.

## SPAN *1015 Intensive Elementary Spanish

5 hours recitation, I 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.)

## SPAN * 1020 Basic Language Skills II

3 hours, I 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. (Not open to heritage speakers or to students who have completed Spanish *1310 [1.5].)

Prerequisite: Spanish *1010 [I], or two years of high school Spanish, or permission of the chairperson.

## SPAN 102 I Basic Language Skills II

3 hours, I 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.
Prerequisite: Spanish 1012 [1.12] or permission of the chairperson.

## SPAN 1022 Basic Language Skills II

3 hours, I 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.

Prerequisite: Spanish 102 I [2.1I] or permission of the chairperson.

## SPAN *I 030 Basic Language Skills III

3 hours, I 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. (Not open to heritage speakers or to students who have completed Spanish *3.7.)

Prerequisite: Spanish *। 020 [2], or three years of high school Spanish without passing the level 3 Regents examination, or permission of the chairperson.

## SPAN I03I Basic Language Skills III

3 hours, I 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.

Prerequisite: Spanish 1022 [2.12] or permission of the chairperson.

## SPAN 1032 Basic Language Skills III

3 hours, I 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.

Prerequisite: Spanish 1031 [3.1 I] or permission of the chairperson.

## SPAN *1034 Fundamentals of Reading and Writing for Nonheritage Speakers

2 hours recitation, I 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 *20IO [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 *IO35 [3.2].)

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, I 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 *20IO [4]. (Not open to heritage speakers or to students who are enrolled in or have completed Spanish * 1010 [I], I3IO [I.5], IO20 [2], I 030 [3], or 3.7.)

Prerequisite: Spanish *|3IO [I.5] or permission of the chairperson.

## SPAN 1038 Basic Writing and Reading Skills for Heritage Speakers

3 hours recitation, I 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.

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.

## 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

Prerequisite: Spanish *|310 [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 *201I Basic Conversation Workshop

I hour recitation, 2 hours multimedia laboratory; | 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], I 035 [3.2], or their equivalent. May be taken concurrently with or independently of Spanish *I 034 [3.4]. (Not open to heritage speakers.)

Prerequisite: Spanish *I 030 [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.)

Prerequisite: Spanish 1035 [3.2], I034 [3.4], or 20 I I [3.6], or permission of the chairperson.

## SPAN *2018 Intermediate Writing and Reading Skills for Heritage Speakers

3 hours, I 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.

Prerequisite: Spanish 1038 [3.8] or permission of the chairperson.

## SPAN 202I Integrated Language Skills

3 hours, I 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.)

Prerequisite: Recent completion of Spanish 1030, or the level 3 Regents examination with a passing grade, or four years of high school Spanish, or Spanish 1035 or 1034, or permission of the chairperson.

## SPAN 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. (Not open to heritage speakers.)

Prerequisite: Spanish 1030 or permission of the chairperson.

## SPAN 2025 Tutorial in Writing

| hour; I credit
Development of proficiency in written expression with attention to the particular needs of the specific student.

Prerequisite: Spanish 2020 [II.I], 2030W [II.|2W], or 2110 [I2.1].

## SPAN 2030W Advanced Language Skills II

3 hours; 3 credits
Continued practice in advanced written expression and in textual and linguistic analysis for heritage and nonheritage speakers; composition modeled on selected literary texts. Writing-intensive course.

Prerequisite: English 1012 [2], Spanish 1030 or 2018 [4.8] or permission of the chairperson.

## SPAN 2llo Spanish Composition

3 hours; 3 credits
Practice in composition and translation. Problems in style.
Prerequisite: Spanish 1030 or 2018 or permission of the chairperson.

## SPAN 2II5 Concurrent Workshop in Written and Oral Self-Expression

3 hours, I 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.

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.

Prerequisite: Spanish 1030 or permission of the chairperson. Corequisite: Spanish *2018 [4.8], 2024, 2030W or permission of the chairperson.

## SPAN 243 I 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. May be taken before or concurrently with Spanish 60.02 .

Prerequisite: Spanish 2030W [ I |. | 2] 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. May be taken before or concurrently with Spanish 60.02.

Prerequisite: Spanish 2030W [II.I2] 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. May be taken before or concurrently with Spanish 60.02 .

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. May be taken before or concurrently with Spanish 60.02 .

Prerequisite: Spanish 2030W [I . . 2] 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. May be taken before or concurrently with Spanish 60.02.

Prerequisite: Spanish 2030W [I I. I 2] 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. May be taken before or concurrently with Spanish 60.02 .

Prerequisite: Spanish 2030W [I I. I2] 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 *IOIO[I].

## 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 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 *IO20 [2].

## SPAN 2910 Exploring Hispanic Cultures Through Film

I hour lecture, 2 hours multimedia laboratory; 2 credits The development of written and conversational skills using recent Spanish and Latin American films that offer the student a broad introduction to contemporary Hispanic 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 Latin America and Spain and of their current social contradictions and political debates. This course does not satisfy the language requirement.

Prerequisite: Spanish * 1010 [I], IO20 [2], or 1030 [3]

## SPAN 2915 Exploring Hispanic Cultures Through the Press

I 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.

Prerequisite: Spanish 1030 [3]

## 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.)

Prerequisite: Language 2030W [I I. | 2] 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.)

Prerequisite: Language 11.12 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.

Prerequisite: Language 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.

Prerequisite: Language 2020 [11.1] or 11.12 or 3610 [17.50] or permission
of the chairperson.

## SPAN 3360 Language and Technology

3 hours, 2 hours multimedia laboratory; 3 credits
A systematic approach to multimedia resources for students and teachers of Languages Other Than English. Audiovisual materials (audio documents, films, and videos), software programs, electronic dictionaries. Audio, video, CD-ROM format, and the Web. Informational materials, news, and other original texts in foreign languages in formats other than printed media. Use of e-mail as a teaching tool. Use of the Web as an environment for learning and teaching foreign languages. Development of classroom activities using multimedia technologies. To be taught in English.

Prerequisite: Spanish 2010 [4] 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], 2020 [II.I], or 11.2 W . (Not open to students who have completed Spanish 50 or 5 I .)

Prerequisite: Spanish 1030 or permission of the chairperson.

## SPAN 35I5 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.

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.

Prerequisite: Spanish 1030 or permission ofthe chairperson

## SPAN 3525 Contemporary Latin America 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 *20 I 8 [4.8],2024 or 2030W.

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.

Prerequisite: Spanish *20 I 0 [4] or permission of the chairperson.
SPAN 3610 Landmarks of Spanish and LatinAmerican Literatures

3 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.

Prerequisite: Spanish 1030 or 2018 [4.8] or permission of the chairperson

## SPAN 36II 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.

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.

Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [I7.50] or permission of the chairperson; English * 1012 [2].

## SPAN 362 I 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.

Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [I7.50] 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.

Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [I7.50] 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.

Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [I7.50] 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.

Prerequisite: Spanish 2020 [II.1] or 2030 W 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.

Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [I7.50] 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.

Prerequisite: Spanish 2020 [ I I. I] or 2030W 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.

Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [I7.50] or permission of the chairperson.

## SPAN 363 I Thematic Readings in the Latin American

 Novel3 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.

Prerequisite: Spanish 2020 [II.I] or 2030 W or 3610 [I7.50] 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.

Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [I7.50] or permission of the chairperson.

## SPAN 3633 Thematic Readings in Latin American Th

## 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.
Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [I7.50] 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.

Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [I7.50] 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.")

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.

Prerequisite: Spanish *20 I 0 [4] or permission of the chairperson.

## SPAN 3665 The "New Historical Novel" in Argentina and Uruguay <br> 3 hours; 3 credits <br> 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.

Prerequisite: Spanish *20 I 0 [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.

Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [I7.50] 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.

Prerequisite: Spanish 2020 [II.I] or 2030 W or 3610 [I7.50] or permission of the chairperson.

## SPAN 3730 Moral and Religious Themes in Hispanic

 Literatures3 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.

Prerequisite: Spanish 2020 [II.I] or 2030 W or 3610 [I7.50] or permission of the chairperson.

## SPAN 3740 Historical and Social Visions in Hispanic

## 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.

Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [I7.50] 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.

Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [I7.50] 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.

Prerequisite: SPAN 2020 [II.I] or 2030 W 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.

Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [I7.50] 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.

Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [17.50] or permission of the chairperson.

## SPAN 3925 The Golden Age of Spanish Literature and the

 Arts3 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
Counter-Reformation, 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.

Prerequisite: Spanish 2020 [II.I] or 2030 W or 3610 [I7.50] 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.Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [I7.50] 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.

Prerequisite: Spanish 2020 [II.I] or 2030 W or 3610 [I7.50] 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.

Prerequisite: Spanish 2020 [II.I] or 2030W or 3610 [I7.50] 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.

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 creditsExamination 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.

Prerequisite: Spanish *20 I 0 [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.

Prerequisite: Spanish 2020 [II.I] or 2030 W or 3610 [I7.50] and two courses from Tiers II and/or III, or permission of the chairperson.

## SPAN 47I5 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.)

Prerequisite: Spanish 3610 [17.50] and two courses from Tiers lland/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.

Prerequisite: Spanish 2020 [II.I] 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.

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

I 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].

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

I 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.I].

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 | 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 |
| 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 2320 | Peer Tutoring II |
| RUSS 2420 | Fieldwork in Communities and Professional Environments I |
| RUSS 3350 | Teaching and Learning Language for Communication |
| RUSS 3901 | Modern Languages: Special Topics Minicourse |
| SPAN 2130 | Writing, Research, and Resources |
| SPAN 2310 | Peer Tutoring I(Spanish) |

SPAN 2320
SPAN 2355
SPAN 2410
SPAN 2420
SPAN 3350
SPAN 3901

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: 718.95I. 5286

## Full-time Faculty

Distinguished Professors: Atlas, Leon
Distinguished External Professor: Oppens
Professors: Allen, Barrett, Kawasaki, MacIntyre, Taylor, Washington
Associate Professors: Eckardt, Geers, Grubbs, Palmquist, Rothman
Assistant Professors: Bowyer, Davis, Jensen-Moulton
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 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 the Whitman Auditorium, and Woody Tanger Auditorium. By 2014 these facilities will be augmented by an additional 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 fully-staged 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-I2 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 I-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 I5-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 master's and doctoral degree programs offered by or in conjunction with this department.

## Core curriculum

The Conservatory of Music participates in the college's core curriculum through Core Curriculum II30. Students who have completed Music 3247 are exempt from Core Curriculum II 30.

## Placement in music courses

Admission to Music 32 II through 3243, 379I and ensemble courses Music 3700 through 378 I 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

Music is a writing intensive major.

Program requirements (48 credits plus foreign language or proficiency)
All of the following:
Music 32II, 3212, 3213, 3214 ( 8 credits)
Music 322I, 3222, 3223, 3224 ( 4 credits)
Music 323I and 3232, or 3235; 3233 or 3236; 3234 or 3237 (I2 credits)
Music II.2 or 324 I, I I. 3 or 3242 , I I. 4 or 3243 (I2 credits)
Music 4430 or 443 I or 4440 or 4450 or 4460 or 4470 ; and 379 I, 3792 (7 credits)
Two credits in ensemble performance from Music 3700 through 378I as assigned by the Conservatory of Music.
One seminar in music numbered in the 4900 s or a suitable advanced course in another department or program, approved in advance 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 composition HEGIS code 1004.10; SED program code 02019

Music is a writing intensive major.
Program requirements (66 credits plus foreign language or proficiency)

## All of the following:

Music $3211,3212,3213,3214$ (8 credits)
Music 322I, 3222, 3223, 3224 (4 credits)
Music 323I and 3232, or 3235; 3233 or 3236 ; 3234 or 3237 (I2 credits)
Music II.2 or 324I, II.3 or 3242, I I. 4 or 3243 (I2 credits)
Music 325I, 3252, 3253, 3254, 3255, 3256 (I8 credits)
Music 33 I 5 or 4360 ; 4430 or 443 I or 4440 or 4450 or 4460 or 4470 or one seminar in music numbered in the 4900 s; and both 379 I and 3792 (I0 credits);
Two credits in ensemble performance from Music 3700 through 378 I as assigned by the Conservatory of Music.
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 325 I through Music 3256), elective, and honors composition courses.

Students must submit a portfolio of work for review by a composition jury at the end of each semester of Music 3251-3256 or 4861-4862
(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 composition program is granted or denied.

All music courses offered to satisfy the requirements for a major in music must be completed with a grade of $C$ or higher.

## Program prerequisite

Students who do not demonstrate the performing proficiency required for admission to Music 379| must prepare to demonstrate proficiency in an audition not later than the beginning of their junior year.

## B.Mus. degree program in performance HEGIS code 1004; SED program code 02018

Music is a writing intensive major.
Program requirements (59 credits plus foreign language or proficiency)
All of the following
Music 32II, 32I2, 32I3,32I4 (8 credits)
Music 322I, 3222, 3223,3224 (4 credits)
Music 323I and 3232, or 3235 ; 3233 or 3236 ; 3234 or 3237 (I2 credits)
Music II. 2 or 324 I, II. 3 or 3242 , I I. 4 or 3243 (I2 credits)
Music 4430 or 443 I or 4440 or 4450 or 4460 or 4470 or one seminar in music numbered in the 4900 s. ( 3 credits); and
Music 379I, 3792, 3793, 3794, 3795, 3796 ( 12 credits).
Eight credits in ensemble performance from Music 3700 through 378I 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 484| (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 374I, 3742, 3743, 3780 or 378I (i.e., Contemporary Music Ensemble, Brass Ensemble, Woodwind Chamber Music, Jazz Ensemble 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

## B.Mus. degree program in music education <br> HEGIS code 0832; SED program code 26815

Adolescence education (grades $7-12$ ) and special subject programs are writing intensive.
Program requirements ( 88 credits plus foreign language or proficiency)

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 (57 credits)

Music 3211 , 3212, 3213, 3214 ( 8 credits)
Music 322I, 3222, 3223, 3224 (4 credits)
Music 323I and 3232, or 3235; 3233 or 3236; 3234 or 3237 (I2 credits)
Music II. 2 or 324 I, I I. 3 or 3242 , I I. 4 or 3243 (I2 credits)
Music 4430, 4431, or 4440, or a course in American or non-western cultures approved by the director of the Conservatory of Music (3 credits)
Music 3700-378I (as assigned by the Conservatory of Music) (6 credits)
Music 379I, 3792, 3793, 3794, 3795 and 3796 (I2 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 ( 1 credit)
Music 358I, 3582, and 3583 (9 credits)
Music 3590 (2 credits)
Music 3600-366I (4 credits chosen from these courses)
III. Education courses (|2 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 (I2 credits):
Secondary Education 200I and 2002 ( 6 credits).
Secondary Education 4413 (6 credits).
Music education majors must complete 12 credits in the Department of Secondary Education as specified above. In the case of music, the major must be in the Bachelor of Music in Music Education program in order to meet the state requirements. Music education majors should see above and consult the listing in the "Music" section in the Undergraduate Bulletin.

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.

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.

Admission requirements and academic standing
Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 200I, 2002, 340 I or 3402 ; an average of 2.75 in Secondary Education 200 I and 2002 is required to continue to Secondary Education 340 I and/or Secondary Education 3402.

To take Secondary Education 4413 or 440 I-4406, students must have an overall GPA of 2.75 or higher and permission of the chairperson or deputy of the Department of Secondary Education.

To take Secondary Education 4407-44I2, students must earn a B- or higher in Secondary Education $440 \mathrm{I}-4406$, a GPA of 2.75 or higher in their major, and the permission of the chairperson or deputy of the Department of Secondary Education.

A student who takes Secondary Education 4407-44I2 prior to Secondary Education 4401-4406 must earn a B- or better grade in 4407-44I2 to take Secondary Education 440I-4406.

Program recommendations
Music majors should complete Music 3211 and 322 I 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) and childhood education teacher (grades 1-6) programs are described in the "Education" section of 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):
One course chosen from Music 1400, $1500,3235$.
Four courses chosen from Music 3700 through 3781.
Two credits chosen from Music 32II, 322I, 3222, 3223, 3600, 366 I.
Five courses chosen from Music $2101,2102,2103,2104,2105,2106,3247,4440$.
Music 358 I 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 should fulfill the foreign language requirement in French, German, or Italian.

## Division of Graduate Studies

The Conservatory of Music offers the following graduate programs: master of arts degree program in music (concentration in musicology and in performance practice); 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 378I may be taken for credit each term the student is enrolled.

## 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.

## MUSC 210I 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 [24.3].

## 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 [50].

Prerequisite: Core Studies 2.2 or Core Curriculum II 30 [I.3] 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 [5I].

Prerequisite: Core Studies 2.2 or Core Curriculum II 30 [1.3] 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 [24.35].
Prerequisite: Core Studies 2.2 or Core Curriculum II 30 [I.3] 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 II 30 [I.3] or permission of the director.

## MUSC 2106 Popular Music and Technology

3 hours lecture; 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 [53]. (Not open to students who took Music 3493 [49.3] or American Studies 3902 [60] in Spring 2007).

Prerequisite: Core Studies 2.2, Core Curriculum II 30 [I.3], 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' self-conception. Examples drawn from early US drama, nineteenth-century 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 100 I 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 II 30 [I.3], or permission of the director.

## MUSC 32 I I 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.I. C grade or better required to progress to Music 32 I . 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 321 I. 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 32 I2, 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 322 I Keyboard workshop I

2 hours recitation, a minimum of 6 hours independent practice; I 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; I 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 322 I with a $C$ or better or placement examination.

## MUSC 3223 Keyboard Workshop III

I hour recitation, a minimum of 6 hours independent practice; | 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

I hour recitation, a minimum of 6 hours independent practice; | credit Continuation of 3223 [22.3]. Keyboard theory: altered chords and modulation. Twentieth-century idioms: clusters, serialism, mixed meters. Informal idioms: I2-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 $\mathbf{3 2 3 5}$ 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.I 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 322 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 augmented-sixth 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 324 IW Music History and Score Analysis I: Ancient Music through $\mathbf{1 7 5 0}$
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 II.2 or 24.1). May be retaken only once if not passed the first time.

Prerequisite: Music 32 II, 322 I, and Core Curriculum II 30 or Music 3247, and English IOI 2; 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 II. 3 or 24.2.) May be retaken only once if not passed the first time.

Prerequisites: Music $32 \mathrm{I} 2,3222,3235$; 324 I [24.I] or II.2; or permission of the director.

## MUSC 3243 Music History and Score Analysis III: <br> 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 II.4 or 24.3.) May be retaken only once if not passed the first time.

Prerequisites: Music 3213, 3223, 3236; 3242 [24.2] or II.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] and3235 [7.I] and English 1010 [I], and two core studies courses (Core Studies 2.1 and 4 or Core Curriculum 1120 and I220 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 6.1 and 7.1 and English *IO12 [2], and two core studies courses (Core Studies 2.1 and 4 or Core Curriculum II20 and 1220 are recommended); or permission of the director.

## MUSC 325I Composition I

2 hours lecture, I 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. I].)

Prerequisite: Music 69.2 or 3222 [22.2]; and permission of the director.

## MUSC $\mathbf{3 2 5 2}$ Composition II

2 hours lecture, I hour recitation, at least 6 hours independent work§;
3 credits
Continuation of Music 325I [25.1].
Prerequisite: Music 325I [25.1] and permission of the director.

## MUSC 3253 Composition III

2 hours lecture, I 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, I 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, I 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, I 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 Curriculum I I 30; or permission of instructor.

3 hours; 3 credits
Introduction to the tools of electro-acoustic music, including basic studio techniques, computer music, MIDI, and live electronic performance. Practical experience in composing in this medium and exposure to important works in this repertoire. (Not open to students who have completed Music 26.)

Prerequisite: permission of the director.

## MUSC 3262 Electro-Acoustic Music

3 hours; 3 credits
In-depth investigation of electronic music making, with special attention to tape composition, digital sound synthesis, MIDI software applications, live sound processing, and related performance techniques. Advanced practical experience and opportunities to compose in this medium.

Prerequisite: Music 26 or 326 [26.1] or permission of the director.

## 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 [2I.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. (Not open to students who completed Music 349। [49.1] in spring, I991, or summer, 1993.)

Prerequisite: permission of the director.

## MUSC 3335 The Mechanism and Maintenance of the Piano

## | hour, I 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]; 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 [2I.3], 7.3 or 3233 [23.3], and II.2 or 324 [24.1]; 361 I [61.1] or 362 [62.1]; and 3630 [63], 3640 [64], and 3650 [65]; or permission of the director.
Corequisite: Music 25 IO [5I]

## MUSC 349I Special Topics

| hour, I 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 367I 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 379। [79.1]-3796 [79.6], or 79.12-79.62, or 484। [84.1], or 4842 [84.2] or permission of the director. Corequisite: Music 379 I [79.1]-3796 [79.6], or 484। [84.I], 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. Corequisite: a course in the Music 3791-3796 or Music 484I-4847 sequence.

## 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 379। [79.1] (in piano, organ, or harpsichord) and permission of the director.

2 hours recitation, minimum 2 hours practicum; 3 credits Continuation of 368। [68.1]. (Not open to students who completed Music 3493 [49.3] in fall 2000.)

Prerequisite: Music 368 I [68.1] and 3792 [79.2] (in piano, organ, or harpsichord) and permission of the director.

## MUSC 3700 Opera Workshop

3 hours; I 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 3710 Choral Union

3 hours; I 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.

## MUSC 37 II Conservatory Singers

3 hours; I 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.

Prerequisite: audition.

## MUSC 3720 Percussion Ensemble

3 hours; I 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; I 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 $\mathbf{3 7 4 0}$ Chamber Music

3 hours; I 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 378। [78.1]; and permission of the director.

## MUSC 374I Contemporary Music Ensemble

3 hours; I 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; I 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; I credit
Study and performance of music for woodwind chamber ensembles. May be taken for credit each semester student is enrolled.

Prerequisite: audition.

## MUSC 3750 Orchestra

5 hours; I credit
Study and performance of literature for orchestra. May be taken for credit each semester student is enrolled.

Prerequisite: audition.

## MUSC 375I String Orchestra

3 hours; I 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; I 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; I credit
Performance of non-Western music scored for small groups. May be taken for credit each semester student is enrolled.

## MUSC 3780 Jazz Big Band

3 hours; I credit
Study and performance of old and new jazz literature. May be taken for credit each semester student is enrolled.

Prerequisite: audition.

## MUSC 378I Small Ensemble Jazz

3 hours; I 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 379I Performance I

2 hours lecture, I 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 321 I [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, I hour recitation, at least 8 hours independent work§; 2 credits
Continuation of Music 379। [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 II.2 or 324 I [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 378। [78.1]) as assigned through audition and permission of the director.

## MUSC 3793 Performance III

2 hours lecture, I 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 [II.I] or Core Curriculum II 30 [I.3]; 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 $\mathbf{3 7 9 4}$ Performance IV

2 hours lecture, I 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 II.2 or 324 I [24.I]; 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, I 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 $\mathbf{3 7 9 6}$ Performance VI

2 hours lecture, I 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].
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 [2I.4], 7.4 or 3234 [23.4] or 3237 , and 11.4 or 3243 [24.3]; or permission of the director.

## MUSC 443 I The Jazz Tradition

3 hours; 3 credits
Jazz history from its origins to the present. 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 [2I.4], 7.4 or 3234 [23.4] or 3237 , and 11.4 or 3243 [24.3]; or permission of the director.

## 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 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.

## Honors courses

## MUSC 484I Advanced Performance I

Minimum of 10 hours conference and independent work§; 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 378। [78.1]) as assigned through audition and permission of the director.

## MUSC 4842 Advanced Performance II

Minimum of 10 hours conference and independent work§; 3 credits Continuation of Music 484I [84.I]. Students must continue in voice or on the instrument studied in Music 484। [84.I].

Prerequisite: Music 4841 [84.1] and permission of the director. Corequisite: an ensemble course (Music 3700 [70] through 378। [78.1]) as assigned through audition and permission of the director.

## MUSC 486 I 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§; 3 credits Continuation of Music 486 [ [86.1].

Prerequisite: Music 486| [86.1] and permission of the director.

## MUSC 4865 Advanced Conducting I

Minimum of 9 hours independent work§, class meetings, and conference; 3 credits

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 [II.I] or 3241 [24.1]; and permission of the director.
Corequisite: an ensemble course (Music 3700 [70] through 378।
[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 583 I 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 585 I 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 587 I 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 588I Music Internship

3 hours; I 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 588। [88. I], 5882 [88.2], and 5883 [88.3] toward a degree.

Prerequisite: Music 6.3 or 3213 [2I.3], 7.3 or 3233 [23.3] or 3236, I I. 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 588 I [88. I], 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 588 I [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 II. 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 II.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 II.4 or 3243 [24.3] or permission of the director.

## MUSC 494I 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 II.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 [22.3].)

Prerequisite: one course in Philosophy or Core Studies 10 or Core Curriculum 1210 or one course in Music, or permission of the chairperson of the offering department.

## Music education

## MUSC 2510 Music Education Colloquium

## I 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 $\mathbf{2 5 2 0}$ Introduction to Music Education

2 hours; I 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 [5।].

## MUSC 3570 Teaching Music Concepts

I hour; I 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 61-66 series that entails field observations and fieldwork in the public schools.

Prerequisite: Music 6.1 or 321 I [21.1] and 7.1 or 3231 [23.1] or 3235 ; or permission of the director.
Corequisite: Music 2510 [5I]; and 361। [6I.I], 3621 [62.I], 3630 [63], 3640 [64], 3650 [65], or 366 I [66.I].

## MUSC 358I 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 [5I].

## 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 [5I].

## 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-I2), 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 358 I [58.1] or 3582 [58.2]; or permission of the director.
Corequisite: Music 2510 [5।].

## MUSC 3600 Voice Production

2 hours; I 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 324 I [II.2 or 24.1 ] or permission of the director.

## MUSC 36 I I String Class: Violin and Viola

3 hours; I 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 362 I String Class: Violoncello and Bass Viol

3 hours; I 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; I 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 $\mathbf{3 6 4 0}$ Brass Class

3 hours; I 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 $\mathbf{3 6 5 0}$ Percussion Class

3 hours; I 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 366 I Fretted Instrument Workshop

3 hours; I 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 3752 Theater Orchestra

## Philosophy

Department office: 3308 Boylan Hall
Phone: 718.951.531।

## Full-time Faculty

Professors: Chopra, Lurz, Moore, Nuzzo, Vasiliou
Visiting Professor: Krimsky
Associate Professors: Campos, Sinclair, Trivedi
Assistant Professors: Arlig, Gotlib, Menser, Steinberg, Vitrano
Lecturers: Repetti, Shottenkirk

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 I-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 Finance and 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 may apply to the doctoral degree program offered in conjunction with this department.

## Core curriculum

The Department of Philosophy participates in the College's core curriculum through Core Curriculum 1210 .

## B.A. degree program in philosophy HEGIS code I509; SED program code 02057

Philosophy is a writing-intensive major.
Department requirements ( $25-38$ credits)

## Option I: Philosophy

Recommended for students planning graduate study in philosophy and for others 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.

All of the following: Philosophy 3 III, 3 I2I, 3320, 340 I, 34 IO.

## Philosophy 354

Philosophy 3203 or 3204.
One additional Philosophy Department course numbered Philosophy 3101, or higher.

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 $3 \mathrm{I} 05,3320,34 \mathrm{I} 0,3703,3704,3740$.
Philosophy 3203 or 32 I 0 .
One of the following: Philosophy 3306 through 3317 or 3720 .

## 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, (I), (2), (3), and (4):
(1) Philosophy 3111 or 3121 .
(2) Philosophy 3203 or 3204 or 3210 or 3232.
(3) Philosophy 3320 or 350 I or 3704.
(4) Philosophy 340 I 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.
(I) One course chosen from Philosophy 3215 through 3239 or 3320 through 3329 or 3401 through 3429 or 350 I through 3799 or 3130 or 3805 .
(2) One course chosen from Philosophy 3101 through 3199 or 3620 through 3629 or 3502 or 3703.
(3) One course chosen from Philosophy 330 I through 3317 or 3422 or 3520 or 3720 or 3805.
C. One of the following, (I) or (2) or (3) or (4) below:
(I) 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, II 00, 2050, 2100, 2500, 3510,

(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 or 32 I 0 .
B) Philosophy $340 \mathrm{I}, 34 \mathrm{I} 0,3422$, or 3530 .
C) Philosophy 3 I23, 3I 30, 3I4I, or 3703 .
D) Philosophy 3704 or 3740 .
E) Philosophy 3305 through 3317 , or 3145 , or 3720 .

One of the following groups, either Marketing/Management or Finance:

- Marketing/Management:

All of the following: Business 3240 or Psychology 3172; Business 3I00, 3130, 3200.

- Finance:

Accounting 200I and either Business 3400 or Economics 3400.
Two of the following: Economics 3320, Business 3310 or 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 $\mathrm{A}, \mathrm{B}, \mathrm{C}$ and D below.
A. All of the following: Philosophy 3 I I I, 3|2I, 3320.

One of: Philosophy 3203 or 3204.
One of: Philosophy 340I or 34 I 0 .
B. One course chosen from group (I), 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.
(I) One of: Philosophy 32I5, 3220, 340 I through 3429, 3530, 360I, 36I0, 36II, 362I; and
(2) One of: Philosophy 3 III through 3I59, 350I, 35I2, 3702, 3703, 3704, 3730, 3740.
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 5101 or 5102 or 5110 or 5 III .
D. A student must have an academic index of 3.50 or higher in philosophy courses taken to satisfy the major.

## 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 350 I or 3502.
Two of the following: Philosophy 3315,35 II, 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 360 I or 3620 .
One of the following: Philosophy 3203 or 3204 or 3232.
One of the following: Philosophy 3421, 3610, 361।, 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

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Department requirements (15 credits)
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Each course may be used to satisfy only one requirement below.
I. One of: Philosophy 370 I or Philosophy 3702.
2. Three courses selected as follows:

At least one of the following: Philosophy 371 I or 3714 or 342 I or 3712 .
Not more than one of the following: Philosophy 370I, 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 and Archaeology, Economics, Education, History, Political Science, Puerto Rican and Latino Studies, Psychology, Sociology, Women's 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, 323I, 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, 373I, 3805.
Philosophy 3310 and 3320.

Two courses chosen from the following: Philosophy 3307, 3309, 3314, 33I5, 3316,3317,33I8W,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, requiring 12 to 13 credits in advanced electives.

All of the following:
Philosophy 3422, Computer and Information Science IIIO, Psychology I000, Psychology 3530.
One from each of the following groups, a) and b):
a) Philosophy $3123,3401,3410,3420$, or 360 I.
b) Computer and Information Science I4I0 or 34IO, or Philosophy 3423, or Psychology 3580.

## Minor in Corporate Social Responsibility

An interdepartmental minor, offered by the Department of Finance and Business Management and the Department of Philosophy.
All of the following: Business 3245 or Business 3250 or Women's Studies 3345; Business 325 I or Philosophy 3335; Philosophy 33।4; Philosophy 3307 or Philosophy 3309 or Philosophy 33 I 0.

Any two of the following: Accounting 320I, Business 32 I 0, Business 3220, Classics 3233, Economics 3252, Business 3020 or Judaic Studies 3205; Philosophy 33I0, Philosophy 3315 or Communication 3200, Philosophy 33 I8W 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 3I60, 3I55; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 330I, [76.I], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 3140, 3170, 3185; English 3194; Judaic Studies 3017 ; Philosophy 3702; Political Science 334I; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's 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 Studies 3328
d. Media and Communications in a Global Context

Anthropology 3I 80; Film 213I; Philosophy 3315; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; 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) and childhood education teacher (grades 1-6) programs are described in the "Education" section of 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 32 I0, $3306,37 \mathrm{II} ; 3 \mathrm{I} 30$ or 3703 ; 350 I or 35 II .
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 $3|||, 3|| 2,3| 13,3| | 4,3|2|, 3 \mid 22$.
c) Philosophy 34 IO, 360I, 370I, 3730 .

Option B:
Philosophy 3III, 3121, 3210, 3320, 34I0, 3703, 3704; 3306 or 371 I.

## 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 develop reading comprehension in at least one of the following languages: French, German, Greek, Latin.

## Division of Graduate Studies

The Philosophy Department offers graduate courses for students in other fields. For information, students should consult the department chairperson. A Graduate Bulletin may be obtained in the Office of Admissions.

## Courses

Advanced courses include Philosophy Department courses numbered 310I 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

## Problems/issues of philosophy

## PHIL 210I 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. (Not open to students who are enrolled in or have completed Philosophy 1.2 or 3105 [2] or Core Studies IO.)

## Core areas of philosophy

## 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 3 II I 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 II.)

## PHIL 3 II 2 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 3II3 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 3I2I 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 I2.)

## PHIL 3 I 22 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 3 I 23 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 and philosophical movements in American philosophy. Such authors as Peirce, James, Dewey, Royce, C.I. Lewis, Whitehead. (Not open to students who have completed Philosophy 48.)

Prerequisite: One course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## PHIL 314I 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.

Prerequisite: one course in Philosophy or Core Curriculum 1210 [2.1].

## 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.

Prerequisite: a Philosophy Department course or Core Studies 10 or Core Curriculum 1210 [2.1].

## 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. Twentieth-century Marxists such as Lukacs, Habermas, Korsch, Althusser, Marcuse.

One course in philosophy or Core Curriculum 1210 .

## 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. Godelean 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 32IIW Reasoning

4 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. Writing-intensive section.

Prerequisite: English 1012 [2].
PHIL 3215 Reasoning and Rationality

3 hours; 3 credits
Theoretical investigation of reasoning and rationality. Advanced treatment of some topics in logic and critical thinking, including missing premises, the principle of charity, pragmatics, fallacies, contrasts between inductive and deductive logic, and scientific reasoning. Study of logics--modal, epistemic, paraconsistent--besides classical. Puzzles in social choice reasoning--Prisoner's Dilemma. Study of a relevant historical work or author such as Aristotle's writings on logic and rhetoric. Debates in cognitive science on rationality, rules in reasoning, or change of belief.

## 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 [I3] or 3204 [33], or an equivalent logic course or permission of the chairperson.

## PHIL 323 I Decision Theory

## 3 hours; 3 credits

Introduction to the theory of individual, group and social decision-making. 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.

Prerequisite: one philosophy course or Core Studies 10 or Core Curriculum 1210 [2.1] or permission of the chairperson.

## 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 well-being. 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.

Prerequisite: a Philosophy Department course, or Core Studies IO, or Core Curriculum 1210 [2.1], or permission of the chairperson.

## 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 Curriculum 1210 [2.1].

## 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 [23].)

Prerequisite: One course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1]; or one course in communication, information, or the media, or permission of the Chairperson of the Philosophy department.

## PHIL 3316 Medical Ethics

3 hours; 3 credits
Analysis and discussion of problems concerning the physician-patient relationship, life and death, medicine on a social scale. (Not open to students who have completed Philosophy 24.)

Prerequisite: One course in philosophy, or Core Studies I0, Core Curriculum 1210 [2.1], or permission of the chairperson.

## PHIL 3317 Ethical Issues in Biology

3 hours; 3 credits
Study of selected issues in current biological research with special attention to the moral and ethical considerations involved.

Prerequisite: Core Studies 8 .I or its equivalent, or Core Curriculum I 32 I [3.2 I] or its equivalent, or Core Studies 10 or Core Curriculum 1210 [2.1], or one course in philosophy or permission of the chairperson.

## PHIL 33 I8W Computers and Ethics

3 hours lecture; 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 [I2W].)

Prerequisite: Core 5.1 or Core Curriculum 1312 [3.12] or Computer and Information I. 0 or Computer and Information Science *I I IO [1.5], 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 and radio. Case histories and role playing provide value judgments concerning entertainment, information, and advertising functions of mass media.
This course is the same as Television and Radio 3223 [23]. (Not open to students who have completed Philosophy 24.I.)

Prerequisite: Television and Radio II 65 [6.5]; Philosophy 3306 [6] or Core Studies 10 or Core Curriculum 1210 [2.1].

## 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 333 I Happiness and the Meaning of Life

3 Hours; 3 Credits
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 inter-disciplinary empirical research on happiness; a variety of approaches to the philosophical issue of the meaning of life. Classic and contemporary readings.

Prerequisite: One philosophy course or Core Curriculum 1210 [2.1].

## 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 Economics 40.8.

Prerequisite: Philosophy 3314 [14] or permission of the chairperson.

## Metaphysics, epistemology, philosophy of mind

## PHIL 340 I 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.
Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2. I].

PHIL 342 I 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.

Prerequisite: One course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1] or permission of the chairperson.

## 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.

Prerequisite: Core Curriculum 1210 [2.1], or Core Studies 10, or one course in philosophy, or a course in computer and information science, or a psychology course, or permission of the chairperson.

## 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 [IO] and Psychology 3580 [57.2]. (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.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## PHIL 3502 Philosophy of Beauty

## 3 hours; 3 credits

Concept of beauty in history of philosophy; Beauty in 18 th 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.

Prerequisite: one course in Philosophy or Core Studies 10 or Core

Curriculum 1210 [2.1].

## PHIL 35 I I 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.

Prerequisite: Core Studies 10, or Core Curriculum 1210 [2.1] or a course in philosophy or literature, or permission of the chairperson.

## 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 [96].)

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.

## 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.

Prerequisite: one course in Philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## 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: a Philosophy Department course or Core Studies 10 or Core Curriculum 1210 [2.1].

## Philosophy and the sciences

## PHIL 360I 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.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## 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.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## 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 36 I I 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.

Prerequisite: Core Studies 8.1 or its equivalent, or Core Curriculum 1321 [3.2 I] or its equivalent, or Core Studies 10, or Core Curriculum 1210 [2.1], or one course in philosophy or permission of the chairperson.

## 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 362 I 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 0.I7.

Prerequisite: Core Studies 7.2 or its equivalent, or Core Curriculum 1331 [3.31] 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 $\mathbf{3 7 0 1}$ 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: a Philosophy Department course 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 avant-garde, 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.

Prerequisite: one Philosophy department course or Core Curriculum 1210 [2.1] or permission of the chairperson.

## 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.)

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## 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.)

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## PHIL 37II 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.)

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## 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.

Prerequisite: One course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## 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 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 Studies 3135 [47].

Prerequisite: Core Curriculum I2IO [2.1], or Core Studies IO, or one philosophy course, or one women's studies course, or permission of the chairperson.

## PHIL 372I 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.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## PHIL 3723 African-American Philosophy

3 hours; 3 credits
Exploration of some of the central philosophical issues in African-American 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.

Prerequisite: one philosophy course or Core Curriculum 1210 [2.1].

## 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.

Prerequisite: one course in philosophy or Core Curriculum 1210 [2.1].

## 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

Prerequisite: one Philosophy department course or Core Curriculum 1210

## 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.

Prerequisite: one course in philosophy or Core Studies 10 or Core Curriculum 1210 [2.1].

## PHIL 373 I 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 $\mathbf{3 7 4 0}$ Philosophy of Law

3 hours; 3 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.

Prerequisite: a Philosophy Department course or Core Studies 10 or Core Curriculum 1210 [2.1].

## Internship/professional training

## PHIL 3920 Internship in Applied Philosophy I

I 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 392 I Internship in Philosophy II

I 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 4I05 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.

Prerequisite: completion of a program, approved by the chairperson, of advanced Philosophy Department courses and permission of the chairperson.

## PHIL 4IIO Seminar in the History of Philosophy

3 hours and independent work§; 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.

Prerequisite: completion of a program, approved by the chairperson, of advanced courses in philosophy and permission of the chairperson.

## PHIL 4I 20 Interdepartmental Humanities Seminar

3 hours; 3 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 [74.7], Comparative Literature 4602 [74.7], English 4| 12 [74.7].

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.

## Honors seminars

## Problems/issues of philosophy

## PHIL 5IOI Seminar I

3 hours; 3 credits

An honors seminar on a problem in philosophy. Topics vary and reflect the interests of faculty and students.

Prerequisite: Juniors and seniors only; and at least one course in philosophy.

## PHIL 5102 Seminar II

3 hours; 3 credits
An honors seminar on a problem in philosophy. Topics vary and reflect the interests of faculty and students.

Prerequisite: Juniors and seniors only; and at least one course in philosophy

## History of philosophy

## PHIL 5IIO Seminar I

3 hours; 3 credits
An honors seminar on an outstanding philosophic thinker. Philosophers selected vary and reflect the interests of faculty and students.

Prerequisite: Juniors and seniors only; and at least one course in philosophy.

## PHIL 5III Seminar II

3 hours; 3 credits
An honors seminar on an outstanding philosophic thinker. Philosophers selected vary and reflect the interests of faculty and students.

Prerequisite: Juniors and seniors only; and at least one course in philosophy.

## Independent study

## Areas of philosophy

## PHIL 520I 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.

## Philosophy 366

Prerequisite: completion of a program, approved by the chairperson, of advanced Philosophy Department courses and permission of the instructor or the chairperson.

## Physical Education and Exercise Science

Department office: 428 West Quad
Phone: 718.951.55।4

## Full-time Faculty

Professors: Dunbar, Johnson, Michielli
Associate Professors: Leung, Zeng
Assistant Professors: Burden, Smith
Instructor: Chow
Lecturer: Grillo

The Department of Physical Education and Exercise Science offers three separate undergraduate degree programs:

* Bachelor of Science in Exercise Science
* Bachelor of Science in Physical Education - Teacher Education (all grades)
* Bachelor of Science in Physical Education - Adaptive Physical Education

The educational programs in the Department have undergone significant revisions with the publication of this bulletin. The new requirements are pending New York State Education Department approval as of August 2012. Students matriculating under earlier bulletins are encouraged to explore their options for either switching to the new requirements specified in the following sections for their respective program or, at the minimum, substituting the new sport and physical activity classes (course sequence $3010-3050$ ) for sport and physical activity classes required in previous bulletins (I000 and 2000 level courses).

## Course substitutions or changing to current program requirements from previous program requirements:

Students majoring in any of the Department of Physical Education and Exercise Science's programs may formally petition the Chair (or the Chair's designee) of the department to deviate from the course requirements specified below provided they have a sound and logical reason for making the request. Likewise, the Chair (or the Chair's designee) has the sole authority to approve/grant appropriate course substitutions for students majoring in the department's programs. Students completing comparable courses in earlier years and/or under earlier degree requirements from Brooklyn College or who desire to transfer comparable courses from other accredited colleges/universities may petition the Chair (or the Chair's designee) for approval.

Students having completed Physical Education and Exercise Science 327I Human Anatomy or Physical Education and Exercise Science 3275 Human Physiology in previous terms at Brooklyn College may substitute these courses automatically for Physical Education and Exercise Science 328 I and Physical Education and Exercise Science 3285. Likewise, students having completed PEES 328I and/or 3285 in the Summer 2012 term may substitute this course sequence for PEES 327 I and 3275 as required in past bulletins.

Students who are matriculating under previous Brooklyn College Undergraduate Bulletins and who are in partial fulfillment of the sport and physical activity requirements of that earlier program may petition the Chair (or the Chair's designee) to substitute those courses for the new sport and physical activity course sequence (Physical Education and Exercise Science 30I0, 3020, 3030, 3040, 3050).

Students who are matriculating under previous Brooklyn College Undergraduate Bulletins and who are required to complete 21 hours of coursework in the Department of Secondary Education may petition the Chair (or the Chair's designee) to substitute Physical Education and Exercise Science 340 I, 3402 and 44 I2 for Secondary Education 340I, 3402, 4406 and 44 I2, respectively. Students in the Physical Education Teacher Education program must complete Secondary Education 200 I and 2002.

## B.S. degree program in exercise science HEGIS code I299.30; SED program code 32345

Students in Exercise Science have many opportunities for practical hands-on experience with laboratory equipment and in testing and measuring in our human performance labs. This focus area provides a strong background for individuals preparing for graduate work in exercise physiology, medicine, physical and occupational therapy, or to become a physician's assistant, or enter other health-related professions.

Students should consult with a pre-health professions advisor to ascertain specific courses necessary to meet the requirements for the particular specialty in which they are interested.

Individuals completing the exercise science program will also meet many of the educational eligibility requirements of the American College of Sports Medicine for certification as a health/fitness instructor, health/fitness director, and/or preventive and rehabilitative exercise specialist.

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 3.0 or greater in required Department of Physical Education and Exercise Science coursework to graduate.

Degree requirements (60 credits)
All of the following:
Physical Education and Exercise Science 2500, 3000, 3005, 3060, 3I50, 328I, 3285, 3290, 3295, 4200W, 4250, 4260, 4400, 4402, 4500, 45I0, 4520, 4760.

Health and Nutrition Sciences 2210 .
Chemistry 1100.
Physics 1100.
Department honors
To qualify for honors in Physical Education or 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: PEES 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 and the Chair of the Department of Physical Education and Exercise Science.

## B.S. degree program in physical education - adaptive physical education HEGIS code 0835; SED program code 02006

The Physical Education - Adaptive Physical Education program prepares students to work with people who have a physical or cognitive disability. Students learn how to adapt sport and physical activities for these populations. They spend one semester observing and interning in settings outside the College community. Students completing particular course work in the program may apply to BlazeSports America for recognition as a Certified Disability Sport Specialist (CDSS).

Students must have a minimum overall grade point average of 2.5 to declare a major in Physical Education - Adaptive Physical Education. Students must maintain a minimum overall grade point average of 2.5 to remain a major in the program. Likewise, Physical Education - Adaptive Physical Education majors must have a grade point average of 3.0 or greater in required Department of Physical Education coursework to graduate.

Program Requirements (60 credits)
Physical Education and Exercise Science II $20,2500,3000,3005,30|0,3020,3030,3040,3050,3060,3080,3| I 5,3|50,328|, 3285,3290,3295$,
4200W, 4250, 4750.
Competency in swimming.
Competency may be demonstrated by either of the following:
(i) Completion of PEES 1120 Swimming
(ii) Successful completion of the departmental swimming test. Consult the department office for details and dates.
(iii) Current Red Cross certification as a Lifeguard or Water Safety Instructor

Department honors
To qualify for honors in Physical Education or 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: PEES 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 and the Chair of the Department of Physical Education and Exercise Science.

## 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 a number of pedagogical courses and a wide range of sport and physical activity courses in addition to theoretical and exercise science classes. In their senior year, they must complete student teaching with experiences at both the elementary school and secondary school levels. In collaboration with the Departments of Secondary Education and Childhood and Special Education, the program is designed in cooperation with the liberal arts and sciences faculties and in consultation with local schools so that our students may develop the knowledge and proficiencies needed to work with New York City's racially, ethnically, and linguistically diverse student population. Graduates of our physical education teacher education program are assistant principals in many of the public schools in Brooklyn and make up a large percentage of the faculty in the borough's physical education departments.

Students must have a minimum overall grade point average of 2.5 to declare a major in Physical Education - Teacher Education. Students must maintain a minimum overall grade point average of 2.5 to remain a major in the program. Physical Education - Teacher Education majors must have a grade point
average of 3.0 or greater in required Department of Physical Education and Exercise Science coursework to graduate. Physical Education Teacher Education majors must also meet all Education requirements to register for Education classes and to be admitted as a Teacher Education candidate. See requirements for details.

Adolescence education (grades 7-12) and special subject programs are writing intensive.
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department. Degree programs in adolescence education and in special subjects include a major in an appropriate department of the college. Completion of a special subjects program as part of a major in physical education qualifies students for New York State initial certification in special subjects for all grades.

Program Requirements (78 credits)
Physical Education and Exercise Science II20\#, 2500, 3000, 3005, $30|0,3020,3030,3040,3050,3060,3080,3| 05,3|I 5,3| 50,328 \mid, 3285,3290$, 3295, $340 \mathrm{I}, 3402,4200 \mathrm{~W}, 4250,44 \mathrm{I} 2$.

Secondary Education 200I, 2002 and 3456/Childhood and Special Education 200I, 2002 and 3456.
\# Competency in swimming
Competency may be demonstrated by any of the following:
(i) Completion of PEES 1120 Swimming
(ii) Successful completion of the departmental swimming test. Consult the department office for details and dates.
(iii) Current Red Cross certification as a Lifeguard or Water Safety Instructor

Admission requirements and academic standing for Teacher Education
Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take Physical Education 340 I or 3402 or Secondary Education 2001 and 2002/Childhood and Special Education 200 I and 2002;
an average of 2.75 in Secondary Education 200 I and 2002/Childhood and Special Education 200 I and 2002 is required to continue to Physical Education 340I and/or 3402;
to take Physical Education 4412, students must have an overall GPA of 2.75 or higher and permission of the Chairperson or designee of the Department of Physical Education and Exercise Science.

## Department honors

To qualify for honors in Physical Education or 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: PEES 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 and the Chair of the Department of Physical Education and Exercise Science.

## Departmental Minor(s)

## Minor in Physical Education

## Department Requirements

Physical Education 1507 or 2016 and a program of 12 credits of advanced courses in physical education, each completed with a grade of C or higher, including at least one course each from a) and b) and c) and d).
a) Physical Education 321 I , 32I3, 3021, 3271.
b) Physical Education 3024, 2135, 2136, 37.
c) Physical Education 3321, 3322, 3323.
d) Physical Education $2|3|, 2|12,2||3,2| 14,2|22,2| 23,2|24,33,2| 7|, 2| 9|, 2| 92,53,55,2|56,57 .|, 2| 58$.

## Minor in Physical Education - Exercise Science

## Department Requirements

Physical Education 327I or Health and Nutrition Sciences 2300; Physical Education 3275; and any two of the following: Physical Education 32II, 32I3, 302I, 3023, 4229, 423I.

Each of these courses must be passed with a grade of $C$ or higher.

## 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 physical education, a major must maintain a scholastic index of at least 3.50 in all advanced work in the major; and satisfactorily complete the following: Physical Education 5082 and 5083; or Physical Education 5082 or 5083 plus honors work in an advanced elective in the department. In addition, the student must have the recommendation of the Physical Education Department.

## Division of Graduate Studies

The Department of Physical Education and Exercise Science offers a master of science in physical education with an area of concentration in sports management, a master of science in exercise science and rehabilitation, and a master of science in education program for physical education teacher (K-12). For information, students should consult the department's deputy for graduate study. A Graduate Bulletin may be obtained in the Office of Admissions.

## Courses

*Courses marked with an asterisk $\left({ }^{*}\right)$ 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 physical education marked (+) may be counted toward the bachelor of arts degree by students who are not physical education 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.

## Skills courses

## PEES *+ I 100 Fitness and Conditioning

2 hours; 2 credits
A beginning experience in general physical fitness and conditioning, including aerobic and resistance training activities.

## PEES *+ IIOI 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.

## PEES *+ll 102 Weight/Resistance Training

2 hours; 2 credits
A beginning experience in physical fitness and conditioning utilizing weights and other forms of resistance training activities.

## PEES *+ 1105 Self-Defense

2 hours; 2 credits
A beginning experience in basic self-defense activities.

## PEES *+ I I 10 Tennis

## 2 hours; 2 credits

This course is designed to provide students a beginning experience in tennis (singles and doubles).

2 hours; 2 credits
This course is designed to provide students a beginning experience in racquetball (singles and doubles).

## PEES *+lll5 Basketball

2 hours; 2 credits
A beginning experience in basketball.

## PEES *+ I I 6 Soccer

2 hours; 2 credits
A beginning experience in soccer.

## PEES *+ 1117 Volleyball

2 hours; 2 credits
A beginning experience in volleyball.

## PEES *+ll20 Swimming

2 hours; 2 credits
A beginning experience in swimming.

## PEES *+l|25 Ballroom Dance

2 hours; 2 credits
A beginning experience in ballroom dance.

## PEES *+l|30 Pilates

2 hours; 2 credits
A beginning experience in pilates and how to train for it.

## PEES *+ll3I Yoga

2 hours; 2 credits
A beginning experience in yoga and how to teach it.

## PEES *+2002 Introduction to Modern Dance I

4 hours; 3 credits
Introduction to the basic elements of modern dance technique and how to teach them.

## PEES *+2003 Modern Dance II

4 hours; 3 credits
Intermediate elements of modern dance technique. Continuation of Physical Education and Exercise Science 2002.

## PEES *+2004 Independent Study in Dance

## | hour; | credit

Research, observation and critique of dance performance(s) associated with historically significant dance choreographers and/or performers from recorded media archives.

## PEES *+20 I I Lifeguarding

I 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 a current American Red Cross certificate for first aid and for cardiopulmonary resuscitation; and the ability to swim continuously 500 yards.

## PEES *+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 Department of Physical Education and Exercise Science majors for the degree.

## Physical education courses

## PEES 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 Department of Physical Education and Exercise Science majors for the degree.

## PEES 3003 Orientation to Physical Education and Exercise

 Science3 hours; 3 credits
Designed to provide physical education and exercise science majors with a professional orientation and introduction to the breadth of the field of physical education and exercise science in schools, industry, and community agencies.

## PEES *+3004 Fundamentals of Physical Conditioning

I 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 3275 [22.75], candidacy for the B.S. degree with a major in physical education, or permission of the instructor.

## PEES 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 Department of Physical Education and Exercise Science majors for this course. Certification may be earned.

## PEES *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.

## PEES 3010 Performance/Analysis I: Foundational Movement Skills and Dance

## 3 hours; 3 credits

Students develop knowledge and skill in designing and implementing basic movement skills and rhythmical/dance activities. Emphasis is placed on the ability to analyze and instruct the associated movement skills. A minimum grade of $C$ is required for this course is required for the degree.

## PEES 3020 Performance/Analysis 2: Fitness/Lifetime <br> Activity

2 hours; 2 credits
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. A minimum grade of $C$ in this course is required for the degree.

## PEES 3030 Performance/Analysis 3: Team Sports

4 hours; 4 credits

Students develop knowledge and skills in various team sports (e.g., soccer, volleyball, baseball, softball, flag football, basketball) offered in P-I2 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 for the degree.

## PEES 3040 Performance/Analysis 4: Dual and Lifetime Sports <br> \section*{2 hours; 2 credits}

Development of knowledge and skills in various lifetime individual and dual sports (e.g., tennis, badminton, golf, bowling, archery, racquetball) offered in P-I 2 school curriculums. Emphasis on producing competent performers, as well as developing the ability to analyze and teach the associated movement skills. A minimum grade of $C$ in this course is required for the degree.

## PEES 3050 Performance/Analysis 5: Disability Sport and Physical Activity

## 3 hours; 3 credits

Students will participate first hand in games and activities derived from the field of disability sport. Specifically, students will learn the fundamental skills, rules, and strategies necessary to play, coach, and develop programs for individuals with disabilities in some of the following sports: wheelchair basketball, wheelchair tennis, wheelchair rugby, goalball, and boccia. A minimum grade of $C$ in this course is required for the degree.

## PEES 3060 Methods of Evaluation in Kinesiology

## 2 hours; 2 credits

Elementary statistical techniques applied to tests and measurements. Historical background and evaluation of tests including those designated to measure health attitudes and knowledge, physical fitness, and neuromuscular proficiency (Not open to students who are enrolled in or have completed Health Science 3300). A minimum grade of " C " in this course is required of Department of Physical Education and Exercise Science majors for the degree.

## PEES 3075 Evaluation in Physical Education

## 3 hours; 3 credits

Elementary statistical techniques applied to tests and measurements. Historical background and evaluation of tests including those designated to measure health attitudes and knowledge, physical fitness, and neuromuscular proficiency. (Not open to students who are enrolled in or have completed Health Science 3300 [60].)

Prerequisite: candidacy for a B.S. degree with a major in physical education or permission of the chairperson; and junior or senior standing; and eight credits in advanced courses in the Department of Physical Education.

## PEES $\mathbf{3 0 8 0}$ Field Experience

3 hours; 2 credits
Experience in an area of the student's expressed professional objective in which the student participates and observes behavior in a setting outside the college community. 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 or disability sport and physical activity and sophomore/junior standing.
Co-requisite: Physical Education and Exercise Science 3000.

## PEES 3105 Instructional Skills and Strategies in Health and Physical Education

3 hours; 3 credits
Introduction to effective classroom management, teaching skills, and instructional models for health and physical education in grades $\mathrm{K}-\mathrm{I} 2$. Field experiences are included in selected K - 12 classrooms. A minimum grade of " C " is required of Department of Physical Education and Exercise Science majors for this course.

Prerequisites: Permission of the UG Deputy or Chair or completion of the 30I0-50 or 30I0-3050 Performance/Analysis I-5 course sequence with grades of C or better in all.
Co-requisite: Physical Education and Exercise Science 3080.

## PEES 31IO Instructional Strategies in Physical Education

 (K-I2)2 hours lecture, 2 hours laboratory; 3 credits
Designed for students in the physical education teacher (K-12)
program. Generic teaching strategies and techniques. Develops students' capabilities to meet the Interstate New Teacher Assessment and Support Consortium and the National Association for Sport and Physical Education (200I) standards.

Prerequisite: Sophomore or above, major in physical education.

## PEES 3II5 Disability Sport, Physical Activity and Recreation for People with Disabilities

3 hours; 3 credits
The structure, function, and outcome of the disability sport movement in the United States and internationally, including its impact on opportunities, current trends, behaviors, and attitudes towards persons with disabilities. Teaching strategies and skills. Exploration of physical activity and recreational pursuits for people with disabilities. Students completing this course with a grade of C or better may receive a Certified Disability Sport Specialist I (CDSS I) designation from BlazeSports America if they choose to apply. A minimum grade of "C" in this course is required of Department of Physical Education and Exercise Science majors for the degree.

Prerequisites: Permission of the Undergraduate Deputy Chair or completion of the 3010-50 or 3710-3750 Performance/Analysis I-5 course sequence, all with grades of $C$ or better.

## PEES 3150 Digital Technology in Kinesiology

2 hours lecture/lab; I 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 4250. Skills acquired in this class are important for success in Physical Education and Exercise Science 4250, 4260, 4750, 4760, 4406 or Secondary Education 4406, and Physical Education and Exercise Science 4412 or Secondary Education 4412.

## PEES 32II Movement Perspectives

3 hours; 3 credits
Consideration of various theoretical aspects of physical education, sports, and dance. Theory and practice through movement.

## PEES 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.

## PEES 327I 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 [22.7I]. (Not open to students who are enrolled in or have completed Biology 6.1 or 6.2.)

Prerequisite: one of the following: Biology I, 3, Chemistry 0.4, I I 00 [I], I.5, I 040 [5], Core Studies 7.1, 8.1.

## PEES 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.)

## PEES 328 I Human Anatomy and Physiology I

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 I50I, and Health and Nutrition Sciences 2302.

Prerequisite: I) 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

## PEES 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 blood, heart, blood vessels, respiratory system, digestive system, metabolism, urinary system, fluid and electrolyte balance, reproductive system, immune system and development. This course is the same as Anthropology and Arcxhaeology 3266, Biology I502, and Health and Nutrition Science 2303.

Prerequisite: One of the following: Anthropology and Archaeology 3265, Biology I50I. Health and Nutrition Sciences 2302 or Physical Education and Exercise Science 328I.

## PEES 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 Physical Education and Exercise Science majors for this course. Lab fee applies.

Prerequisite: Physical Education and Exercise Science 328I and 3285, each with a minimum grade of $C$, or the equivalent.

## PEES 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 Physical Education and Exercise Science majors for this course.

Prerequisite: Physical Education and Exercise Science 328I and 3285, each with a grade of C , or the equivalent.

## PEES 332I 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 [I], Education 48.I, 58.I, 60.I, permission of the chairperson.

## PEES 3322 Recreational Therapy

21/2 hours lecture, I hour fieldwork; 3 credits
Overview of recreational therapy programs and services for the disabled. Program planning for schools, institutions, and the community.

Prerequisite: Physical Education 7 or permission of the chairperson.

## PEES 3323 Activities for the Mentally Retarded

2I/2 hours lecture, I hour fieldwork; 3 credits
Characteristics and needs of people who are mentally retarded.
Physical education and recreational activities programs. Methods of teaching basic motor skills and movement perception.

## PEES 340 I 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 Department of Physical Education and Exercise Science majors for the degree.

Prerequisite: Secondary Education/Childhood and Special Education 2001 and 2002.

PEES 3402 Integrative and Multidisciplinary Teaching and Learning in Physical Education
4 hours recitation, 25 hours field experience; 3 credits
Principles for integrating multidisciplinary, multicultural, and aesthetic perspectives into the curriculum through physical education. Relating skills, knowledge, and instructional technology associated with physical education through connecting themes, issues, and activities. Innovative and alternative research-based models and practices for inclusive settings, special education, reading, and writing across the curriculum. A
minimum grade of " B " is required of Department of Physical Education and Exercise Science majors for this course.

Prerequisite: Secondary Education/Childhood and Special Education 2001 and 2002;
Prerequisite or Corequisite Physical Education and Exercise Science 3401.

## PEES 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 Department of Physical Education and Exercise Science majors for this course. Lab fee applies.

Prerequisite: Physical Education and Exercise Science 328I and 3285 (with a grade of C or better in each) or the equivalent; English *|012.

## PEES 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 327I [22.71] and 3275 [22.75] or the equivalent.

## PEES 4230W 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. Writing-intensive course.

Prerequisite: Physical Education 327। [22.71] and 3275 [22.75] or the equivalent; English *1012 [2].

## PEES 423I 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: Physical Education 3004, 328I or both 327 I and 3275, 4229.

Prerequisite or corequisite: Physical Education 3075 and 3285.

## PEES 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 Physical Education and Exercise Science majors for this course. Lab fee applies.

Prerequisite: Physical Education and Exercise Science 328I and 3285 (with a grade of C or better) or the equivalent, Physical Education and

Exercise Science 3890 (with a grade of C or better).
Co-requisite: Physical Education and Exercise Science 4200W.

## PEES 425 I Applied Anatomy and Kinesiology

3 hours; 3 credits
Mechanical principles of human motion; macroscopic analysis of bones and muscles; joint leverage and limitations; type of muscular contraction and relations of muscular efficiency to posture; analysis of motor activities.

Prerequisite: Physical Education 32 I I [ I I ] and 3275 [22.75] or the equivalent of the courses.

## PEES 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 Physical Education and Exercise Science majors for the degree.

Prerequisite: cumulative GPA of 2.5 or higher and Physical Education and Exercise Science 4250 (with a grade of $C$ or better) and Physics 1100 .

## PEES 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 Physical Education and Exercise Science majors for this course.

Prerequisite: cumulative GPA of 2.5 or higher and Physical Education and Exercise Science 4200W (with a grade of C or better).

## PEES 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 Physical Education and Exercise Science majors for this course. Lab fee applies.

Prerequisite: cumulative GPA of 2.5 or higher and Physical Education and Exercise Science 4200W (with a grade of C or better).

## PEES 44I2 Advanced Seminar on Methods of Teaching Inclusive Physical Education, Student Teaching

2 hours weekly seminar, weekly supervised teaching (full semester, 5 days/week for full school day); 12 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 and secondary schools. 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 Physical Education 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 disabilities,
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 observe, develop, and study Physical Education curriculum in light of teaching experiences and observations. Theories and methods of teaching inclusive 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 disabilities, 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: permission of the chairperson of the Department of Physical Education and Exercise Science (or the department chair's designee); Physical Education and Exercise Science 3401 unless otherwise specified by the Department of Physical Education and Exercise Science; Physical Education and Exercise Science 3402 unless otherwise specified by the Department of Physical Education and Exercise Science and approval of the department chair (or the department chair's designee).

## PEES 4421 Field Experience I

2 hours; I credit
Experience in an area of the student's expressed professional objective in which the student participates and observes behavior in a setting outside the college community. A student who has had community experience in another course, such as Physical Education 3070 [70], may ask to be excused. It is recommended that this course be taken in the sophomore year.

Prerequisite: candidacy for a B.S. degree with a major in physical education and sophomore standing.

## PEES 4422 Field Experience II

## 2 hours; I credit

In-service experience in an area of the student's expressed professional objective, within the college setting. Students should consult a counselor before registration.

Prerequisite: all of the following: candidacy for a B.S. degree with a major in physical education, junior or senior standing, permission of the chairperson, a department average of 2.70 or higher in physical education courses, a scholastic index of 2.00 or higher.

## PEES 4500 Psychology of Physical Activity

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 Department of Physical Education and Exercise Science majors for the degree.

Prerequisite: cumulative GPA of 2.5 or higher.

## PEES 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 Physical Education and Exercise Science majors for the degree.

Prerequisite: cumulative GPA of 2.5 or higher and Physical Education and Exercise Science 4200 W and 4250 (with a grade of C or better in each).

## PEES 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 Physical Education and Exercise Science majors for the degree.

Prerequisite: cumulative GPA of 2.5 or higher and Physical Education and Exercise Science 4200 W and 4250 (with a grade of C or better in each).

## PEES 4750 Internship in Disability Sport and Physical

 Activity30 hours; 10 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.

## PEES 4760 Internship in Exercise Science

30 hours; 10 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.

## Honors courses

## PEES 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 Physical Education and Exercise Science 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.

## PEES 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. Conferences. Report or term paper.

Prerequisite: senior standing and an index of 3.00 or higher in physical education courses and a scholastic index of 2.50 or higher and

# Physical Education and Exercise Science 

permission of the chairperson.
PEES 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. Design, test, and evaluation of research data. Report or term paper.

Prerequisite: all of the following: Physical Education 3072 [72], senior standing, an index of 3.00 or higher in physical education courses, a scholastic index of 2.70 or higher, permission of the chairperson.

## Physics

Department office: 3438 Ingersoll Hall
Phone: 718.951.5418

## Full-time Faculty

Professors: Bond, Franco, Liou, Sahni, Schwartz, Tomkiewicz, Tung
Associate Professors: Boutis, Miyano, Shum
Assistant Professors: Giovambattista, Nakarmi, Suarez

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.

The Department of Physics proudly hosts the coordinated engineering program and the engineering honors program. In these programs, students complete their first two years of study at Brooklyn College towards a degree in electrical, computer, mechanical, chemical, biomedical, civil, or environmental engineering. They then transfer to one of the cooperating engineering schools, which are Polytechnic University, City College of New York, and the College of Staten Island, or to a school of their choice to complete their engineering degrees.

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.

## Core curriculum

The Department of Physics participates in the College's core curriculum through Core Curriculum 1331.

## 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 Program

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 0207 I

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 I/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 $3550,4900 \mathrm{~W}, 5500$.
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 c and d .
e) Chemistry 1100 and 2100 ; or Chemistry 1050, 2050, and 2100 .
f) Mathematics I20I and I206.

## 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 (76-77 I/ 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.

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 120 I and 1206 .
f) Biology 1001 .
g) Earth and Environmental Sciences 1100 or Earth and Environmental Sciences 1200.

The following pedagogical courses in the Department of Secondary Education: SEED 200I, 2002, 340I, 3402, 4404, 44I0, 3456 (total of 24 credits).
This four-term sequence may be started in the lower-sophomore term, or upper-sophomore term.
SEED 200I, 2002, 340I, 3402 (I2 credits).
The appropriate 5 -credit course in student teaching:
SEED 4404 Seminar on Methods of Teaching Science, Student Teaching I
The appropriate 4-credit course in student teaching:
SEED 4410 Advanced Seminar on Methods of Teaching Science, Student Teaching II
Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking SEED 3454.

Students, except music education majors, must complete 24 credits in the Department of Secondary Education as specified above.

Admission requirements and academic standing
Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take SEED 200I, 2002, 340I or 3402; an average of 2.75 in SEED 200 I and 2002 is required to continue to SEED 340 I and/or 3402; to take SEED 44 I 3 or $440 \mathrm{I}-4406$, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take SEED 4407-4406, students must earn a B- or higher in SEED 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes SEED 4407-44I2 prior to SEED 440I-4406 must earn a B- or better grade in SEED 4407-44I2 to take SEED 440I-4406.

## B.S. degree programs in physics HEGIS code 1902; SED program code 02070

Sequence for students planning graduate work toward a Ph.D. degree in physics or astronomy.

## Department requirements (66 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 II50, $2150,3100,4000,3900,3950,3350,4100,4200,4300,4350,4900 \mathrm{~W}$; Chemistry 1100 and 2100 ; Computer and Information Science IIIO or I.IO or I.20; Mathematics I20I and I206 and 220I, and 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, geology, mathematics, physics, and psychology.
B) Courses marked with a number sign (\#) in the Department of Health and Nutrition Sciences.
C) ---Anthropology and Archaeology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470, 4665.
----Core Studies 5, 5.I, 5.2, 7.I, 7.2, 8.I, 8.2.
---Core Curriculum I 300 through 1399
----Core Curriculum 330I through 3399
---Economics 3400, 44I0, 34I0, 4422.
---Philosophy 3203, 3204, 323I, 3232, 3422, 3423, 360I, 3605, 36 I 0.
---Physical Education 3023, 327I, 3275, 328I, 3285, 4229, 425 I.
---Sociology 2701.

## Departmental Minor(s)

## Minor in Physics

## Department Requirements

## Physics 1100 or 1150 ; Physics 2100 or 2150 ; Math 1201

At least I2 credits of advanced electives in physics. All courses must be completed at Brooklyn College with a grade of C- or better.

## Division of 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 $\left({ }^{*}\right)$ 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 *II00 General Physics I

3 hours lecture, I 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 *| | | | [|. | ], *| | | 2 [ I.2], *| | 50 [ I.5].)

Prerequisite: a grade of C or higher in Mathematics *|0|| [2.9] or I026 [2.92] or in any mathematics course numbered higher than 1026 [2.92]; or placement in Mathematics *I20। [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 *I। II [I.I] and *। II2 [I.2] instead of Physics *। I 00 [I].

## PHYS *IIII General Physics IA

3 hours; 2 credits
Introduction to mechanics with more introductory material than is
 constitute a two-term sequence intended for students who are not prepared for Physics *II00 [I]. (Not open to students who are enrolled in or have completed Physics 0.7 or II 00 [I] or II 50 [I.5].)

Prerequisite: a grade of C or higher in Mathematics *10।। [2.9] or 1026 [2.92] or in any mathematics course numbered higher than 1026 [2.92]; or placement in Mathematics *|20। [3.3] on the basis of the calculus placement test.

## PHYS *III2 General Physics IB

4 hours lecture, 3 hours laboratory; 4 credits
Continuation of Physics *|||| [|.|] and an introduction to heat and sound. Students who complete this course with a grade of C or higher may register for Physics *2I 00 [2]. (Not open to students who are enrolled in or have completed Physics *I I 00 [I] or I I50 [I.5].)

Prerequisite: a grade of C or higher in Physics *। | | | [1.|].

## PHYS *II50 General Physics I

3 hours lecture, I 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 *। 100 [I]


Prerequisite or corequisite: Mathematics *I 206 [4.3].

## PHYS *II90 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 *10|| [2.9] or in any mathematics course numbered higher than III2 [2.9]; or placement in Mathematics *| 20 I [3.3] on the basis of the calculus placement test.

## Second semester introductory courses

## PHYS *2100 General Physics II

3 hours lecture, I 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 *2 150 [2.5].)

Prerequisite: Physics *| I 00 [1] or I I 50 [I.5]; or Physics *। | | 2 [I.2] with a grade of C or higher.

## PHYS *2I50 General Physics II

3 hours lecture, I 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 *2 100 [2].)

Prerequisite: a grade of C or higher in Physics *। 150 [1.5] and in Mathematics *I 206 [4.3].
Prerequisite or corequisite: Mathematics *220I [5.3].

## Survey and service courses

## 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 |33| [3.31] or its equivalent.

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 *I050 [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 |33| [3.31] or its equivalent.

Courses for physics majors \& pre-engineering stud.

## 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.I.)

Prerequisite: Physics *2 150 [2.5]; or Physics *2 100 [2] and Mathematics * I 206 [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 II or II.I or 4100 [61.2].)

Prerequisite: Physics *। 150 [I.5] or permission of the chairperson. Prerequisite or corequisite: Mathematics *220I [5.3].

## PHYS 3300 Electric Circuits

4 hours; 4 credits
Passive and active circuit elements. Voltage, current, and power. Kirchhoff's laws; mesh and node analysis. Thevenin's and Norton's theorems. Source-free and forced RL, RC, and RLC circuits. (Not open to students who are enrolled in or have completed Physics 13 or 13.1 or 4200 [61.5].)

Prerequisite: Physics *2I50 [2.5].
Prerequisite or corequisite: Mathematics 2206 [13].

## PHYS $\mathbf{3 5 0 0}$ 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 *2 100 [2] and Mathematics *I20I [3.3], or Physics *2 150 [2.5].

## PHYS $\mathbf{3 5 5 0}$ 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 *2 100 [2] and Mathematics *I201 [3.3], or Physics *2 150 [2.5].

PHYS $\mathbf{3 6 0 0}$ 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.IW].

## PHYS $\mathbf{3 6 5 0}$ Issues in Physics and Society

2 hours; 2 credits
A technical and quantitative study of one of these issues: I) 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 3100 [I0.5] and 4900W [67.IW].

## PHYS $\mathbf{3 7 0 0}$ 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 [I0.5] and 4900W [67.IW].

## PHYS $\mathbf{3 8 0 0}$ 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 basic electrical measurements and instruments. Experiments in analog electronics and uses of electronic equipment.

Prerequisite: Physics *2 100 [2] or 2150 [2.5].

## PHYS $\mathbf{3 9 5 0}$ 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 *2I50 [2.5].
Prerequisite or corequisite: Mathematics 2206 [13].

## PHYS 4I00 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 *2 150 [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 Statistical Physics

3 hours; 3 credits
Thermodynamic-state functions; 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 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 *10।2 [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.

Prerequisite of 5700 [88. I]: completion of an approved program of advanced 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 of 5750 [88.2]: 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 of 5800 [83.1]: 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 of 5850 [83.2]: 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 5I50 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 3 I 00 [I0.5], 3950 [I9], and 4900W [67.I].

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 4500 Solid-state Physics
PHYS 4950 Advanced Laboratory II

## Political Science

Department office: 3413 James Hall
Phone: 718.951.5306

## Full-time Faculty

Professors: Bermanzohn, Currah, Ness, Okome, Theoharis, Ungar, Wilson
Visiting Professor: Nieves
Associate Professors: Alonso, Johnson, Law, London, Robin, Su
Assistant Professors: Arnold, Estey, Ha

The goal of the Brooklyn College Department of Political Science is to equip our students to live and serve in a globally interdependent and rapidly changing world. To this end, we teach our students about the structure and operation of politics and power, and provide them with the knowledge and skills that will help them succeed at their chosen careers. We seek to develop our students' sense of social responsibility by encouraging their involvement in community and public service, both through our course work and through our internship program. 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 and an interdisciplinary minor in law and society.

Political science courses enable students to understand political organizations in the U.S. and the world in their historical, social, and economic contexts. We teach our students to develop the critical skills and practical capabilities necessary to improve the human condition and to become an active participant in political life. Drawing on the diversity of the borough of Brooklyn, we strive to foster a learning environment conducive to the discussion of an array of perspectives and views.

Students taking political science courses learn to understand and apply frameworks for comparing nation-states; address social and political problems, issues, and conflicts; and place U.S. political processes and governmental institutions in the context of a complex world. Students also study the potential limitations of national and international institutions grappling with the issues of war, violence, and inequality as well as develop an understanding of such fundamental political concepts as democracy, equality, and justice. Political science students acquire the skills necessary for a normative critique of the structures of government and politics.

Our students go on to work in law, think tanks, branches of government, businesses, nonprofits, and public and private schools and colleges. 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.

## Core curriculum

The Department of Political Science participates in the college's core curriculum through Core Curriculum 1230.

## B.A. degree program in political science HEGIS code 2207; SED program code 02109

This is a writing intensive program.

Department requirements ( 30 credits)
I. Political Science *I00| or *I002.
2. All of the following: Political Science 3012 W , Political Science 3014 W , and Political Science 4000 W . Political Science 4000 W is a capstone seminar to be taken in the senior year.
3. A total of five courses chosen from the following fields in political science plus any prerequisite of the courses: American and urban politics; international politics; comparative politics; political theory and methodology. One special topics course, Political Science 350 I , and one independent research chosen from Political Science 500 I or 5002, may be included as one of the five courses.

## B.A. degree program in adolescence education: social studies teacher HEGIS code 220I.0I; SED program code 26754

Adolescence education (grades 7-I2) and special subject programs are writing intensive.

Program requirements
Students who wish to pursue a bachelor of arts degree in adolescence 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.

The following pedagogical courses in the Department of Secondary Education: SEED 200 I, 2002, 340 I, 3402, 4402, 4408, 3456 (total of 24 credits):
This four-term sequence may be started in the lower-sophomore term or upper-sophomore term.
SEED 200I, 2002, 340I, 3402 (I2 credits).
The appropriate 5-credit course in student teaching:
SEED 4402 Seminar on Methods of Teaching Social Studies, Student Teaching I
The appropriate 4-credit course in student teaching:
SEED 4408 Advanced Seminar on Methods of Teaching Social Studies, Student Teaching II
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department.
Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking Education 3454.

Students, except music education majors, must complete 24 credits in the School of Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take SEED 2001, 2002, 340I or 3402; an average of 2.75 in SEED 200 I and 2002 is required to continue to SEED 340 I and/or 3402; to take SEED 4413 or 440 I-4406, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take SEED 4407-4406, students must earn a B- or higher in SEED 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes SEED 4407-44I2 prior to SEED 4401-4406 must earn a B- or better grade in SEED 4407-44I2 to take SEED 440I-4406.

## 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 3I60, 3 I55; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 330 I, [76. I], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 3140, 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 Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 22 15, 3130 , 3395; Children and Youth Studies 3110 ; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2I3I; Philosophy 33I5; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; Philosophy

## Political Science

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, 333I; Anthropology 3I60, 3162; Classics 3234; Political Science 3I20, 3 I23, 3 I22, 3240; Sociology 3503, 3504.
Courses in anthropology and archaeology 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) and childhood education teacher (grades 1-6) programs are described in the "Education" section of 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 and 1002

Twenty-four credits of advanced electives chosen from courses listed in the following five fields. Students must select at least one course from each field.

American and Urban Politics: Political Science 3I40, 3I42, 3I52, $3102,3|03,3| 04,3|50,3| 44,3 \mid 60$.
International Politics: Political Science 320I, 324I, 322I, 3202, 3242, 3203, 3243.
Comparative Politics: Political Science 330I, 3304, 3306, 3307, 3308, 3305.
Political Theory and Methodology: Political Science 3404, 3440, 344 I.
Seminars: An advanced seminar in political science.

## Department honors

Students who want to qualify for honors in political science must have an average of 3.50 or higher in all politicalscience courses, except Political Science IOOI or I002, and a grade of A- or higher in a seminar. All course work eligible for consideration for department honors must be taken at Brooklyn College.

Prospective graduate students in political science should develop reading comprehension in at least one foreign language given at the College.

## Division of 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. 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.
§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.

## Required writing intensive courses

## POLS 30I2W 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: Political Science *| 00 I [1.5 I] or 1002 [I.7] or Core Curriculum 1230 [2.3] or Core Studies 3.

## 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: Political Science *| 00 | [1.5 |] or 1002 [I.7] or Core Curriculum 1230 [2.3].

## 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 [2.3] or Political Science * 1001 [1.5।] or 1002 [1.7].

## POLS $\mathbf{3 1 0 2}$ 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 [2.3] or Political Science *I00। [1.5I] or 1002 [I.7].

## 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 [2.3] or Political Science *I00। [1.5I] or 1002 [I.7].

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 [2.3] or Political Science *I00। [1.5I] or 1002 [I.7].

## 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 Curriculum 1230 or Political Science 100 I or 1002.

## 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 I230 [2.3] or Political Science *I00I [1.5I] or 1002 [I.7].

## 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 [2.3] or Political Science *100I [1.5I] or 1002 [I.7].

## POLS 3I2I 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 [2.3] or Political Science *I 00 I [1.5I] or I002 [1.7].

## POLS 3I22 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 [2.3] or Political Science * 1001 [1.51] or 1002 [1.7].

## POLS 3 I23 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 [2.3] or Political Science *I00I [1.5I] or 1002 [I.7].

## 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 350 I [60. I]: Fall 2006 or Spring 2008.)

Prerequisite: Political Science * $00 \mid$ [1.5।].

## 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 [2.3] or Political Science *I00। [1.5I] or I002 [1.7].

## POLS 314I 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: two of the following courses: Core Studies 3 or Core Curriculum 1230 [2.3] or Core Studies 4 or Core Curriculum 1220 [2.2] or Core Studies 9 or Core Curriculum 3201-3208 [20.01-20.99].

## 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 [2.3] or Political Science *I00। [1.5I] or 1002 [1.7].

## POLS 3143 Community Power Analysis

3 hours; 3 credits
Nature and distribution of power in American communities. Power and political change. Discussion of community power literature.

Prerequisite: Core Studies 3 or Core Curriculum 1230 [2.3] or Political Science *100। [1.5I] or 1002 [I.7].

## 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 [2.3] or Political Science *100। [1.5I] or 1002 [1.7].

## 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 [2.3] or Political Science *I00। [1.5I] or I002 [1.7].

## POLS 315I 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 [12.9].

Prerequisite: Core Studies 3 or Core Curriculum I220 [2.2] or I 230 [2.3].

## 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 Studies 335। [39].

Prerequisite: Core Studies 3 or Core Curriculum 1230 [2.3] or Political Science *I00। [1.5I] or I002 [1.7].

## 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 Studies 3353 [63].

Prerequisite or corequisite: Political Science *। 00 | [1.5I] or Political Science * 1002 [I.7] or Core Curriculum 1230 [2.3].

## POLS 3 I 54 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 [2.3] or Political Science * 100 I [1.5I] or 1002 [1.7].

## 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 21 st century. This course is the same as Women's Studies 3330 [6I].

Prerequisite or corequisite: Political Science * 100 I [1.51] or Political Science * 002 [I.7] or Core Curriculum 1230 [2.3].

## 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 [17].

Prerequisite: Political Science *100I [1.5I] or Political Science *I002
[I.7] or Core Curriculum 1230 [2.3] or Religion 3003 [1. I] or Religion 3005 [1.2].

## 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 [2.3] or Political Science *I00। [1.5I] or 1002 [1.7].

## International politics

## POLS 3201 Basic Factors 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 [2.3] or Political Science *I00। [1.5I] or I002 [1.7].

## 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 [2.3] or Political Science *I00। [1.5I] or 1002 [I.7].

## 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 [2.3] or Political Science *I00। [1.5I] or 1002 [1.7].

## POLS 322I 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 [2.3] or Political Science *I00। [1.5I] or 1002 [I.7].

## 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 [2.3] or Political Science *I00। [1.5I] or 1002 [I.7].

## POLS 324I 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 [2.3] or Political Science *I00I [I.5I] or 1002 [I.7].

## 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 [2.3] or Political Science *I 00 I [1.5I] or 1002 [1.7].

## 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 I230 [2.3] or Political Science *I00। [1.5I] or 1002 [I.7].

## POLS 3244 Political Economy 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 sub-national basis. Class will examine thematic and political-economic interpretations and theories of migration in the contemporary era.

Prerequisite: Core Curriculum I 230 or Political Science I 00 I or 1002

## 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 [2.3] or Political Science * 100 I [1.5I] or 1002 [I.7].

## POLS 3302 Comparative Political Systems: Europe

3 hours; 3 credits
Comparative study of political institutions, processes, and behavior in selected West European political systems.

Prerequisite: Core Studies 3 or Core Curriculum 1230 [2.3] or Political Science * 100 I [1.5I] or 1002 [1.7].

## 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 [2.3] or Political Science *I00I [1.5I] or 1002 [I.7].

## 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 [2.3] or Political Science *I00। [1.5I] or 1002 [I.7].

## 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 [17.4].

Prerequisite: one of the following: Core Studies 3, Core Curriculum I 230 [2.3], Political Science *I 00 I [I.5 I], I.7; Africana Studies 5, I7, 3140 [17.3].

## 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 [12.4]. (Not open to students who have completed Africana Studies 2.4 or Afro-American Studies 3324 [4I].)

Prerequisite: Core Studies 3 or Core Curriculum 1230 [2.3] or Political Science *100। [1.5I] or 1002 [1.7].

## 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 [2.3] or Political Science *100। [1.5I] or 1002 [1.7].

## 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 [2.3] or Political Science *I00। [1.5I] or 1002 [I.7].

## 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 [2.3] or Political Science * 100 I [1.5I] or 1002 [I.7].

## POLS 334I 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 Studies 3357 [77.3].)

Prerequisites: Political Science *। 002 [I.7] or Women Studies I00| [12].

## 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 I230 [2.3] or Political Science *I00I [1.5I] or 1002 [I.7].

## 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.

Political Science *100| [I.5I] or Political Science *1002 [I.7] or Core Curriculum 1230 [2.3].

## 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 on the relationship between happiness and policies.

Prerequisite: Core Curriculum 1230 or Political Science 100 I or 1002.

## Political theory and methodology

## POLS 340 I 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 [2.3] or Political Science *100I [1.5I] or 1002 [I.7].

## 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 [2.3] or Political Science *I00। [1.5I] or 1002 [I.7].

## 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, ntiracist, postcolonial, pluralist, democratic, and poststructuralist political theory.

Prerequisite: Core Studies 3 or Core Curriculum 1230 [2.3] or Political Science *I00। [1.5I] or 1002 [I.7].

## 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 [2.3] or Political Science *I00। [1.5I] or 1002 [I.7].

## 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 [2.3] or Political Science *I00। [1.5I] or 1002 [I.7].

## POLS 34II 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 Studies 3356 [40].

Prerequisite: Core Studies 3 or Core Curriculum 1230 [2.3] or Political Science *I 00 I [1.5I] or I002 [1.7].

## 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 [44.9] and Women's Studies 3447 [49].

Prerequisite: Core Studies 3 or or Core Curriculum 1230 [2.3] or Core Studies 9 or Core Curriculum I 230 [2.3],or Political Science *। 00 I [1.5I] or 1002 [I.7], or Africana Studies 1001 [0.I 2], or Women's Studies 10.7 or 1001 [12].

## 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 [3].

Prerequisite: Political Science *100| [1.5I] or Political Science *। 002 [1.7] or Core Curriculum 1230 [2.3] or Religion 3003 [1.1] or Religion 3005 [1.2].

## POLS 34I5 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: Political Science I001 or 1002 or Health and Nutrition Sciences 2140 or Core Curriculum 1230

## 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 [2.3] or Political Science *I00। [1.5I] or 1002 [1.7].

## POLS 342I 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 [2.3] or Political Science * 1001 [1.51] or 1002 [1.7].

## 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 350 I [51.I].)

Prerequisite: Core Studies 3 or Core Curriculum 1230 [2.3] or Political Science * 100 I [1.5I] or 1002 [1.7].

## 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 [2.3].

## POLS 344 I 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 [2.3] or Political Science *I00। [1.5I] or 1002 [1.7].

## 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 Studies 3354 [4I].)

Prerequisite: Core Studies 3 or Core Curriculum I230 [2.3] or Political Science *I00। [1.5I] or I002 [1.7].

## 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 [2.3] or Political Science *I00। [1.5I] or 1002 [1.7].

## 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 [2.3] or Political Science *I00I [1.5I] or 1002 [1.7].

## 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: one of the following: Political Science *|00| [1.5।], or 1002 [1.7].

## Seminars

## 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.

Prerequisites: Political Science *100। [I.5I] or I 002 [I.7], and 3012 W $[12 \mathrm{~W}]$ or $3014 \mathrm{~W}[14 \mathrm{~W}]$.

## Internship courses

## POLS 360I New York State Legislature Internship I

4 hours lectures and conferences; 4 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: Political Science 1.5 or 100 I [1.5I] or I.6; and permission of the chairperson.
Corequisite: Political Science 3602 [20. I 2].

## POLS $\mathbf{3 6 0 2}$ New York State Legislature Internship II

## 30 hours fieldwork; 8 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: Political Science * 100 I [1.5 I] or I 002 [I.7], and permission of the chairperson.

## 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 urban-related field assignment. Required paper.

Prerequisite: junior or senior standing or permission of the chairperson.

## POLS 36II 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 urban-related field assignment. Required paper.

Prerequisite: junior or senior standing or permission of the chairperson; and Political Science 3610 [75.5].

## Honors courses

## POLS 500 I 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

## POLS 5003 Tutorial I, II

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

## Psychology

Department office: 5401 James Hall
Phone: 718.951.560।

## Full-time Faculty

Distinguished Professor: Sclafani
Professors: Abramov, Brauner, Delamater, Erdelyi, Ghirlanda, Hainline, Hardin, Hass, Kozbelt, Kuhlman, Osman, Owen, Pipe, Romer, Sclafani, Snadowsky
Associate Professors: Chanowitz, Grasso, Kurylo, McDonough, Rabin, Walder, Weston
Assistant Professors: Carmichael, Chua, Crump, Gao, Kacinik, Reigada, Robles
Lecturers: Chalmers, Miles

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, 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.

Internships may be arranged with courts, psychiatric hospitals, legal agencies, schools, and social welfare agencies. These experiences 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 excellent laboratories in the areas of animal learning, physiological psychology, human perception, sensory physiology, behavior genetics, human learning and cognition, and social, developmental, and organizational psychology.

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 or in conjunction with this department.

## B.A. degree program in psychology HEGIS code 2001 ; SED program code 02096

## Department requirements (a minimum of 29-31 credits)

All of the following: A) and B) and C) and D)
A) Psychology 1000,3400 , and 3450 W .
B) Two of the following: Psychology $2100,2300,2600,28$ IO, either (but not both) 2200 or 2210 .
C) One of the following: Psychology 35 I0 or 3520 or 3530 or 3540 or 3600 or 3670 .
D) Three additional advanced electives in psychology. No more than one of the following courses may be used to satisfy this requirement: Psychology
500 I, $5002,5003,5004,50 I I, 50 I 2,5013,5014$.
Advanced courses are any courses numbered 3000 and above.

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 no later than the lower-senior term. For courses requiring permission of the chairperson as a prerequisite, permission should be obtained before registration.

## B.S. degree program in psychology HEGIS code 200 I; SED program code 02098

Department requirements (a minimum of 29-3I credits)
All of the following: $A$ ) and $B$ ) and $C$ ) and $D$ ).
A) Psychology 1000, 3400, and 3450W.
B) Two of the following: Psychology $2100,2300,2600,2810$, either (but not both) 2200 or 2210 .
C) One of the following: Psychology 3510 or 3520 or 3530 or 3540 or 3600 or 3670 .
D) Three additional advanced electives in psychology. No more than one of the following courses may be used to satisfy this requirement: Psychology $500 \mathrm{I}, 5002,5003,5004,50 \mathrm{II}, 50 \mathrm{I} 2,50 \mathrm{I} 3,50 \mathrm{I} 4$.
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; 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, geology, mathematics, physics, and psychology.
B) Courses marked with a number sign (\#) in the Department of Health and Nutrition Sciences.
C) ---Anthropology and Archaeology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470, 4665.
----Core Studies 5, 5.I, 5.2, 7.I, 7.2, 8.I, 8.2.
---Core Curriculum 1300 through 1399
---Core Curriculum 3301 through 3399
----Economics 3400, 44I0, 34I0, 4422.
---Philosophy 3203, 3204, 323I, 3232, 3422, 3423, 360I, 3605, 3610.
---Physical Education 3023, 327I, 3275, 328।, 3285, 4229, 425 I.
----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 3450 W requirement no later than the lower-senior term. 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, requiring 12 to 13 credits in advanced electives.

All of the following:
Philosophy 3422, Computer and Information Science II I O, Psychology I000, Psychology 3530.
One from each of the following groups, a) and b):
a) Philosophy $3123,3401,3410,3420$, or 3601 .
b) Computer and Information Science 14 I 0 or 34 I 0 , 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: Interdisciplinary minor, offered by the departments of Psychology and Biology; requiring $18-2 \mid$ credits including 12
advanced credits each completed with a grade of C- or higher. At least 6 of the advanced credits must be completed at Brooklyn College. Two of
the advanced electives courses cannot be used to satisfy the requirements of both the minor and the major. Students who do not major in psychology are strongly encouraged to also take Psychology 3400 or Mathematics 450 I.

Courses:
All of the following:
Psychology 2600 Mind, Brain, and Behavior;
Psychology 2610 Neurobiology / Biology 2020 Neurobiology
Psychology 3600 Introduction to Physiological Psychology
Three of the following:
Psychology 3660 Drugs and Behavior,
Psychology 3670 Comparative Psychology;
Psychology 3680 Human Neuropsychology;
Psychology 4690 Special Topics in Biopsychology (cross-listed with Biology 5020); requires approval of the Chair of Psychology or Biology.
Note that the prerequisite for Psychology 2600 is one of the following: Psychology I or Psychology I000 or Psychology 40 I9 or Health and Nutrition Sciences 2300 or Physical Education 327I. Therefore, students who otherwise would not take any of these courses will have to complete 21 credits for the minor.

## Concentration(s) for majors in early childhood and childhood education teacher programs

## Psychology

The requirements for early childhood education teacher (birth-grade 2) and childhood education teacher (grades I-6) programs are described in the "Education" section of 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 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.

## Concentration requirements:

Psychology 1000, 2100, 22I0, 28I0, 3220.
At least I5 credits chosen from the following: Psychology 3 II $0,3180,3230,3270,3240,4220,38 \mathrm{I} 0,3820$ or $3830,336 \mathrm{I}$ or $3362,3400,3825$, $35 \mathrm{I} 0,3520,3530,3600,3700$.

## Division of 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 may be viewed online.

## 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 with superior records and the recommendation of an instructor in the department of psychology may apply to the chairperson for permission to register for honors courses. Students may not register for more than six credits in honors courses in the department in one term and may not receive credit for more than four honors courses.

## 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 I 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], I230 [2.3], 320 I [20.0 I]- 3209 [20.09].

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

I 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 209। [9.1] and 2092 [9.2], but only for projects in different broad areas.)

Prerequisite: Psychology I or 1000 [1.I] 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.I] 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 I 000 [I.I] or 2.

## PSYC 3IIO 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 [17].)

Prerequisite: Psychology 2100 [10] or 2210 [20] or Communication 1001 [1].

## 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 317I Introduction to Industrial and Organizational

 Psychology3 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 [40.3]. (Not open to students who have completed Economics 40.3.)

Prerequisite: Economics 2100 [IO.I] or Psychology 2100 [IO].

## PSYC 3174 Organizational Diagnosis and Intervention

45 hours; 3 credits
An evaluation of methods of organizational diagnosis and intervention. Organizations, both private and public, suffer psychological problems that can be seen as analogs of the problems of individuals. This course focuses on methods of clinical diagnosis and intervention/therapy for groups and organizations. Psychoanalytic and psychodynamic approaches are stressed.

Prerequisite: Psychology 2100 or permission of the chairperson.

## 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 21 II [30].)

Prerequisite: Psychology 1000 [1.1] and at least one of the following: Psychology 2100 [I0], 2300 [30.2], or 3600 [65.I]. Students who have completed Health and Nutrition Sciences II 00 [6. I] may enroll with permission of the chairperson of the Department of Psychology.

## 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.I.)

Prerequisite: Psychology 2100 [10] and permission of the chairperson.

## Developmental psychology

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 I 000 [I.I] 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 I000 [I.I] and either Psychology 2200 or 2210 [20] or 2810 [30] or Education 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 $\mathbf{3 2 6 0}$ 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: one of the following: Psychology 2200 or 2210 [20] or 25 or Health and Nutrition Sciences 2170 [3I]; and Psychology 2810 [30].

## PSYC 4210 Field Experience in Child Psychology

I hour lecture, 6 hours fieldwork; 3 credits
Fieldwork and observation of children in a variety of group settings. (Not open to students who have completed Psychology 27.)

Prerequisite: Psychology 2210 [20] 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 I 35 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 I000 [1.I] or 2.

## PSYC $\mathbf{3 3 0 0}$ 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 336I Psychological Study of Women

3 hours; 3 credits
Survey of theory and research. Sex roles and stereotypes.
Development of sex differences. Psychological consequences of socialization. Theories of female personality. Ways in which psychotherapists view women. Women's movement as a social psychological phenomenon. (Not open to students who have completed Psychology 8.)

Prerequisite: Psychology I000 [1.I] or 2.

## PSYC 3362 Psychology of Masculinity

## 3 hours; 3 credits

Socialization and acquisition of the male sex role, gender identity, and sex role learning; norms and stereotypes of masculinity; physical and hormonal factors; effects of role on mental and physical health.

Prerequisite: Psychology 1000 [I.I] or 2 or Health and Nutrition Sciences 218। [35] or Health Science 2181 [35].

## 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 I or 1000 [I. I] or 2.

## Statistics and research methods

## PSYC 2001 Laboratory Experience

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.

## 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.

Prerequisite: Psychology 1000.

## PSYC 3450W Experimental Psychology

2 hours lecture, 4 hours laboratory; 4 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. (Not open to students who have completed Psychology I8.I and I8.2. Writing-intensive course.

Prerequisite: Psychology 3400 [40.1]; English 1012 [2].

## Cognition, learning, perception and emotion

## 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. I.)

Prerequisite: Psychology IO00 [1.I]

## 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.I.)

Prerequisite: Psychology 1000 [I.I] and 2600 [50] or 3600 [65. I].

## PSYC 3530 Cognitive Psychology

3 hours; 3 credits
Psychology of memory, problem solving, decision making, language, imagery, and other cognitive processes. General overview of the field, including information-processing models, studies of thinking, the question of artificial intelligence, strategies for improving memory, and other similar areas.

Prerequisite: Psychology I or 1000 [I.I].

## 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 I or 1000 [I.I].

## PSYC 3541 Thought and Language

## 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 I 000 [I.I]; Junior or Senior year standing.

## 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 [IO] and as Philosophy 3423 [29]. (Not open to students who have completed Computer and Information Science 32.1.)

Prerequisite: Core Curriculum 1311 or 1312 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 I or 1000 [I.I]; and 3400 [40.I].

## Biopsychology and neuroscience

## PSYC $\mathbf{2 6 0 0}$ 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 I or 1000 [1.I] or Biology 3 I or 4019 [34] or Health and Nutrition Sciences 2300 [22.7I] or Physical Education 3271 [22.71].

## 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 IOOI and I002; or Psychology I 000 and one of the following: Psychology 2600 [50], 3600 [65.1] or Biology 100 I ; or permission from the instructor

## PSYC $\mathbf{3 6 0 0}$ Behavioral Neuroscience

3 hours; 3 credits
Neural and hormonal mechanisms underlying behavior. Sensory processes, motivation, emotion, sexual behavior, sleep, learning, and memory.

Prerequisite: Psychology I000; Psychology 2600.

## 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. I ].

## 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 4I.)

Prerequisite: Psychology I or 1000 [1. I].

## PSYC $\mathbf{3 6 8 0}$ 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. Includes participation in the evaluation of a simulated neurological case.

Prerequisite: Psychology I or 1000 [I. I] or Biology 308| [24.1] or 31 or 4019 [34] or Health and Nutrition Sciences 2300 [22.71] or Physical Education 3271 [22.71].

## PSYC 4690 Special Topics in Biopsychology

## 3 hours; 3 credits

Focus on one of the major areas of comparative or physiological psychology. 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 I or 1000 [I.I].

## History, systems, and advanced general psychology

## PSYC $\mathbf{3 7 0 0}$ 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 I and 2, or 1000 [I.I]; and 9 credits in advanced psychology courses.

## Psychopathology and clinical applications

## PSYC 28IO 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 I000 [I.I] 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 $\mathbf{3 8 2 0}$ 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 28 IO [30].

## PSYC $\mathbf{3 8 2 5}$ Behavior Therapy

## 3 hours; 3 credits

A critical review of that approach to therapy that seeks to change dysfunctional behavior through the systematic application of experimentally derived principles. Topics include the nature of behavior therapy, relaxation and systematic desensitization, assertion training, modeling, contingency management, extinction procedures, aversive procedures, cognitive approaches, ethical considerations in the use of behavior therapy techniques.

Prerequisite: Psychology I or 1000 [1.1] and 3820 [32.1].

## 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] and 2300 [30.2] and permission of the chairperson.

## 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 lecture, 4 hours laboratory; 5 credits Introduction to principles and methods underlying construction and evaluation of psychological tests. Laboratory practice in administration and interpretation of selected tests. (Not open to students who have completed Psychology 52.5.)

Prerequisite: Psychology 28 or 2810 [30]; and Psychology 3400 [40.1].

## 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 28 or 28 IO [30]; and Psychology 38 I0 [30.I] or 3820 [32.1]; and permission of the chairperson.

## Honors courses

## PSYC 500I 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 [40. I]; six additional credits in advanced Psychology Department courses; Psychology 3450 W [57W], which may be included among the six credits or may be taken as a corequisite; permission of the chairperson.
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 [40. I]; six additional credits in advanced Psychology Department courses; Psychology 3450 W [ 57 W ], which may be included among the six credits or may be taken as a corequisite; permission of the chairperson.
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 [40. I ]; six additional credits in advanced Psychology Department courses; Psychology 3450 W [57W], which may be included among the six credits or may be taken as a corequisite; permission of the chairperson.
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 [40. I]; six additional credits in advanced Psychology Department courses; Psychology 3450 W [57W], which may be included among the six credits or may be taken as a corequisite; permission of the chairperson.
Prerequisite or corequisite: Psychology 3450W.

## PSYC 50II 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.I]; 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. I]; and permission of the chairperson

## The following inactive course(s) will only be offered if there is sufficient demand:

Interpersonal Perception
Psychological Issues in Organizational Theory
Human Factors and Technology
Psychology of Individual Differences
Psychology of Feelings and Emotions
Practicum in Group Processes
Field Experience in the Social Psychology fo the Courtroom
Special Topics in Personality and Psychopathology

## Puerto Rican and Latino Studies

Department office: I 205 Boylan Hall
Phone: 718.951.5561

## Full-time Faculty

Associate Professors: Martinez, Perez y Gonzalez
Assistant Professors: Aja, Perez
Lecturer: Nadal

The Brooklyn College 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, the department advocates for racial and ethnic diversity and provides students with the knowledge and critical skills to navigate a diverse and globally interdependent world. An interdisciplinary program committed to community involvement and excellence in teaching, research, and scholarship, we focus on the past experiences, present dynamics, and future projections for Puerto Rico and Latin America, and for stateside Puerto Ricans and Latin@s/Hispanics.

The department offers a bachelor of arts degree in Puerto Rican and Latino studies (PRLS) or PRLS and business as well as a minor in PRLS and a minor in Latin American studies. The department also offers a bachelor of arts degree in adolescence education for social studies teachers as well as a concentration for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades I-6); bilingual education teacher (grades I-6). We offer courses with the following college departments and programs: Africana studies, American studies, anthropology and archaeology, archival studies (library), Caribbean studies, children's studies, economics, comparative literature (English), history, human resource management and diversity studies (sociology), interdisciplinary studies (communications), studies in religion, sociology, and women's studies as well as the Conservatory of Music. Our department also participates in the graduate teaching fellows program of the Brooklyn College School of Education.

Internships are available to students who wish to explore career options. Via the Brooklyn College Center for Latino Studies and the Center for Religion in Society and Culture, and the CUNY Center for Puerto Rican Studies, 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.

## Core curriculum

The Department of Puerto Rican and Latino Studies participates in the College's core curriculum through the upper-tier Core Curriculum "Exploring Global Connections" 3203.

## B.A. degree program in Puerto Rican and Latino studies HEGIS code 0308; SED program code 01976

Department requirements
Fulfillment of the college foreign language requirement in Spanish. Knowledge of Spanish as established in an interview with a faculty member of the Puerto Rican and Latino Studies Department or successful completion of Puerto Rican and Latino Studies 44 I5 or 4430.

One of the following: a) or b).
a) Puerto Rican and Latino Studies ( 30 credits)

Puerto Rican and Latino Studies I00I, 3320W and one seminar taken from among: Puerto Rican and Latino Studies 45I0, 46I5 through 57I0.
One of the following courses: Puerto Rican and Latino Studies 2105, 3105 through 3125.
One of the following courses: Puerto Rican and Latino Studies 2300, 3205 through 3225.
One of the following courses: Puerto Rican and Latino Studies 3305, 3310, 3325 through 3340, 4450.
One of the following courses: Puerto Rican and Latino Studies 2505, 4505 through 46 I 0.
Three additional Puerto Rican and Latino Studies courses; Puerto Rican and Latino Studies 5715 and 5720 are also options.
b) Puerto Rican/Latino Studies and Business (36 credits)

All of the following: Puerto Rican and Latino Studies I00I, 32I5, 3220, 3320W, 4505, 45I0, 45I5; Business 3170.
One of the following: Caribbean Studies 1001; Puerto Rican and Latino Studies 2300, 3205, 3210 (same as Anthropology and Archaeology 3520), 3335, $46 I 0$ or $4635,4615,4645,5710,5715$.

Three of the following: Business $3100,3200,3130,3140$.
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 either Puerto Rican and Latino Studies 4605 or 4630 with a grade of B or higher and must have an academic index of 3.50 or higher in the major.

Department recommendations
All Puerto Rican and Latino studies majors should consult the chairperson in planning the sequence of required courses. For students selecting concentration a: 18 credits in courses in another department chosen in consultation with a department adviser.

For students selecting concentration b: 9 credits in business-oriented elective courses from any department of the college chosen in consultation with a department adviser.

## B.A. degree program in adolescence education: social studies teacher HEGIS code 2201.01 ; SED program code 26754

Adolescence education (grades $7-12$ ) and special subject programs are writing intensive.

## Program requirements

Students who wish to pursue a bachelor of arts degree in adolescence 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.

The following pedagogical courses in the Department of Secondary Education: SEED 200I, 2002, 340I, 3402, 4402, 4408, 3456 (total of 24 credits):
This four-term sequence may be started in the lower-sophomore term or upper-sophomore term.
SEED 200I, 2002, 340I, 3402 (I2 credits).
The appropriate 5 -credit course in student teaching:
SEED 4402 Seminar on Methods of Teaching Social Studies, Student Teaching I
The appropriate 4-credit course in student teaching:
SEED 4408 Advanced Seminar on Methods of Teaching Social Studies, Student Teaching II
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department.
Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking Education 3454.

Students, except music education majors, must complete 24 credits in the School of Education as specified above.

[^9]overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take SEED 4407-4406, students must earn a B- or higher in SEED 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes SEED 4407-44I2 prior to SEED 440I-4406 must earn a B- or better grade in SEED 4407-44I2 to take SEED 440I-4406.

## 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 advanced credits, each completed with a grade of C or higher.

Puerto Rican and Latino Studies 3210 or Anthropology and Archaeology 3520.
Two of the following:
Puerto Rican and Latino Studies 3205, 3225 or History 3520; Puerto Rican and Latino Studies 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 35I0, 35I2; Political Science 3304; Puerto Rican and Latino Studies 3IIO, 3II5, 3330, 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

## Department Requirements

A program of 15 credits in Puerto Rican and Latino studies; Puerto Rican and Latino Studies 1001 and 12 elective credits including one seminar in Puerto Rican and Latino Studies 4510 or 4615 through 5710, 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 3I60, 3155; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 330I, [76.I], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 3140, 3170, 3185; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 334।; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 22I5, 3130 , 3395; Children and Youth Studies 3110 ; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's Studies 3328
d. Media and Communications in a Global Context

Anthropology 3I80; Film 2131; Philosophy 3315; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; Philosophy

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 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 100 I, 2005, 3325, and 4420. Six of the following courses: Puerto Rican and Latino Studies 2300, 3I05, 3I20, 3I25, 3205 through 3320W, 3330, 4450, 45IO, 46I5, 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 I-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 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, 44I0, 44I5, 4420, 4425, 4430.

Three of the following courses: Puerto Rican and Latino Studies I00I, 2300, 3105, 3120, 3125, 3205, 3210, 3315 (same as Africana Studies 3240 and Comparative Literature 3623), 3320W, 3325, 4450, 45I0, 46I5, 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.

## Division of 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. A Graduate Bulletin may be obtained in the Office of Admissions.

## Courses

*Courses marked with an asterisk (*) 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.

## PRLS * 1001 Introduction to Puerto Rican and Latino Studies

3 hours; 3 credits
Survey of Puerto Rican and Latino studies. Pertinent themes in Puerto Rican and Latino history, culture, literature, contemporary society, and
politics within the Caribbean-U.S.A. context. Impact of the United States's economic policies on the island and the causes of Puerto Rican and Latino migration to urban centers on the continent. Puerto Ricans and other Latinos in New York City.

## PRLS 2105 Workshop in Puerto Rican and Latino Cinema, Drama and Theater

3 hours; 3 credits
Overview and development of contemporary theater, drama and cinema among Puerto Ricans and other Latinos. Special emphasis on New York City's creative community.

Prerequisite: None

## 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.

Prerequisite: Sociology IIOI or Puerto Rican and Latino Studies 100 I.

## Culture and the arts

## PRLS 3105 Puerto Rican Cultural Patterns

3 hours; 3 credits
Cultural antecedents and developmental process of present Puerto Rican culture. Taíno contributions, European and African elements, Puerto Rican folklore and cultural persistence. Perspectives on cultural issues related to colonialism, race, gender, and identity.

## PRLS 3110 Taíno Roots of Contemporary Religion and Culture in Puerto Rico and the Caribbean

3 hours; 3 credits
Religious artifacts and eco-cultural systems of the original inhabitants of Puerto Rico and Hispaniola, from neolithic times to European colonization. Taíno myths and the principal elements of religion. Indigenous influences in contemporary societies and as a theme of national identity. Women's roles and female iconography.

Prerequisite: English 1010 .

## PRLS 3115 Spiritism and African Religions in Puerto Rican and other Spanish-speaking Caribbean Societies

3 hours; 3 credits
African heritage as a religious and cultural phenomenon in Puerto Rico. Contemporary Afro-Caribbean folk religions and cults, Espiritismo, Santería, and their effects on Puerto Ricans and other Latinos.

Prerequisite: English 1010.

## PRLS 3120 Artistic Expression and Symbolism of the Puerto Rican and Latino People

3 hours; 3 credits
Development of artistic expression and symbolism among Puerto Ricans and Latinos. Transformation of identity and folklore to contemporary artistic and media images.

Prerequisite: Puerto Rican and Latino Studies *100| or 3105 or Puerto Rican and Latino Studies 3125 or Core Studies 2.1 or Core Curriculum 1120.

## PRLS 3125 Music of the Puerto Rican People

## 3 hours; 3 credits

Survey of folk, popular, classical forms of Puerto Rican music. Influence of Taíno, Spanish, and Afro-Caribbean cultures on these forms. Relationship between Puerto Rican music and folklore. Lectures supplemented with performances, slides, tapes, records.

## Latin America and transnational societies

## PRLS 3205 Women in Puerto Rican and Latin American Societies

3 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 *100| 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; post-independence political and economic development; contemporary identity politics; religion and social movements; urbanization and international migration. This course is the same as Anthropology and Archaeology 3520.

Prerequisite: Core Studies 3 or 9 or Core Curriculum 1230 or Core Curriculum 3203 or permission of the chairperson.

## PRLS 3215 Borderlands and Homelands in the U.S. Mexican Experience

3 hours; 3 credits
Historical antecedents. War with Mexico and the Treaty of Guadalupe Hidalgo, I848. Early immigration and labor. Effects of the Mexican Revolution and growth of U.S. communities. Depression era, segregation, and deportation. Development of social, civic, and political organization. Bracero programs, migrant workers. Chicano identity and civil rights movement. Artistic expression and its relation to social change.

Prerequisite: Puerto Rican and Latino Studies *100| or Core Studies 3 or 9 or Core Curriculum 1230 or Core Curriculum 3203.

PRLS 3220 Exiles and Entrepreneurs: Cuban Experience in the U.S.
3 hours; 3 credits
Historical antecedents. Spanish-Cuban-American War and the Treaty of Paris, I 898. Early political, cultural, and economic influences. Flourishing of prerevolutionary Tampa, Key West, and New York communities. Major migratory phases following the Cuban Revolution, 1959. Contemporary U.S. communities and their relation to revolutionary Cuba. Political leadership, economic development, and relation to other Latinos. Artistic expression and the forging of a new identity. Entrepreneurship.

Prerequisite: Puerto Rican and Latino Studies *1001 or Core Studies 3 or 9 or Core Curriculum I230 or Core Curriculum 3203.

## PRLS $\mathbf{3 2 2 5}$ History of Social Movements in Latin America

3 hours; 3 credits
This course will examine the changing nature of social movements in Latin America from the nineteenth century to the present. Topics include social movements concerning citizenship, religion, unions, feminism, torture, poverty, indigenous rights, and environmentalism. (This course is the same as History 3520)

Prerequisite: Puerto Rican and Latino Studies 3210 or Anthropology and Archaeology 3520, or Core Studies 9, or Core Curriculum 1230 or Core Curriculum 3203 or permission of the chairperson.

## History and literature

## PRLS $\mathbf{3 3 0 5}$ History of Puerto Rico to $\mathbf{1 8 1 5}$

## 3 hours; 3 credits

From European contact to 1815 . Original inhabitants of Puerto Rico and their encounter with Europeans. First centuries under Spanish rule. Impact of Spain and Africa on Puerto Rican history. Slavery. Primary sources. Critical analysis of class, property, and environment. Pre-enlightenment, the Enlightenment, and Latin American independence.

## PRLS 3310 History of Puerto Rico since 1815

## 3 hours; 3 credits

Cédula de Gracias. Lares Rebellion of I868. Politics and repression. Emergence of a Puerto Rican national consciousness reflected in political and social institutions. United States occupation and modification of colonial institutions. Organized labor and social movements. Operation Bootstrap, industrialization, and urbanization of the island under Commonwealth status. Migration and return migration since the 1960 s

## PRLS 3315 Caribbean Literature

## 3 hours; 3 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 [29] and Comparative Literature 3623.

## PRLS 3320W Puerto Rican Communities in the United States: Settlement and Evolution

## 3 hours; 3 credits

Puerto Rican migrants in the United States. Community development and representative institutions. Organizational structure, leadership, and Puerto Rican settlement patterns throughout the United States compared with New York. Historical similarities and differences of Puerto Ricans and other groups. Role in larger American society.
Writing-intensive course.
Prerequisite: English 1012.

## PRLS 3325 Institutions of Urban Life and the Latino

## Experience

3 hours; 3 credits
Multidisciplinary perspective on the evolution of Hispanics/Latinos as an urbanized segment of the United States population. Cross-cultural 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 *I00I or Core Studies 3 or 9 or Core Curriculum 1230 or Core Curriculum 3203 or permission of the chairperson.

## PRLS 3330 Overcoming Divisions and Dictatorships: The Dominican Republic

3 hours, 3 credits
The role of race, dictatorship, U.S. influence, and transnationalism in shaping the Dominican Republic will be examined. An interdisciplinary approach to depict trends, processes, and current issues in the Dominican Republic will be used. Topics include: slavery, racism, Haitian intervention, independence, plantation economy, Caudillos, U.S. intervention, neocolonialism, Trujillo, political exile, Bosch, globalization, labor and entrepreneurship, transmigration and transnationalism.

## PRLS 3335 Latinos 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 and mainstream North American culture as explored in films, television programs, print media, and advertising.

Prerequisite: Puerto Rican and Latino Studies * 100 I or permission of the chairperson

## PRLS 3340 Critical Issues in Puerto Rican and Latino

 Studies3 hours lecture; 3 credits
Selection of representative works focusing on social institutions, transnationalism, and community life in the USA and Latin America. Use of diaries, autobiographies, chronicles, and scientific reports in order to examine critical issues in Latino/a communities and their connection to the Latin American countries of origin.

## 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.

## Bilingual (Spanish-English) studies

## PRLS 2005 The Puerto Rican, Latino, and Caribbean Child

 in New York City3 hours; 3 credits
Puerto Rican, Latino, and Caribbean children in contemporary society. Relation of school curricula to their historical background and cultural contributions. Development of identity; knowledge and appreciation of heritage. Examination, use, and evaluation of instructional materials. Concepts, information, and materials necessary for effective work with target population.

## PRLS 44 I0 Bilingualism: The Puerto Rican, Caribbean, and Latino Child <br> 3 hours recitation, 2 hours laboratory; 4 credits Concepts and programs of bilingualism. Their importance and application in working with multiethnic populations. Selected field and laboratory work; study and evaluation of bilingual programs and materials.

## PRLS 4415 Spanish Language Arts for the Bilingual Child

3 hours recitation, 2 hours workshop; 4 credits
Fundamental concepts of Puerto Rican and other regional language variations and creative literature for prospective bilingual professionals.

Language arts applied to the bilingual child. Workshops on community and parental involvement. Assessment models. 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 Second Language for the Language-Minority Child

3 hours recitation, 2 hours workshop; 4 credits Role of English as a second language for Puerto Rican and other Spanish-speaking children in a bilingual program. Comparative analysis, understanding linguistic concepts, and their application. Workshops related to language patterns of bilingual children. Assessment models.

Prerequisite: English 1010 or permission of the chairperson.
PRLS 4425 Historical and Cultural Perspectives: Puerto Rico, Latin America and the Caribbean
3 hours recitation, 2 hours laboratory; 4 credits
History and culture of Puerto Rican, Latino, and other Latin American/Caribbean groups. Preparation of instructional materials and assessment models. Field experience

## PRLS 4430 Spanish for Prospective Bilingual Professionals

## 3 hours; 3 credits

Varieties of the regional Spanish language in such features as syntax, usage, and pronunciation. Performance and diagnostic assessment.

Prerequisite: Departmental permission is required.

## Contemporary society - issues and processes

## 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 45I5 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, 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 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
community. Readings, lectures, and examination of case records. Motivation for self-help programs. Contact with internal operations of Puerto Rican/ Latino organizations and appraisal of their varied approaches and techniques. Supervised fieldwork with organizations that serve the Puerto Rican/Latino communities.

Prerequisite: Puerto Rican and Latino Studies *100 I 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 *100| and an additional Puerto Rican and Latino Studies course or departmental permission.

## Seminars

PRLS 4510 Emerging Realities and Alternatives for Puerto Ricans and Other Latinos 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 Latinos. 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 4615 Special Topics

3 hours; 3 credits
Topics vary from term to term. Course description may be obtained in the department office before registration. Topics may focus upon problems, social institutions, social processes, social organizations of Puerto Ricans in Puerto Rico and the United States or other Latinos in their countries of origin. Students may take this course and Puerto Rican Studies 70.2 at most twice, but may not repeat topics.

Prerequisite: completion of an approved program of advanced Puerto Rican and Latino Studies courses and permission of the chairperson.

PRLS 4620 Seminar in the Political, Social, and Economic Status of Puerto Rico
3 hours; 3 credits
Political, social, and economic structures in Puerto Rico that shape the status issue. Analysis of congressional policies. United Nations debate on decolonization. Plebiscites and referenda. Effects of political status in social and economic terms. Role of Puerto Ricans in the U.S.

Prerequisite: Puerto Rican and Latino Studies 33 IO or 4505 or permission of the chairperson.

## PRLS 4625 Seminar in Nationalist Movements of Puerto

## Rico

3 hours; 3 credits
El Grito de Lares and Betances' leadership. Women's contributions. Electoral politics. The Nationalist Party and Albizu Campos' political philosophy. Ideological currents of the independence movement. Issues of race, class, gender, and religion. Impact of McCarthyism and the 1959 Cuban Revolution on island politics. Radical barrio politics in United States - Puerto Rican communities.

Prerequisite: Puerto Rican and Latino Studies 100 I or 3310 or departmental permission.

## 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.

PRLS 4640 Puerto Rican and Latino Literature in the

## United States

3 hours; 3 credits
Representative literature of Puerto Rican and Latino writers who lived or are living in what is today the United States. Study of chronicles, diaries, autobiographies, and testimonials. The diaspora experience and the cultural affirmation of identity as portrayed in the novel, short stories, drama, and poetry.

Prerequisite: Puerto Rican and Latino Studies * 100 I 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.

## PRLS 5710 Research Seminar in Puerto Rican/Latino

## Studies

3 hours; 3 credits
Applied research and methodology. Application of advanced course work to address pertinent issues. Research project.

Prerequisite: completion of at least nine credits in Puerto Rican and

Latino Studies courses.

## Independent research and Honors 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.

Prerequisite: completion of an approved program of advanced Puerto Rican and Latino studies courses and departmental permission

The following inactive course(s) will only be offered if there is sufficient demand:
PRLS 2505
Administration of Justice and the Puerto Rican/Latino Community

## Religion, Program of Studies

Department office: 331। James Hall
Phone: $718.951 .5000 \times 1755$
Religion is a primary expression of the human condition and a powerful force in shaping events around the world. The urgent political, economic, social, and cultural issues of our time are all connected to religious beliefs and practices. Religion influences public and private concerns about issues including community and solitude, suffering and death, good and evil, and personal meaning and identity.

Studies in religion at Brooklyn College takes an interdisciplinary approach. We draw on faculty from many departments and programs throughout the campus, including anthropology and archaeology, Africana studies, American studies, art, classics, English (comparative literature), history, Judaic studies, philosophy, political science, Puerto Rican and Latino studies, and sociology. We offer a dual major and a minor in which we examine the religious traditions of Asia, the Middle East, Africa, the Americas, and Europe. We use a comparative perspective to explore various beliefs, behaviors, values, rituals, texts, and communities in order to help students discover the nature of conflicts and agreements within a particular religion, between religions, and between religious and secular points of view. Our students develop an appreciation of the significance of religion and the difficulties and possibilities inherent in undertaking a critical, disciplined study of it.

Our graduates are equipped to contribute to the ongoing discussion of the nature of religion in our communities and in the world. Our students find employment in fields that value analytic, research, and writing skills, and ethical decision-making. Graduates have careers in education, media, social work, health care, tourism, commercial and industrial concerns, and religious, governmental, and international organizations. While some studies in religion majors pursue graduate study and careers in fields associated with religion, most prepare for careers in other fields by entering, among others, a law, business, or medical school, or a graduate program in social work or public policy.

## B.A. degree program for studies in religion (dual major) HEGIS code 1510; SED program code 82421

[^10]
## 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 or 3005. Nine or more 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 330I, [76.1], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110 , 3344; Anthropology 3130, 3140, 3170, 3185 ; English 3194; Judaic Studies 3017 ; Philosophy 3702; Political Science 334।; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 22I5, 3130 , 3395; Children and Youth Studies 3110 ; Health and Nutrition Science 2130; Judaic Studies 4195; Philosophy 3307; Political Science 3240, 3242, 3243; Women's Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; Philosophy 3309; Sociology 3202

Requests for course substitutions must be submitted to the Global Studies Curriculum Committee.

## Courses

## RELG 3003 Abrahmic Religions

3 hours; 3 credits
A consideration of Judaism, Christianity, and Islam in terms of their origins, major beliefs, and practices. Introduction to the concepts of myth, symbol, ritual, and salvation. Relationship of these religions to cultural changes, community life, and individual identity.

## 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 [78.8].

Prerequisite: Political Science *100| [1.5I] or Political Science *I002
[I.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 Taoism, with emphasis on origins, teachings, and role in culture. Unique features of Eastern spirituality through comparison with the Abrahmic traditions and secular societies. Consideration of the practice of these religious traditions within contemporary United States.

## RELG $\mathbf{3 0 1 0} \mathbf{~ J o b}$ 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, I987, or spring, I989, or Judaic Studies 4751 [75.I] in spring, 1989.) This course is the same as Judaic Studies 4022 [22].

Prerequisite: Studies in Religion 3003 [I.I] or permission of the program director.

## RELG 3020 Science and Religion

3 hours; 3 credits
Similarities and differences in the methodologies, sources of knowledge, modes of thought and language employed by science and religion. Survey of traditional areas of conflict. Examination of attempts by scientists and theologians to bring about a commonality of views. (Not open to students who completed Studies in Religion 3060 [20] in fall, 1992, or spring, 1994.)

## RELG 3030 Greek and Roman Mythology

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 Classics 3200 [15].

Prerequisite: Studies in Religion 3003 [I.I] or 3005 [I.2], or permission of the program director.

## 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 [53.5].

Prerequisite: Core Curriculum 1220 [2.2] or permission of chairperson

## RELG 3050 Jesus and the Christian Tradition

3 hours; 3 credits
A cultural history of Christianity from the first century to the present; quest for the historical Jesus; images of Jesus in major eras of world history in scripture, theology, literature, art, and music; the place of Christian culture in the history of world civilization. This course is the same as History 3315 [30.2]. (Not open to students who completed History 3290 [28.9B] or Studies in Religion 3060 [20] in spring, 1990.)

Prerequisite: Studies in Religion 3003 [I.I] 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 3126 [32.2].

Prerequisite: Political Science *|00| [I.5I] or Political Science *|002
[1.7] or Core Curriculum 1230 [2.3] or Religion 3003 [1.I] 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 [I.I] or 3005 [1.2] or permission of a program director.

## RELG 3070 Minicourse in Special Topics in Religion

I hour; I 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 400 I 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.

## SEEK Department

Department office: 2208 Boylan Hall
Phone: 718.95I.5738

## Full-time Faculty

Professor: Levy
Associate Professor: Soare
Assistant Professors: Bullen, Corbett Carter
Lecturers: Herrera, Karanja, Khalfin, Watson

The Search for Education, Elevation, and Knowledge (SEEK) Department is the Brooklyn College branch of the legislatively-mandated 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 eleven-course core 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, core 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-core, core, 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 IOOI 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: Gould, Lenzer, Lewis, Zukin
Associate Professors: Bank Munoz, Barchiesi, Braine, Shortell, Smithsimon, Vitale
Assistant Professors: Brown, Johnson, Manohar, Molina, Pan

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.

## Core curriculum

The Department of Sociology participates in college's core curriculum through Core Curriculum 1230.

## B.A. degree program in sociology HEGIS code 2208; SED program code 02 III

Department requirements ( 38 credits)
All of the following: Sociology IIOI, 2101, 2102, 2111, 2112 and 5201 W . Sociology 520 IW , 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 520IW.
B.A. degree program in adolescence education: social studies teacher HEGIS code 220I.0I; SED program code 26754

## Sociology

Adolescence education (grades 7-12) and special subject programs are writing intensive.
Program requirements
Students who wish to pursue a bachelor of arts degree in adolescence 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.

The following pedagogical courses in the Department of Secondary Education: SEED 200 I, 2002, 340I, 3402, 4402, 4408, 3456 (total of 24 credits):
This four-term sequence may be started in the lower-sophomore term or upper-sophomore term.
SEED 200 I, 2002, 340 I, 3402 (I2 credits).
The appropriate 5 -credit course in student teaching:
SEED 4402 Seminar on Methods of Teaching Social Studies, Student Teaching I
The appropriate 4-credit course in student teaching:
SEED 4408 Advanced Seminar on Methods of Teaching Social Studies, Student Teaching II
This program reflects changes in teacher certification requirements recently implemented by the New York State Education Department.
Degree programs in adolescence education and in special subjects 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, one of the sciences, or a language other than 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 teach English, social studies, mathematics, or one of the sciences in grades 5 and 6 by taking Education 3454.

Students, except music education majors, must complete 24 credits in the School of Education as specified above.

## Admission requirements and academic standing

Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take SEED 2001, 2002, 340 I or 3402; an average of 2.75 in SEED 200 I and 2002 is required to continue to SEED 340 I and/or 3402; to take SEED 44 I 3 or $440 \mathrm{I}-4406$, students must have an overall GPA of 2.75 or higher and permission of the head of adolescence education and special subjects; to take SEED 4407-4406, students must earn a B- or higher in SEED 4401-4406, a GPA of 2.75 or higher in their major, and the permission of the head of adolescence education and special subjects. A student who takes SEED 4407-44I2 prior to SEED 4401-4406 must earn a B- or better grade in SEED 4407-44I2 to take SEED 440 I-4406.

## Departmental Minor(s)

## Minor in Business and Society

Department Requirements
All of the following:
Economics 2100 ; Business 3200; Business 3 I 00; Sociology 3607.
Two courses from the following:
Sociology 3204, 220I, 2602, 2500, 2600, 260I, 2800.

## Minor in Consumer Behavior

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Requirements for an interdisciplinary minor in consumer behavior

## All of the following:

Business 3 I00; Business 3130 or Television and Radio 2517; Business 3140; Sociology 3203.

Two courses, one chosen from each of two of the following areas:
Area I: Sociology 2400, 2602, 2600, 2601.
Area 2: Business 3I20/Computer and Information Science I530, Business 3I70, 80.4.
Area 3: Psychology 2100, 3171.

## Minor in Criminal Justice

Department Requirements
All of the following:
Political Science 3I20; Sociology 3504.
Three courses chosen from among the following:
Africana Studies 3330, 3331.
Anthropology 3162.
Philosophy 3320, 3740.
Political Science 3I23, 3122, 3240, 3243.
Psychology 65.2.
Puerto Rican and Latino Studies 57.2.
Sociology 3503, 2500, 250I, 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 3I72; Business 3200 or Sociology 3607 or 2603.
Four courses, two chosen from each of the following areas:
Area I: Psychology IO; Sociology 220I, 2605, 2400, 2600, 260 I.
Area 2: Business 3I00, 32I0, 3230, 3140; Psychology 3171.

## Minor in Human Resource Management and Diversity Studies

## Department Requirements

All of the following:
Business 3240 or Psychology 3I72; Business 3200 or Sociology 3607 or 2603; Sociology 2600 and 260 I.
Two courses, one from each of two of the following three areas:
Area I: Africana Studies 3324, 3330.
Area 2: Judaic Studies 3017 ; Women's Studies I00I, 3340.
Area 3: Puerto Rican and Latino Studies 3I05, 32I0, 32I5, 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, 333I; Anthropology 3I60, 3I62; Classics 3234; Political Science 3I20, 3I23, 3I22, 3240; Sociology 3503, 3504.
Courses in anthropology and archaeology 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
At least 12 credits in sociology, in courses numbered 10 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 IIOI, and:
Five additional courses, two selected from Area I and three selected from Area 2:
Area I: Sociology 3303, 3304, 3504.
Area 2: Sociology 3204, 2200, 220I, 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 3I60, 3I55; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 330 I, [76.I], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3110, 3344; Anthropology 3130, 3140, 3170, 3185 ; English 3194; Judaic Studies 3017; Philosophy 3702; Political Science 334।; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's 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 Studies 3328
d. Media and Communications in a Global Context

Anthropology 3I 80; Film 213I; Philosophy 3315; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; 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) and childhood education teacher (grades I-6) programs are described in the "Education" section of 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 IIOI.
Two of the following courses: Sociology 2400, 2401, 2402, 2600.
One of the following courses: Sociology 3204, 2200, 220I, 3202, 3203.
Three of the following courses: Sociology 3302, 3303, 2500, 250 I, 3504, 260 I.
Three of the following courses: Sociology 2602, 3607, 3503, 3606, 2604, 2700, 270 I, 2800.

## Division of 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. 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.
§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 *IIOI 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 *I 102 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 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 *| $10 \mid$ [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 *| 101 [5] and 210| [18], or permission of the chairperson.

## SOCY 2 III 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 *। 10 । [5], or permission of the chairperson.

## SOCY 2II2 Research Methods II

3 Lecture Hours and 2 Lab Hours; 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 *| 101 [5] and $211 \mid$ [19], or permission of the chairperson.

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: Core Curriculum 1230 [2.3] with a grade of B - or higher, Core Studies 3 with a grade of B- or higher, or Sociology *IIOI [5] 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], I230, Core Studies 3, 4, 9, Environmental Studies *I00I [I], Sociology *। 10 I [5] or permission of the chairperson.

## SOCY 2202 Introduction to Urban Sustainability

2 lecture, 2 laboratory; 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 Earth and Environmental Sciences I500, amd Economics 225 I

## 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 Puerto Rican and Latino Studies 2300.

Prerequisite: Sociology IIOI or Puerto Rican and Latino Studies 100 I.

## 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: 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 *I IOI [5], or permission of the chairperson.

## SOCY 240I 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: 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 *IIOI [5], 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: Core Curriculum 1230 [2.3] with a grade of B - or higher, or Core Studies 3 with a grade of B- or better, or Sociology *| IOI [5], 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: 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 *।। 0 I [5] or permission of the chairperson.

## SOCY 250I 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: 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 *। IO। [5], or permission of the chairperson.

## SOCY 2502 Blacks in the American Criminal Justice

 System3 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 [43.2].

## 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 Studies 3420 [51.5].

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 *IIO। [5], or permission of the chairperson.

## SOCY 260I 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: Core Curriculum 1230 with a grade of B - or higher, Core Studies 3 with a grade of B- or higher, or Sociology IIOI.

## 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: 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 *||0| [5] 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: Core Curriculum 1230 [2.3] with a grade of B- or higher, or Core Studies 3 with a grade of B- or better, or Sociology *| IOI [5], 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: 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 *|IO। [5], 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: One of the following: Core Curriculum 1230 [2.3] with a grade of B - or higher, or Core Studies 3 with a grade of B - or better, or Sociology *| $10 \mid$ [5], or permission of the chairperson.

## SOCY 270I Sociology of Science

3 hours; 3 credits
Culture of science. Development of scientific ideas. Social context for scientific work. Institutionalization of science. Scientific communications. Resistance and receptivity to science. Science and social change.

Prerequisite: Core Curriculum 1230 [2.3] with a grade of B- or higher, or Core Studies 3 with a grade of B- or better, or Sociology *| IOI [5], or permission of the chairperson.

## SOCY $\mathbf{2 8 0 0}$ 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: 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 *| I 0 I [5], or permission of the chairperson.

## SOCY 320I Urban Sustainability Theory

3 lecture; 3 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 the same as Earth and Environmental Sciences 1501 and Economics 325I

Prerequisite: Earth and Environmental Sciences 1500 or Economics 225 I or Sociology 2202

## 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], 2.3, I23B, Core Studies 3, 4, 9, Environmental Studies *I00। [I], Sociology *| $10 \mid$ [5] 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: Core Curriculum 1230 [2.3] with a grade of B - or higher; Core Studies 3 with a grade of B - or higher; Business 3100 [50.2]; Sociology *I IOI [5].

## 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: Core Curriculum 1230 [2.3] with a grade of B- or higher, Core Studies 3 with a grade of B- or higher, or Sociology *। IOI [5] or permission of the chairperson.

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: 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 *| | 0 I [5] 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: 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 *||0| [5] or permission of the chairperson.

## SOCY 3303 Contemporary Urban Social Welfare Policy

3 hours; 3 credits
Development of the US welfare state in the early 20th century. Re-organization of US welfare state in the late 20th and early 21 st century. Locates the social welfare system in relation to larger social and political struggles over economic and political power, labor markets and social inequality. Examines the connections between changes in social welfare policy, the relationship between the state, markets, and corporations and the impact of changing social welfare policies on low income urban communities. Situates social welfare policy in relation to the maintenance of and changes in class, race, and gender stratification, and changes in the social construction of race and gender over time. This course is the same as Women's Studies 32.5.

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 *|। 0 I [5] or permission of the chairperson.

## SOCY 3304 Drug Use and Drug Policy in the United States

3 hours; 3 credits
Development of drug policy in the U.S. from pre-WWI era and Harrison Act to the contemporary era. Relationship between drug policy, regulation of marginal social groups, immigration control, and the social construction of race, gender, and class. Trends in drug use, and relationships to larger patterns of social and economic change.

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 *| 10 I [5] or permission of the chairperson.

## 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: 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 *| | 0 | [5] 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: 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 *। 10 I [5] or permission of the chairperson.

## SOCY $\mathbf{3 6 0 5}$ 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: 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 *IIOI [5], 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, Pan-Germanism, democracy. (Not open to students who have completed Sociology 75.)

Prerequisite: Core Curriculum 1230 [2.3] with a grade of B - or higher, or Core Studies 3 with a grade of B- or better, or Sociology *IIOI [5], 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 Studies 3229 [43.2].

Prerequisite: Core Curriculum 1230 [2.3] with a grade of B - or higher, or Core Studies 3 with a grade of B- or better, or Sociology *IIO। [5], 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 Studies 3319 [56] (WMST 33।9).

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 *IIOI [5] 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 Studies 3318 [55].

Prerequisite and/or co requisite: 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 *। I 0 I [5], or Women's Studies I00 [ [ 2] 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: one of the following: Core Curriculum 1230 [2.3] with a grade of B- or higher; Core Studies 3 with a grade of B- or higher; Sociology *। IOI [5]; 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: Core Curriculum 1230 [2.3] with a grade of B - or higher, Core Studies 3 with a grade of B- or better, Sociology *IIOI [5] or permission of the chairperson.

## SOCY 4900 Internship in Applied Sociology

I hour lecture, 6 hours supervised fieldwork; 3 credits each term 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 [19.3] is not required prior to 4901 [19.4]. Only one internship course, either 4900 [19.3] or 490 I [19.4], 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 490I Internship in Applied Sociology

I hour lecture, 6 hours supervised fieldwork; 3 credits each term 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 [19.3] is not required prior to 4901
[19.4]. Only one internship course, either 4900 [19.3] or 490 I [19.4], 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 5IOI 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 5IO2 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 [83.1] and permission of the instructor and the chairperson.

## SOCY 520IW Senior Seminar

3 hours 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. Writing-intensive course.

Prerequisite: Sociology $210 \mid$ [|8], 2102 [|8.5], $2||\mid$ [19], and 2$| 12$ [19.5] with a grade of B- or higher; English *1012 [2]; senior status or permission of the chairperson.

## Speech Communication Arts and Sciences

Department office: 3439 Boylan Hall
Phone: 718.95I. 5225

## Full-time Faculty

Presidential Professor: Silman
Professors: Chapey, Cherry, Emmer, Gura, Gurland, Haas, Lu, Marton, Rubinstein
Associate Professor: Schaeffer
Assistant Professors: Barriere, Beaumont-Bowman, Epstein, Fuse, Longtin, Neave-Ditoro, Thompson
Lecturer: Stein

The Department of Speech Communication Arts and Sciences opens a community of scholars, researchers, practitioners, and teachers to students to explore the broad dimensions of human communication from a number of perspectives, with the intent to further humane understanding. The department equally encourages inquiry in communication studies (traditional rhetoric, interpersonal and intercultural communication, business and organizational communication, the performance of literature) and in the speech sciences (speech-language pathology, audiology, speech and hearing sciences). The department offers a bachelor of arts degree in speech-language pathology, audiology, speech and hearing science (speech science), and in speech, with a concentration in communication studies or in oral interpretation.

The department endeavors to train students to be exemplary communicators in a wide range of settings and to develop an acute awareness of how others communicate. All students learn to conduct research accurately and thoughtfully and to present findings with precision and integrity. Speech science students are expected to explore the development of speech and language from physiological and psychological perspectives, and to concentrate on understanding, evaluating, and rehabilitating those who encounter difficulties in communication. Graduates begin to recognize disorders and distinguish them from differences, as well as have their initial exposure to assessment and remediation of these disorders. Speech students learn to appreciate and understand the power and force of oral language in expository, persuasive, and aesthetic settings. All graduates command a complex and nuanced understanding of effective communication.

The Diana Rogovin Davidow Speech and Hearing Center at Brooklyn College allows both undergraduate and graduate speech science students to receive supervision as they fine-tune their clinical skills and help members of the greater Brooklyn College community improve their ability to communicate. Many of our students go on to graduate studies before entering the fields of education, government, business, or health care. 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 speech HEGIS code I506; SED program code 81375

Department requirements
Speech majors must meet with an adviser before the lower sophomore term. The CLAS department counselor assigns area advisers for CLAS students; SGS students meet with an SGS counselor.

Students may not offer more than six credits for a baccalaureate degree from Speech 4270, 527I, 5272, and 5273.
The Speech Core consists of the following items, I through 4.
I.Speech 1608 or 1619 or 4666.
2.Speech 1113 .
3.Speech 1714 or 1715 or 1717 .
4.Speech 5275 W .

Majors must complete the course requirements in one of the following areas.
I. Communication Studies (30 credits)

Items 2, 3, and 4 of the Speech Core
Speech 1205; 1707; 1619; and 2623.
In addition, majors must select at least six (6) credits chosen from the following: Speech $1618,2719,4625,37,4646,4260$, or 4666.

The Speech Communication Arts and Sciences Department Screening Committee may assign students to any of the following: Speech IIOI; IIO3; |l04; | | I O; I I II.
II. Oral Interpretation (24 credits).

Items I, 2, and 4 of the Speech Core.
Fifteen (I5) credits chosen from the following: Speech I7I5; I7I6; I7I7; 2724; 2725; 4744.
The Speech Communication Arts and Sciences Department Screening Committee may assign students to any of the following: Speech IIOI; IIO3; II04; I I IO; I III.
B.A. degree program in speech-language pathology, audiology, speech and hearing science HEGIS code 1220; SED program code 85189

Department requirements (39-4। credits)
Speech majors must meet with an adviser before the lower sophomore term. The CLAS department counselor assigns area advisers for CLAS students; SGS students meet with an SGS counselor.

Students may not offer more than six credits for a baccalaureate degree from Speech 4270, 527I, 5272, and 5273.
The Speech Core consists of the following items, I through 4.
I.Speech 1608 or 1619 or 4666.
2.Speech 1113 .
3.Speech 1714 or 1715 or 1717 .
4.Speech 5275 W .

Students must complete items I, 3, and 4 of the Speech Core:
All of the following: Speech I I I3; I I78; I I79; 248।; 2482; 223।; 338।; 4383.
The Speech Communication Arts and Sciences Department Screening Committee may assign students to any of the following: Speech IIOI; IIO3;


## Departmental Minor(s)

## Minor in Speech

Department Requirements
At least 12 credits in advanced electives in the Speech Communication Arts and Sciences Department with a grade of C or higher. Speech minors are advised to consult with department counselors for recommendations.

## Department recommendation

Students should consult the Speech Counseling Guide, which describes each major in detail and may be obtained in the department office.

## 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 Speech Communication Arts and Sciences Department, receive a grade of B or higher in Speech 5283 or 5284 or 5285 , and have the recommendation of the Speech Communication Arts and Sciences Department and the Faculty Council Committee on Honors, Citations, and Awards.

## Division of Graduate Studies

The Speech Communication Arts and Sciences Department offers the following degree programs: master of arts in speech (currently under revision) and 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 scince in speech-language 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 program in speech-language pathology is accredited by the Council on Academic Programs (CAA) of the American Speech, Language, Hearing Association (ASHA). The department participates in the Au.D. (Doctor of Audiology) program offered by the CUNY Graduate Center in collabration with Brooklyn, Queens, and Hunter colleges.

For information, students should consult the department's deputy for graduate studies.

## Courses

*Courses marked with an asterisk $\left({ }^{*}\right)$ 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.

## Speech communication

## Basic skills

## SPEC * 1 IOI Clinic

## I hour, no credit

Remedial, clinical, noncredit work. Individual consultations or carefully selected small groups. This course is usually assigned in the freshman year.

Prerequisite: assignment on the basis of the speech screening interview or a diagnostic interview in the Diana Rogovin Davidow Speech and Hearing Center.

## SPEC *1 103 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 Speech and Theater IIOI [2.3] or Speech *। 103 [3.1] or I 104 [3.2]. Not open to students who have completed more than five credits in speech.)

Prerequisite: assignment on the basis of the speech screening interview.

## SPEC *1 104 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 Speech and Theater | IO | [2.3] or Speech * 1103 [3] or 3.1. Not open to students who have completed more than five credits in speech.)

Prerequisite: assignment on the basis of the speech screening interview.

## SPEC IIIO 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 Speech III। [IO.I]. Not open to students who have completed more than five credits in speech.)

Prerequisite: completion of course assigned at speech screening interview.

SPEC I I I I 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 Speech I I IO [IO]. Not open to students who have completed more than five credits in speech.)

Prerequisite: completion of course assigned at speech screening interview.

## Interpersonal communication

## SPEC 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.

Prerequisite: completion of course assigned at speech screening interview.

## SPEC 1618 Group Discussion of Social Problems

3 hours; 3 credits
Nature and operation of discussion groups. Use of evidence, reasoning, reflective thinking, group interrelations, leadership, and decision making.

Prerequisite: completion of course assigned at speech screening interview.

## SPEC 1619 Intercultural Communication: Speech Community Perspectives

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 contacts. (Not open to students who completed Speech 4260 [60] in the Spring 1998 or Fall 1998 semester.)

Prerequisite: completion of course assigned at speech screening interview, or permission of the chairperson.

## SPEC 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 career-related competencies. (Not open to freshmen or to students who have completed Speech 4260 [60], fall, I 98 I, or spring, I982.)

Prerequisite: open to students who have completed a minimum of 61 college credits and have completed the course assigned at the speech
screening interview.

## SPEC 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. (Not open to students who took SPE 4260 [60] during 2005.)

Prerequisite: completion of course assigned at speech screening interview.

## SPEC 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.

Prerequisite: Speech Communication Arts and Sciences 1205 [5] or 1608 [8], or permission of the chairperson

## SPEC 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 [66].)

Prerequisite: Health and Nutrition Sciences 1100 [6. I] or equivalent.

## Public address and performance

## SPEC 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.

Prerequisite: completion of course assigned at speech screening interview.

## SPEC 1714 Oral Interpretation: Prose

3 hours; 3 credits
Fundamental principles of the study of literature through performance. Emphasis on prose forms. (Not open to students who have completed Speech 14.)

Prerequisite: completion of course assigned at speech screening interview.

## SPEC 1715 Oral Interpretation: Poetry

## 3 hours; 3 credits

Application of basic oral interpretation skills to the analysis and performance of poetry. (Not open to students who have completed Speech 24.)

Prerequisite: Completion of the course assigned at the speech screening interview.

## SPEC I7I7 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 Speech 1718 [14.5].)

Prerequisite: Completion of the course assigned at the speech screening interview.

## SPEC 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 Speech 1717 [14.4].)

Prerequisite: completion of the course assigned at the speech screening interview.

## SPEC 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.

Prerequisite: Speech 1707 [7] or permission of the chairperson.

## SPEC *2722 Parliamentary Procedure

| hour; I credit
Study and practice in the rules of parliamentary procedure.
Prerequisite: sophomore or junior or senior standing.

## SPEC 4744 Special Topics in Oral Interpretation

3 hours; 3 credits each term
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.

Prerequisite: Speech 24.3 or permission of the chairperson.

## Speech communication language theory and research

## SPEC $\mathbf{I} 205$ 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 I001 [I]).

## SPEC 2720 Morphology

3 hours; 3 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 [20].

Prerequisite: Linguistics 200 [ [1] or Anthropology 230 I [2.3].

## SPEC 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 and Radio 3535 [35] and Communication 3300 [35].)

Prerequisite: Television and Radio \| 65 [6.5] or permission of the chairperson.

## SPEC 4260 Special Topics

3 hours; 3 credits each term
Topics vary from term to term. Courses description may be obtained from the department office before registration. Students may take this course for credit twice but may not repeat topics.

Prerequisite: Speech *। 103 [3] or 7 or 1618 [18] or permission of the chairperson.

## SPEC 527 I Independent Study

3 hours independent work§ and conferences; I 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 Speech 4270 [70], 527 I [7I], 5272 [72], and 5273 [73].

Prerequisite: five or more credits in Department of Speech Communication Arts and Sciences courses and permission of the chairperson.

## SPEC 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 Speech 4270 [70], 5271 [7I], 5272 [72], and 5273 [73].

Prerequisite: five or more credits in Department of Speech Communication Arts and Sciences courses and permission of the chairperson.

## SPEC 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 Speech 4270 [70], 5271 [7I], 5272 [72], and 5273 [73].

Prerequisite: five or more credits in Department of Speech Communication Arts and Sciences courses and permission of the chairperson.

## SPEC 5275W Senior Seminar: Current Issues in Speech

 Communication3 hours; 3 credits
Contemporary concerns and principles in speech communication as they interact across the discipline. Practical case studies.
Writing-intensive section.
Prerequisite: Speech 1608 [8] or 1619 [18.5] or 2623 [23], Speech 2231 [31], Speech 1714 [14.1] or 1715 [14.2] or 1717 [14.4] and English *1012 [2].

## Speech language pathology

## Basic skills

## SPEC III3 Phonetics

3 hours; 3 credits
Introduction to the science of English sounds and to theories of derivation of present American linguistic usages. Phonetical applications to matters of speech correction and improvement. (Not open to lower freshmen.)

Prerequisite: completion of course assigned at speech screening interview.

## SPEC *III4 Survey of Speech, Language, and Hearing Disorders

## 3 hours; 3 credits

Survey of speech, language, and hearing disorders. Study of the impact of communication disorders on development in order to enable the nonspecialist to work effectively with these children. Consideration of a range of problems, including neurological and physiological disabilities; application to children from culturally and linguistically diverse backgrounds.

## SPEC II78 Speech-Language and Hearing Science: Anatomy and Physiology

4 hours; 4 credits
An overview of the speech-language and hearing mechanisms; their anatomical relationships and physiological processes.

Prerequisite: Completion of course assigned at speech screening interview.

## SPEC II79 Speech-Language and Hearing Science: Acoustics

4 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: Speech III3 [13].

## Audiology

## SPEC 248I Audiology I

3 hours lecture, 2 hours laboratory; 4 credits
Disorders of hearing, measurement of hearing through pure tone and speech audiometry, and interpretation of audiometric test results. (Not open to students who have completed Speech and Theater 27.3.)

Prerequisite: all of the following: Speech 1113 [13], 17.4 or 1178 [I7.8], 17.5 or 1179 [17.9], 2231 [31]. These courses must be completed with an average of $B$ or higher and with no grade lower than $C$.

## SPEC 2482 Audiology II

3 hours lecture, 2 hours laboratory; 4 credits
Auditory rehabilitation for children and adults; implications for early intervention; application to community and educational settings.

Prerequisite: Speech 1113 [13], 1178 [17.8], I 79 [17.9], 223| [3।], and 2481 [28.1] with an average of B or higher and with no grade lower than C .

## Interdisciplinary courses

## SPEC 4270 Speech Laboratory

Minimum of 45 hours satisfactory participation; I credit each term Satisfactory participation in projects and activities not included as part of the work of a specific course in any area of the Department of Speech. Students may take this course for credit four times, but may not offer more than six credits toward a baccalaureate degree from Speech 4270 [70], 527 I [7I], 5272 [72], and 5273 [73]. Students should consult the department office about the special registration procedures required for this course.

## Speech communication language theory and research

## SPEC 223I Speech and Language Development

4 hours; 4 credits
Speech, language, and communication development in relation to motor, perceptual, cognitive, emotional, and social development. Implications for individual, cultural, and linguistic variation and literacy.

Prerequisite: Speech II I3 [|3].

## Speech language disorders and practicums

## SPEC 3381 Nature of Speech-Language Disorders

3 hours lecture; 3 hours laboratory; 4 credits
Etiology and characteristics of speech and language disorders. Implications for literacy development and linguistic and cultural diversity.

Prerequisite: all of the following: Speech III3 [13]; I I78 [17.8]; II79
[17.9]; 2231 [31]. These courses must be completed with an average of $B$ or higher and with no grade lower than $C$.

## SPEC 4383 Treatment of Speech-Language Disorders

3 hours lecture, 3 hours laboratory; 4 credits
Clinical theory and practice in the treatment of speech and language disorders. Cultural-linguistic diversity issues. Application to educational settings. Observations of speech-language intervention.

Prerequisite: Speech 1113 [13], 1178 [17.8], I 179 [17.9], 223| [3।], and 338I [38.I] with an average of B or higher and with no grade lower than C .

## Honors courses

## SPEC 5283 Independent Research

Minimum of 9 hours independent work§ 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 Speech Communication Arts and Sciences Department courses and permission of the instructor and the chairperson.
Prerequisite for students in the speech pathology/audiology-speech and hearing science area: Speech 2231 [31] or 38.3 .

## SPEC 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 Speech Communication Arts and Sciences Department courses and permission of the chairperson. Prerequisite for students in the speech pathology/audiology-speech and hearing science area: Speech 223 I [3I] or 4383 [38.3].

## SPEC 5285 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 areas of speech.
Prerequisite: an average grade of B or higher in a program, approved by the chairperson, of advanced Speech Communication Arts and Sciences 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:

SPEC 1704
SPEC 2724
SPEC 2725
SPEC 3733
SPEC 3734
SPEC 1609
SPEC 1716
SPEC 272I
SPEC 2729
SPEC 5274

Masterpieces of Persuasion
Readers Theater
Interpretation of Classic Literature
Organizational Communication
Studies in Public Address
Evaluative Listening for Oral Communication
Oral Interpretation: Drama
Speeches for Special Occasions
Social Control through Persuasive Speech
Senior Seminar: Current Issues in Speech Communication

## Television and Radio

Department office: 304 Whitehead Hall
Phone: 718.95I.5555

## Full-time Faculty

Professors: MacLelland, Rodman, Wasser
Associate Professors: Fry, Jannone, Patkanian, Sosa
Assistant Professors: Anderson, Hashmi, Macias
Lecturer: Dunphy
The Department of Television and Radio seeks to cultivate in its students a deep understanding of electronic media and a proficiency in their use. Research development and applied electronic 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 broadcast journalism, and minors in television and radio for film majors and for theater majors. We offer our students departmental scholarships, industry-sponsored internships, and teaching assistant and research credits. Our association with the College television club and the radio station 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 B-CAT, Brooklyn's community access 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. Each summer broadcast journalism students produce their own local news broadcast for B-CAT.

Alumni of the department find jobs in a wide variety of communication professions, including advertising, public relations, print and electronic journalism, corporate communications, sales, and education, as well as in television and radio facilities. 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 and Radio II65, 26I6, 2265, 2420, 4430W.
Two of the following: Television and Radio 384। or 395 I or 386 I or 387 I.
One of the following: Speech 1714 or 1715 or 1619 or 2623.
Six additional credits in Television and Radio 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 and Radio faculty.

Students may not offer more than six credits for a baccalaureate degree from Television and Radio 4870, 4I75, 4I76, 4I77, and 4578.

## B.S. degree program in broadcast journalism HEGIS code 0605; SED program code 83638

[^11]Television and Radio I I65, 2420, 2726, 387I, 3728, 4728, 3729 and either 3535 or English 2402.
An additional 12 credits of advanced related course work are required in any specialized area other than Television and Radio and the Journalism Program of the English Department, with the courses approved by the program director.

## Departmental Minor(s)

## Minor in TV and Radio

Department Requirements
Television and Radio II65, 2265, 2616, 2420, and one other advanced course, beyond 2420, with appropriate prerequisites.

## Division of Graduate Studies

The Television and Radio Department offers a master of fine arts degree program in television and digital media production and a master of science in television and radio. For information, students should consult the department's deputies for graduate studies. A Graduate Bulletin may be obtained in the Office of Admissions.

## Courses

*Courses marked with an asterisk $\left({ }^{*}\right)$ 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.

## TVRA I 65 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.

## TVRA 222I British Television

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.

## TVRA 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 3150 W ).

Prerequisite: English 2 and either: Television and Radio 2265, or Core Studies 5, or both Core Studies 5.1 and 5.2, or Core Curriculum 131 I or 1312 , or Communication I001.

## TVRA 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 and Radio II 65 [6.5].

## TVRA 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 and Radio 386। [26.1].)

Prerequisite: Television and Radio II 65 [6.5]

## TVRA 25 I7 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 [50.7].

Prerequisite: Television and Radio 1165 [6.5] or Business 3 I 00 [50.2] or permission of the chairperson.

## TVRA 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 and Radio II 65 [6.5] or Business 3 I 00 [50.2] or permission of the chairperson

## TVRA 2616 Television and Radio Writing

## 3 hours; 3 credits

Basic communication skills required of the writer in television and radio.
Techniques of writing news, documentary, comedy, drama, and
advertising for these media.

Prerequisite: Television and Radio || 65 [6.5].

## TVRA 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 [60].

Prerequisite: English 1010 [I].

## TVRA 2726 Television and Radio Journalism

3 hours; 3 credits
Survey of operations, functions, policies, and problems of television and radio public affairs and news. Responsibilities and roles in relation to freedom of information and the public's right to know.

Prerequisite: Television and Radio 1165 ; or, with the permission of the Broadcast Journalism Program coordinator, either English 2402 or Television and Radio 3535.

## TVRA 3223 Ethical Issues in the Electronic Mass Media

3 hours; 3 credits
Analysis and discussion of ethical issues related to television and radio. 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 [15.4]. (Not open to students who have completed Philosophy 4.I.).

Prerequisite: Television and Radio II 65 [6.5], and Philosophy 3306 [6] or Core Studies 10.

## TVRA 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: TVRA 2265 [16.5].

## TVRA 326I 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 and Radio 2265 [16.5] or permission of the chairperson

## TVRA 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 Studies 3121 [31].
Prerequisite or co-requisite: Television and Radio 1165 [6.5] or Woman's Studies 1001 [12].

## TVRA 348I 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 and Radio 4I73.)

Prerequisite: Television and Radio 2616 [16] and 2265 [16.5].

## TVRA 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.

Prerequisite: Television and Radio 2616 [16] and 2265 [16.5].

## TVRA 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 Communication 3300 [35].)

Prerequisite: Television and Radio | 165 [6.5] or instructor's permission.

## TVRA 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-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 Business 3110 [31.7] and Computer and Information Science I597 [9.7].

Prerequisite: Sophomore status or permission of the chairperson.

## TVRA 3564 Electronic Delivery Systems

3 hours; 3 credits
Emerging electronic delivery systems. Social, educational, and cultural implications. Programming and marketing considerations.

Prerequisite: Television and Radio 2265 [16.5] or permission of the chairperson.

## TVRA 3565 Public Television

## 3 hours; 3 credits

Television as an educational medium. Public and instructional programming.

Prerequisite: Television and Radio 2265 [16.5].

## TVRA 366 I 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 and Radio 4173 [73], Special Topics: Advanced Television Writing: Comedy.)

Prerequisite: Television and Radio 2616 [16] with a grade of B or better.

## TVRA 3662 Advanced Television Dramatic Scriptwriting

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 and Radio 4I73 [73], Special Topics: Advanced Television Writing: Drama.)

Prerequisite: Television and Radio 2616 [16] with a grade of $B$ or better.

## TVRA 3663 Advanced Television Documentary Scriptwriting <br> 3 hours; 3 credits

Scriptwriting for television documentaries. Developing scripts based on research and story structure.

Prerequisite: Television and Radio 2616 [16] with a grade of $B$ or better.

## TVRA 3728 Television and Radio Newswriting

3 hours; 3 credits
Adaptation of various sources of news material to television and radio writing and delivery style. Forms for television and radio newswriting. Television and radio news equipment. Relationships between members of the television and radio news team.

Prerequisite: Television and Radio II 65 [6.5].

## TVRA 3729 Summer Broadcast News Institute

4 hours lecture, 8 hours laboratory; 9 credits, summer session 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 in-studio and field television production. (Not open to students who have completed Television and Radio 26.8।, 26.82, and 26.83.)

Prerequisite: Television and Radio 3535 or 3728 [28] or 3861 [26.1] or 387 I [27.1], or English 240 [ [ 8.1 I], or permission of the director of the Broadcast Journalism program.

## TVRA 3782 Radio Journalism

4 hours production; 4 credits
This class will teach the basic techniques of radio reporting, writing and on-air production. Students will learn to work as a broadcast team and produce pieces for air on BCR, Brooklyn College Radio.

Prerequisite: Television and Radio 2616 [16].

I 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 and Radio 2265 and 2420. Broadcast Journalism majors may, with permission of the chairperson, substitute either English 2402 or Television and Radio 3535 for both Television and Radio 2616 and 2420.

Prerequisite or corequisite: Television and Radio 2616 or 3728.

## TVRA 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 [50].

A course in dramatic literature or Television and Radio 395I [25.1] or 3861 [26.1] or 3871 [27.1].

## TVRA 386I Television Production

I 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 and Radio 2265 and 2420. Broadcast Journalism majors may, with permission of the chairperson, substitute either English 2402 or Television and Radio 3535 for both Television and Radio 2616 and 2420.

Prerequisite or corequisite: Television and Radio 2616 or 3728.

## TVRA 387 I Elements of Television Field Production

I 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 and Radio 2265 and 2420. Broadcast Journalism majors may, with permission of the chairperson, substitute either English 2402 or Television and Radio 3535 for both Television and Radio 2616 and 2420

Prerequisite or corequisite: Television and Radio 2616 or 3728.

## TVRA 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 post-production. Construction of a complex soundscape in a variety
of digital platforms. This course is taught as a workshop.
Prerequisite: Television and Radio 384 I or 3824 [24.1] or 395 I [25.1] or 3861 [26.1] or 3871 [27.1] or permission of the Chairperson.

## TVRA 395 I Introduction to Radio Production

I 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 and Radio 2265 and 2420. Broadcast Journalism majors may, with permission of the chairperson, substitute either English 2402 or Television and Radio 3535 for both Television and Radio 2616 and 2420.

Prerequisite or corequisite: Television and Radio 2616 or 3728.

## TVRA 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 and Radio 1165 [6.5]. Prerequisite or corequisite: Television and Radio 2265 [16.5].

## TVRA 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 and Radio 71 through 74 for a total of eight credits, but may not repeat topics.

Permission of the chairperson.

## TVRA *4I75 Television and Radio Colloquium

| hour lecture and recitation; | 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 and Radio *4870 [70], 4175 [75], 4176 [76], 4177 [77], and 4578 [78]. (Not open to students who have completed Television and Radio *4।76 [76], 4177 [77], or 4578 [78].)

Prerequisite: 12 credits in television and radio courses and permission of the chairperson.

## TVRA *4I76 Television and Radio Internship

I 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 and Radio *4870 [70], 4175 [75], 4176 [76], 4177 [77], and 4578 [78].

Prerequisite: senior class standing, 12 credits in television and radio courses and permission of the chairperson.

## TVRA *4I77 Television and Radio Internship

I hour lecture, minimum of I4 hours unsupervised fieldwork; 3 credits

In-depth field experience in a professional telecommunications facility. Administrative, production, or technical duties as assigned by the cooperating facility. Preparation and presentation of 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 and Radio *4870 [70], 4175 [75], 4176 [76], 4177 [77], and 4578 [78].

Prerequisite: senior class standing, 12 credits in television and radio courses, and permission of the chairperson.

## TVRA 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 and Radio 384 I or 3824 [24.1] or 395 I [25.I] or 386 I [26. I], or 387 I [27.I] or permission of the chairperson; English * 1012 [2].

## TVRA 456 I 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 and Radio 395। [25.1], 3861 [26.1], 387 I [27.1], or permission of the chairperson.

## TVRA 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 and Radio 395 । [25.1] 386 I [26.I]. or in Television and Radio 387I [27.1] or permission of the chairperson.

## TVRA *4578 Fieldwork in Media Programming and Marketing

20 hours fieldwork, I 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 and Radio *4। 76 [76] or 4177 [77].)

Prerequisite: Television and Radio 2517 [I7] and 456। [26.15]; or permission of the chairperson.

## TVRA 4728 Television News Reporting

I hour lecture, 4 hours laboratory; 3 credits Introduction to television field reporting. Functioning as a reporter, field camera person, computer tape editor, field producer or assignment producer. Methods of television news reporting. Writing television news scripts for stories covered. Computer videotape editing of news.

An approved Broadcast Journalism major and Television and Radio 387 I [27.1] and 8. Television and Radio majors with a B or better in

Television and Radio 3871 [27.1] and/or Television and Radio 3728
[28] may be admitted with the permission of the chairperson.

## TVRA 4824 Advanced Multimedia Production: New Media for Television

I hour lecture, 4 hours laboratory; 3 credits
Developing strategies and methodologies for creating cross-platform 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 and Radio 384 I or 3824 [24.I], 387 I [27.I], or permission of the chair.

## TVRA 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 and Radio 387I [27.1] or 3729 [29] or permission of the chairperson.

## TVRA 4849 International Documentary Production

| 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 220। [49.2].)

Prerequisites: Television and Radio II 65 [6.5], 2265 [16.5], 387। [27.I], and permission of the instructor

## TVRA 4862 Television Production and Direction

I hour lecture, 4 hours laboratory; 3 credits
Continuation of Television and Radio 386। [26.1]. Various types of television program production and the techniques employed in each.

Prerequisite: Television and Radio 386। [26.1] and permission of the chairperson.

## TVRA *4870 Television and Radio Laboratory

Minimum of 45 hours of satisfactory participation; I credit Satisfactory participation in projects and activities not included in specific course work in any area of the Department of Television and Radio. 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 and Radio *4870 [70], *4। 75 [75], *4।76 [76], *4।77 [77], and *4578 [78].

Prerequisite: 12 credits in Television and Radio courses or permission of the chairperson.

## TVRA 4925 Advanced Radio Production

I 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 and Radio 395 I [25.1] or Music 3261 [26.1] or

Film 2601 [48] or permission of the chairperson.

## TVRA 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 and Radio 2265 and 2420; or either English 2402 or Television and Radio 3535; or permission of the chairperson.

## Honors courses

## TVRA 5020 Independent Research

Minimum of nine hours independent work and conference or class meetings; 3 credits
Research or fieldwork in television and radio supervised by a faculty member. Approved topic. Final report or paper.

Prerequisite: Television and Radio 1165 [6.5], 26 |6 [16], 2265 [16.5], 2420 [20], 395 I [25.1] or 386 I [26.I] or 387 I [27.1], 4430 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 permission of the chairperson.

## TVRA 5030 Seminar

Minimum of 9 hours independent work and conference or class meetings; 3 credits
Readings in television and radio. Examination.
Prerequisite: Television and Radio 1165 [6.5], 26 |6 [16], 2265 [16.5], 2420 [20], 3951 [25.1] or 386 [ [26.1] or 387 I [27.I], 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.

## TVRA 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 and Radio 1165 [6.5], 2616 [16], 2265 [16.5], 2420 [20], 395 I [25.1] or 386 I [26.1] or 387I, 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.

## Theater

Department office: 317 Whitehead Hall
Phone: 718.95I. 5666

## Full-time Faculty

Professors: Bullard, Stein, Thomson, Vivier
Associate Professors: Bonczek, Cohen, Marsh , Richardson
Assistant Professors: Easley, Hughes, Snider-Stein, Tesman

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 theater, a bachelor of fine arts in acting, and a bachelor of fine arts in 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 registration counseling interview is required by the department when the student applies for admission to the College. Students should indicate their intention to major in theater on their application for admission to the College. 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, I205, I206, and I207--for each course marked with the symbol (+) for which the student registers. However, no student shall be required to register for more than two Production Practica in one semester, and theater majors who have completed six crew assignments, credit-bearing or not, 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 I00 I, I I 0 I, I20 I, I202, I203, 350 I or $3502 \mathrm{~W}, 3503$.
Four credits from the following courses: Theater 1202, 1203, 1204, 1205, 1206, 1207 . (Students may not exceed more than 9 credits in practicum courses.)

Two of the following courses: Theater 220I, 2202, 23I0, 23II, 23I2, 23I3, 2320, 332I, 3330, 333I, 3333, 334I, 470I, 4702, 4703, 4704, 4705, 4706, 2001. (Students may take Business 3200 or 3100 as a substitute for Theater 2001).

Two of the following courses: Theater $2 \mathrm{I} 02,2 \mathrm{I} 03,3 \mid 02,3 \mathrm{I} 03,360 \mathrm{I}, 3602,3620,370 \mathrm{I}, 47 \mathrm{I} 0,4620$.
One of the following: Theater 2002, 250I, 3504, 3505, 2502, 3506.
Additional credits in Department of Theater courses; Classics 3220; Comparative Literature 3610,361I; 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 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. Courses marked with the symbol "\&" are for B.F.A. Acting majors only.

Department requirements (61-68 credits)

Acting (6| credits)
All of the following: Theater 120 I, I 202, I203, 340I, 3402, 3403, 3404, 3405, 3406, 3407, 320I, 3202, 3203, 3204, 3205, 3206, 3436, 4400, 350I or 3502W, 3503. (Students entering the program who have no transferable credits in Theater must pass a department examination on general theater knowledge. Students who fail to pass this examination must register for Theater 1001 in their first semester of the program.)

Four credits 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 470 I, 4702, 4703, 4704, 4705, 4706.
One of the following: Theater 3426, 3427.
Four additional credits in Department of Theater courses

Design and Technical Production (66-68 credits)
All of the following: Theater I00I, I202, I203, 23IO, 2320, 332I, 3330, 333I, 334I, 220I, 350I or $3502 \mathrm{~W}, 3503$. (Students with no previous experience may need to complete Theater 1201 before registering for more advanced technical courses. See course prerequisites.)

Four credits from the following courses: Theater I202, 1203, I204, 1205, 1206, 1207 . (Students may not exceed more than 9 credits in practicum courses.)

One acting course or Speech 1717.
Two of the following: Theater 250I, 3504, 3505, 2502. (One of the following may substitute for one of the above: Classics 3220, Comparative Literature 3305, 36I0, 36II, English 3I22, 3I24, 3I32, 3I70.)

Twenty-one additional credits from the following: Theater $33 \mathrm{I} 0,23 \mathrm{II}, 23 \mathrm{I} 3,232 \mathrm{I}, 3322,432 \mathrm{I}, 3332,3333,3340,3342,4340,434 \mathrm{I}, 335 \mathrm{I}, 435 \mathrm{I}, 470 \mathrm{I}$, $4702,4703,4704,4705,4706,5805,5806,5807$, Art 22IO, 22II, 23I0, 23II, 2320, 3321.

## Departmental Minor(s)

## Minor in Acting (for TV and Radio Majors)

Department Requirements
Theater IOOI, I IOI, I20I, I202, I203, and I204; and twelve credits chosen from the following courses, each completed with a grade of $C$ or higher: Theater $2102,2103,3102,3103,2110,21 \mid 1,2112,2113,3620,3701,4620,4710$. Any substitution of courses must be approved by the chairperson or designee/ undergraduate deputy chair.

## Minor in Theater

## Department Requirements

A major in Television and radio; Theater I20I, I202, I203, I204; and 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.

## Minor in Theater Production for TV and Radio Majors

## Department Requirements

A major in Television and radio;
Theater I20I, I202, I203, I204;
All of the following courses each completed with a grade of C or higher: Theater 23I0, 3330;
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 I00I, IIOI, I20I, I202, I203, 2I02, 2I03. Students should be aware that Theater 2102 and 2103 have crew co-requisites; see "Department crew requirements" section in the bulletin.

Three additional courses from the following: Theater 250I, 2502, 350I, 3502, 3503, 3504, 3505, 3506; Comparative Literature 36I0, 36 II; English 3122, 3123, 3124, 3132, 3I70, 3184; Africana Studies 320I, 3205; Anthropology 3I97.

Additional credits necessary to total a minimum of 30 credits for the Concentration, chosen from among the following: any Theater Department courses; Comparative Literature 3610,361 I, English 3I22, $3123,3124,3132,3170,3184$; Africana Studies 320I, 3205; Anthropology 3197. (Students may take Theater 1003 only if it has not been taken as a paired course with Education 3202.)

## Division of 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. A Graduate Bulletin may be obtained in the Office of Admissions.

## 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 symbol $(+)$ denotes a department crew requirement.

## 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 I00| [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 200I Theater Management

3 hours; 3 credits
Theater management, including problems of financing, promoting, labor relations, unions, and programming for educational, community, and professional theater.

Prerequisite: Theater 100| [I]

## 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.

Theater $100 \mid$ [I].

## 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-off-Broadway. Innovative theater practitioners in acting, directing, and design.

Prerequisite: Theater 100| [I]

## 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 Africana Studies 3225 [24.5].

## 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 [I]

## 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 [I] and English *|0|2 [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 [I]

## 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: Theaterl001

## 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 Women's Studies 4I.5.

Prerequisite: Theater 350 I [40. I], or an Upper-Tier Core Curriculum course in Exploring literature or Exploring global connections.

## THEA 480I 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 IIOI 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 I 10 I [2].

Prerequisite: Theater $110 \mid$ [2]

## THEA +2I 03 Acting Workshop II

3 hours; 3 credits
Continuation of Theater 2102 [10.1]. May be taken twice for credit.
Prerequisite: Theater 2102 [IO.I]

## THEA 2110 Acting Practicum I

2 hours workshop; I 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 [IO.I] or B.F.A. acting status, and permission of the undergraduate deputy chairperson.

## THEA 2III Acting Practicum II

2 hours workshop; I credit
Continuation of Theater 2110 [12.5]
Prerequisite: Theater 2110 [12.5].

## THEA 2II2 Acting Practicum III

2 hours workshop; I credit
Continuation of Theater $211 \mid$ [|2.6]
Prerequisite: Theater 211। [12.6].

## THEA 2II3 Acting Practicum IV

2 hours workshop; I 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 [I0.I].

## 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 [I] and 1201 .
Corequisite: see section "Department crew requirements" above.

## THEA 23 I I 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 100 I [I]
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.I]
Corequisite: see section "Department crew requirements" above.

## THEA 2320 Costume Construction for the Stage

3 hours; 3 credits
Theory and practice of constructing the stage costume for educational, community, and professional theater. Application of these theories and practices to current college productions.

Prerequisite: Theater 1001 [I] and I201
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 120 ।
THEA 332 I 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 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
|20| [3]; 23 IO [20.I]
Corequisite: see section "Department crew requirements" above

## THEA 333I 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 3333 Scenic Design II

3 hours; 3 credits
Concentration on scenic design, problems of interpretation, style, and staging.

Prerequisite: Theater 333। [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.

Prerequiste: Theater 1201

## THEA 334I 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 4340 Stage Lighting Workshop

6 laboratory hours; 3 credits
Practical laboratory work in stage lighting techniques and mechanics for departmental productions.

Prerequisite: Theater 120 |

## Directing

## THEA 360I Directing I

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.

Prerequisite: Theater I00I,I20I, 2102 and permission of the undergraduate deputy chairperson.

350। [40.1]; 3503 [40.2]

## THEA 3602 Directing II

3 hours; 3 credits
Selection, casting, rehearsal, and production in class of a contemporary play.

Prerequisite: Theater 360 [ 30.1 ] and permission of the concentration head 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 100 [ 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 per week; I credit
Weekly scene/electrics shop hours in a lab setting. May be taken five times for credit

## THEA 1203 Costume Shop Practicum

3 hours per week; I credit
Weekly scene/electrics shop hours in a lab setting. May be taken five times for credit

## THEA 1204 Running Crew Practicum I

5 hours; I credit
Running Crew on a departmental production. May be taken twice for credit.

Prerequisite: permission of the instructor.

## THEA 1205 Running Crew Practicum II

5 hours; I credit
Running Crew on a departmental production. May be taken twice for credit.

Prerequisite: permission of the instructor.

## THEA I 206 Running Crew Practicum III

5 hours; I credit
Running Crew on a departmental production. May be taken twice for credit.

Prerequisite: permission of the instructor.

## THEA 1207 Running Crew Practicum IV

5 hours; I credit
Running Crew on a departmental production. May be taken twice for
credit.
Prerequisite: permission of the instructor.

## THEA 220I 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 [I] and 1201;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 335I 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 and Radio 395I.)

Prerequisite: Theater 1201.

## THEA 435 I Sound Recording Workshop

6 hours; 3 credits
Practical laboratory work in sound recording for departmental productions in preparation.
Prerequisite: Theater 335 I and permission of the concentration head.

Prerequisite: Theater 335 I and permission of the concentration head.

## BFA courses

## THEA 320 I Dynamics I

4 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.
Corequisite: Theater 340 I and 3203.

## THEA 3202 Dynamics II

4 hours; 2 credits
Continuation of Theater 3201.
Prerequisite: Theater 3401 and 3201 Acceptance into the BFA
Acting Program and permission of the concentration head.
Corequisite: Theater 3402 and 3204.

## THEA 3203 Dynamics III

4 hours; 2 credits
Continuation of Theater 3202.
Prerequisite: Acceptance into the BFA Acting Program and permission of the concentration head.

Corequisite: Theater 3401 and 3201.

## THEA 3204 Dynamics IV

4 hours; 2 credits
Continuation of Theater 3203.
Prerequisite: Theater 3401 and 3203. Acceptance into the BFA Acting Program and permission of the concentration head.
Corequisite: Theater 3402 and 3202.

## THEA 3205 Dynamics V

4 hours; 2 credits
Continuation of Theater 3204.
Prerequisite: Theater 3404 and 3204. Acceptance into the BFA Acting
Program and permission of the concentration head.
Corequisite: Theater 3405.

## THEA 3206 Dynamics VI

4 hours; 2 credits
Continuation of Theater 3205.
Prerequisite: Theater 3405 and 3205. Acceptance into the BFA Acting Program and permission of the concentration head.
Corequisite: Theater 3406.

## THEA 3207 Dynamics VII

4 hours; 2 credits
Study of the actor's stage movement and/or voice production. Work related directly to work being done in acting classes. May be taken twice for credit.

Prerequisite: Theater 3204. Acceptance into the BFA Acting Program and permission of the concentration head.

## THEA 3208 Dynamics VIII

4 hours, 2 credits
Study of the actor's stage movement and voice production. Work related directly to work being done in acting classes. May be taken twice for credit.

Prerequisite: Theater 3204. Acceptance into the BFA Acting Program and permission of the concentration head.

## THEA 340I 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 3420 and 3431

## 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.

## THEA 3404 Acting IV: Classics of Modern Realism

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 [1 1.4] 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.

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 Speech I| | 3 [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 4400 Senior Rehearsal and Performance

Minimum of 45 hours participation; I credit
Under faculty supervision students will study and evaluate their working procedures and development in a selected role throughout the rehearsal and performance period by means of a journal, which serves as the basis for student evaluation. This course may be used to satisfy the senior performance requirement for B.F.A. majors.

Prerequisite: senior B.F.A. status in acting 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 [20].

Prerequisite: Theater 3601 [30.1] or English 3306 [I7.I].

## 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 470I 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.

Prerequisite: permission of the instructor.

## 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 47I0 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 580I Theater Laboratory

Minimum of 45 hours satisfactory participation each term; I credit each term
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 $\oint$ 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 $\S$ 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 3310 Stagecraft II
THEA 3322 Costume Design for the Stage II

THEA 3332 Scene Rendering
THEA 3342 Lighting Design II
THEA 3424 Special Topics in Dynamics
THEA 1002
Mini Course in Theater Arts

## Women's Studies

Department office: I 207 Ingersoll Hall
Phone: 718.951 .5476
Women's studies examines the roles and positions of women, aspects of their domestic, economic, political, social, reproductive, and sexual lives, and their relationships to the cultures and societies in which they live and to each other. The critical analysis of individuals, institutions, and intellectual ideas is approached from historical, cross-cultural, and contemporary viewpoints. As an interdisciplinary field, women's studies is a model for traditional disciplines, leading the way to more innovative teaching and learning.

The interdisciplinary Brooklyn College program in women's studies offers students a bachelor of arts degree and a minor. We also offer a concentration for education majors in the following programs: early childhood education teacher (birth-grade 2); childhood education teacher (grades I-6). The program is committed to providing students with an excellent education, advisement, and support.

The women's 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 Studies students have the opportunity to take field trips to feminist academic conferences, museums, and libraries. Majors and minors are also able to participate in a new study-abroad program specifically designed to serve their needs. For some, declaring a women's studies major is a political statement. According to our students, having Women's Studies on their transcripts says that human rights, including those of women and LGBTQ and other persons belonging to all racial, ethnic, and religious groups, are of the highest importance. It says that despite the fact that history, politics, and philosophy, among other areas, are dominated by Western male thought, our faculty and students go out of their way to hear the voices of women resound through the ages, and to note how many groups have influenced modern thought, culture, and policy.

A major or minor in women's studies says you are willing to see a more complete picture of any field. Our students state that our courses open their eyes to new, creative ways of thinking and conceptualizing their careers. As an interdisciplinary major, women's studies provides an excellent background for students who wish to go into medicine, law, research, business, education, art, or almost any profession or career.

## B.A. degree program in women's studies HEGIS code 4903; SED program code 02117

Program requirements (30 credits)
Students must complete parts I through 4 with a grade of $C$ or higher in each course:
I. Women's Studies I00I.
2. Four of the following:

Women's Studies $32 I 3,3 I 20,3 I I 5,3405,3606,3340,350 I, 344 I, 335 I, 3356,3354,3224,3228,3446,36 I 0,3 I I 7,3 I 35,3 I 50,3447,3449,3230$, $3328,35|0,3317,3165,3550,1002,3330,62,3353,3238,3436,3357,440|, 4402,4404,3345,3420,3|21,3229,3318,4405,3355,3319,3| 22$. (Note: Women's Studies 3115 is not open to students who completed Women's Studies 3165 or English 3166 in fall, I993, or spring, I994.)
3.Four of the following:
(Courses that fultill the requirements for Part 2 cannot be used to satisfy the requirements for Part 3.)
Africana Studies 3260 (This course is the same as English 3162 and Women's Studies 31 I7.)
Africana Studies 3360. (This course is the same as Women's Studies 3446.)
Africana Studies 3365. (This course is the same as Political Science 3412 and Women's Studies 3447.
Anthropoloty 3310 (This course is the same as Women's Studies 32I3.)
Anthropology 3170.
Art 3089.
Classics 4032.
Business 3245.
Business 3250 (This course is the same as Women's Studies 3345.)
Economics 3154(This course is the same as Women's Studies 3317.)
Economics 3222.
English 3187.
English 3166 (This course is the same as Women's Studies 3115 .)
English 3162 (This course is the same as Africana Studies 3260 and Women's Studies 31 I7.)
Film 3122. (This course is the same as Women's Studies 3150.)
Health and Nutrition Sciences 2180 (This course is the same as Women's Studies 3606.)
Health and Nutrition Sciences 2181.
History 3206 (This course is the same as Women's Studies 3224.)

History 3335 (This course is the same as Women's Studies 3230.)
History 3328 (This course is the same as Women's Studies 3238.)
History 3418 (This course is the same as Women's Studies 3228.)
Judaic Studies 3017.
Philosophy 3306.
Philosophy 3720 (This course is the same as Women's Studies 3135 .)
Political Science 3152 (This course is the same as Women's Studies 335 I.)
Political Science 334I (This course is the same as Women's Studies 3357.)
Political Science 34II (This course is the same as Women's Studies 3356.)
Political Science 3412 (This course is the same as Africana Studies 3365 and Women's Studies 3447.)
Political Science 3153 (This course is the same as Women's Studies 3353.)
Political Science 3155 (This course is the same as Women's Studies 3330.)
Political Science 3442 (This course is the same as Women's Studies 3354.)
Psychology 3361.
Puerto Rican and Latino Studies 3205.
Sociology 2600 (This course is the same as Women's Studies 3420.)
Sociology 3607 (This course is the same as Women's Studies 3229.)
Sociology 3303 (This course is the same as Women's Studies 3122. .)
Sociology 3608 (This course is the same as Women's Studies 3319.)
Sociology 3609 (This course is the same as Women's Studies 3318 .)
Television/Radio 3434 (This course is the same as Women's Studies 312 I.)
Theater 3506 (This course is the same as Women's Studies 3355.)
Any of the following that are not used to satisfy part 2, above: Women's Studies $3213,3120,3115,3405,3606,3340,3501,344 I, 335 I, 3356,3354$, $3224,3228,3446,36|0,3| I 7,3|35,3| 50,3447,3449,3230,3328,35|0,33| 7,3|65,3550,1002,3330,62,3353,3238,3436,3357440|, 4402$, $4404,3345,3420,3|2|, 3229,33|8,4405,3355,33| 9,3122$.
4. Women's Studies 44IOW.

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.

## Departmental Minor(s)

## Minor in Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) studies

Program Requirements ( 12 credits)
All courses must be completed with a grade of C or higher.
I. Women's Studies 1002
2. At least three courses from the list below:

Women's Studies $3213,3405,3354,3330,62,3353,3238,3436,4404$; Classics 4032 ; English 4110 ; Health and Nutrition Sciences 2181 ;
Women's Studies 440 I and/or Women's Studies 83 or 44 IOW may be included with permission of the coordinator.

## Minor in Women's Studies

Program Requirements
A program of 12 credits in advanced electives in the Women's Studies Program with a grade of C or higher in each course.

## 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 3I60, 3I55; Business 3250; Economics 3352; History 3340, 3390; Judaic Studies 3205; Political Science 330I, [76.I], 3340, 3445; Puerto Rican and Latino Studies 4505; Sociology 3205
b. Cultural Transformations and Social Identities

Africana Studies 3II0, 3344; Anthropology 3I30, 3I40, 3I70, 3I85; English 3194; Judaic Studies 30I7; Philosophy 3702; Political Science 334।; Puerto Rican and Latino Studies 3205, Sociology 3206; Studies in Religion 3050; Women's Studies 3357
c. Social Tolerance, Human Rights, and Human Security

Anthropology 22I5, 3130 , 3395; Children and Youth Studies 3110 ; Health and Nutrition Science 2130; Judaic Studies 4I95; Philosophy 3307; Political Science 3240, 3242, 3243; Women's Studies 3328
d. Media and Communications in a Global Context

Anthropology 3180; Film 2131; Philosophy 3315; Sociology 2800; Television and Radio 2265
e. Global Environmental Studies

Biology 3083; Economics 3252; Environmental Studies 400 IW; Earth and Environmental Science 3450, 3600 or Geology 3450, 3600; 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 the teacher education programs indicated above are described in the "Education" section of this 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 Studies with a grade of C or higher in each course. Students must meet with the Women's 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 Studies 1001.
Seven courses chosen from the following: Women's Studies 3 I20, 3 II5, 3606, 3340, 344I, 335I, 3354, 3224, 3228, 3446, 440I. Women's Studies 44I0W.

## Courses

## WMST 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 grrrl 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.

## WMST 2100 Fundamental Concepts 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 I230 or Women's Studies IOOI or permission of the coordinator.

## WMST 3115 Contemporary U.S. Women Writers: Diverse Cultural Perspectives

3 hours; 3 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 [50.4I]. (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 Studies I00। [I2], or Core Studies 6, or Core Curriculum $10 . X X$, or English 1010 [I].

## WMST 3117 Black Women's Fiction

## 3 hours; 3 credits

Black women novelists, short story writers, and essayists. Cross-cultural comparisons with African and Caribbean novelists. Readings of selected essays in Black feminist criticism. This course is the same as English 3162 [64.4]. and Africana Studies 3260 [27].

Prerequisite: one of the following: Africana Studies 24, 3220 [24.1], 322 I [24.2], 3360 [44.6]; or English 1010 [I], I.7; or Core Studies I; or Core Curriculum IIIO [I.I]; or Women's Studies I00I [I2] or 3II5 [33].

## WMST 3120 Women and the Creative Arts: Arts, Crafts and Music <br> 3 hours; 3 credits <br> 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. <br> Contemporary validation of women's creativity, readings, slide <br> presentations, and audiovisual presentations.

Prerequisite: Women's Studies I00I [12] or permission of the program coordinator.

## WMST 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 and Radio 3434 [34].

Prerequisite: Television and Radio || 65 [6.5] or Women's Studies I00| [12] or permission of the coordinator.

## WMST 3122 Current Issues in Social Welfare Policy

## 3 hours; 3 credits

Examines the re-organization of the US welfare state in the late 20th and early 2 Ist century. Locates the social welfare system in relation to larger social and political struggles over economic and political power, labor markets, and social inequality. Examines the connections between changes in social welfare policy, the relationship between the state, markets, and corporations, and the impact of changing social welfare policies on low income urban communities. Situates social welfare policy in relation to the maintenance of and changes in class, race, and gender stratification, and changes in the social construction of race and gender over time. This course is the same as Sociology 3303.

Prerequisite and/or co-requisite: Core Curriculum 1230 with a grade of B- or higher, or Core Studies 3 with a grade of B - or higher, or SOCY IIOI, or WMST IOOI.

## WMST 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 [15.2].

Prerequisite: Core Studies 10 , or one philosophy course, or one women's studies course, or permission of the director.

## WMST 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 [22].

Prerequisite: Film *। 10 [ [1] or permission of the chairperson.

## WMST 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 Studies 100 I [12], or permission of the program coordinator.

## WMST 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 [19.5].

Prerequisite: Anthropology*100I [1] or Women Studies I001 [12].

## WMST 3224 Women in Modern Europe

3 hours; 3 credits
History of women in Europe from the Industrial and French Revolutions to the present. Change in and interaction of women's economic, social, and political roles, and relationship of these to contemporary concepts of women's nature. This course is the same as History 3206 [27.8].

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the program coordinator.

## WMST 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 [43.14].

Prerequisite: Core Studies 4 or Core Curriculum 1220 [2.2] or permission of the program coordinator.

## WMST 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 [43.2].

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 *IIOI [5].

## WMST $\mathbf{3 2 3 0}$ 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 [30.3].

Prerequisite: Core Studies 4, or Core Curriculum 1220 [2.2] or permission of the program coordinator.

## WMST 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 [30.3I].

Prerequisite: Core Curriculum I230 [2.3] or Women's Studies I00 I [12] or permission of the coordinator.

## WMST 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 3 I 54 [40.6].)

Prerequisite: Women's Studies 100। [12].
WMST 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 [43.7].

Prerequisite and/or co requisite: 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 *I I 0 I [5], or Women's Studies I00 [ [12], or Sociology 3607 [43.2] or permission of the program coordinator.

## WMST 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 [43.6].

Prerequisite and/or co requisite: Core Curriculum 1230 [2.3] with a grade of B - or higher, Core Studies 3 with a grade of B - or higher, or Sociology * 101 [5], or Women's Studies 100 I [12] or permission of the program coordinator.

## WMST 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 Studies 100 I [12], or permission of the program coordinator.

## WMST 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 21 st centuries. This course is the same as Political Science 3155 [35].

Prerequisite or corequisite: Core Curriculum 1230 [2.3] or Women's Studies 12 or English 1010 [1] or English *IOI2 [2] or permission of the coordinator.

## WMST 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 Studies 1001 .

## WMST 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 3340.

Prerequisite and/or corequisite: History 3543 preferred, or Women's and Gender Studies IOOI.

## WMST 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 Studies I00I [I2] or permission of the program coordinator.

## WMST 334IW Sex, Power, Money: Political Economy of Women in the United States

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 Studies 1001 [12] or permission of the program coordinator; and English *।012 [2].

## WMST 3345 Gender Diversity in the Workplace: A Global Perspective

3 hours; 3 credits
Knowledge and skills that will enable students to effectively integrate gender considerations into business and human resource decisions both in the U.S. and global contexts. The course will: (I) Analyze the evolution of the relationship between sex, gender, 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 industrialized countries; and (3) Examine strategies for successfully managing gender diversity in organizations. Real life examples and cases will be used to illustrate and integrate the studied concepts. This course is the same as Business 3250 [40.7].

Prerequisite: Upper sophomore status or Women's Studies 100 I [12] or Business 3240 [40.3] or Psychology 3172 [12.7].

## WMST 335I 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 [31].

Prerequisite: Women's Studies 100। [12] or permission of the program coordinator.

## WMST 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 [34].

Prerequisite or corequisite: Core Curriculum 1230 [2.3] or Women's Studies 1001 [12] or English 1010 [1] or English *IOI2 [2] or permission of the coordinator.

## WMST 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 [78.5].

Prerequisite: Women's Studies I00I [I2] or permission of the program coordinator.

## WMST 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 34। I [78.3].

Prerequisite: Women's Studies 10.7 or 100 I [12] or permission of the coordinator.

## WMST 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 [77.3].)

Prerequisite: Political Science *। 002 [I.7], Women's Studies I0.7, or permission of the instructor.

## WMST 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 Studies I00I [12] or permission of the program coordinator.

## WMST 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 [51.5].

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 *IIOI [5], or permission of the coordinator.

## WMST 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 I230 [2.3] or Women's Studies I00। [12] or permission of the coordinator.

## WMST 344I 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 2.3 or permission of the program coordinator.

## WMST 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 [44.6]

Prerequisite: Africana Studies 1020 [0.2] or 3260 [27], or Core Curriculum 1220 [2.2], or 20.XX, or Women's Studies I00| [12].

## WMST 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 [78.35] and Africana Studies 3365 [44.9].

Prerequisite: Core Studies 3 or 9; or Core Curriculum 1230 [2.3] or 20.XX, or Political Science ${ }^{*}$ I 00 I [I.5I] or 1002 [I.7], or Africana Studies IOOI [0.12], or Women's Studies I00I [I2], or permission of the program coordinator.

## WMST 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 Studies 100 I [12], and Core Curriculum 1230 [2.3].

## WMST 350 I 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 Studies coordinator.

## WMST 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 Studies I00। [12] or permission of the instructor or program coordinator.

## WMST 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 Studies I00I [12], or permission of the program coordinator.

## WMST 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 [34].

Prerequisite: Women's Studies IOO | [12]; or Health and Nutrition Sciences 6.I; or permission of the program coordinator.

## WMST 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 Studies I00I [I2] or permission of the program coordinator.

## WMST 440I 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 Studies I00। [I2]; and three electives from those listed under program requirements; and permission of the program coordinator and at least one sponsoring faculty member.

## WMST 4402 Community Internship in Women's Studies

42 hours fieldwork; I 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 3 II 5 [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 350I [37] Women and Reproductive Rights Women's Studies 344। [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.

Prerequisite: permission of 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
Studies 100 [ 12 ], 3120 [32], $3 \mid 15$ [33], 3405 [34], 3606 [35], 3340
[36], 350 I [37], 344। [38], 3165 [58], 3550 [59].

## WMST 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 Studies I00| [12] or permission of the program coordinator.

## WMST 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 Studies 1001 [12] or permission of the instructor or program coordinator.

## WMST 44IOW 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. I.) Writing intensive course.

Prerequisites: English * 1012 [2]; and Women's Studies I00। [12]; and at least two courses in Women's Studies approved by the program coordinator.

## Inventory of Registered Programs at Brooklyn College

The following graduate 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. 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 SIMS code 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 |
| :---: | :---: | :---: | :---: |
| 0502 | 01990 | Accounting (public 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. |
| 1002 | 02015 | Art | B.A |
| 1002 | 82460 | Art | B.F.A. |
| 1003 | 01408 | Art History | B.A. |
| $\begin{aligned} & 5407 \\ & 0401 \end{aligned}$ | $\begin{aligned} & 33154^{\prime} \\ & 33154^{\prime} \end{aligned}$ | Biotechnology <br> Biology | A.S. (Kingsborough C.C.) B.S. (Brooklyn College) |
| $\begin{aligned} & 5407 \\ & 0401 \end{aligned}$ | $\begin{aligned} & 33155^{\prime} \\ & 33155^{\prime} \end{aligned}$ | Biotechnology Biology | A.S. (Kingsborough C.C.) B.S. (Brooklyn College) |
| 0401 | 01985 | Biology | B.A. |
| 0401 | 01984 | Biology | B.S. |
| 0401.01 | 26814 | Biology Teacher | B.A. |
|  |  | Broadcast Journalism (See Television and Radio.) |  |
| 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. |
| 2009 | 33088 | Children and Youth Studies | B.A. |
| 1504 | 02049 | Classics | B.A. |
|  |  | Comparative Literature (See English.) |  |
| 0601 | 31603 | Communication | B.A. |
| 0701 | 01991 | Computer Science | B.S. |
| 0799 | 02104 | Business Information Systems | B.S.-M.P.S. |
| 1701 | 02067 | Computational Mathematics | B.S. |
| 5101 | 82457 | Computers and Programming | Certificate |


| HEGIS Code | SED Program Code | Certificate or Program Name | Certificate or Degree(s) Awarded |
| :---: | :---: | :---: | :---: |
| 0702 | 32153 | Information Systems | B.S. |
| 0799 | 31604 | Multimedia Computing | B.S. |
|  |  | Creative Writing (See English.) |  |
| 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. |
| $\begin{aligned} & 5499 \\ & 1914 \end{aligned}$ | $\begin{aligned} & 34242^{\prime} \\ & 34242 \end{aligned}$ | Earth and Planetary Sciences Earth and Environmental Sciences | A.S. B.S. |
| 2204 | 01889 | Economics | B.A. |
|  |  | Education: <br> Adolescence Education and Special Subjects (See individual programs by subject listing.) |  |
| 0802 | 26828 | Childhood Bilingual Education Teacher (grades I-6) | B.A |
| 0802 | 26829 | Childhood Education Teacher (grades I-6) | B.A. |
| 0823 | 26737 | Early Childhood Education Teacher (birth-grade 2) | B.A. |
| 0823 | 27988 | Early Childhood Special Education | B.A. |
| $\begin{aligned} & 5503 \\ & 0823 \end{aligned}$ | $\begin{aligned} & 26738^{\prime} \\ & 26737{ }^{\prime} \end{aligned}$ | Educational Studies <br> Early Childhood Education Teacher | A.S. (Kingsborough C.C.) B.A. (Brooklyn College) |
| 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. |
| 0602 | 81099 | Journalism | B.A. |
| 1505 | 02051 | Linguistics | B.A. |
| 4999 | 21627 | Environmental Studies | B.A. |
|  |  | Exercise Science (See Physical Education.) |  |
| 1010 | 02023 | Film | B.A. |
| 5008 | 87520 | Film Production | Certificate |
| 1102 | 02025 | French | B.A. |
| \| $102.0 \mid$ | 26796 | French Teacher | B.A. |
| 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. |
| \| 104.01 | 26804 | Italian Teacher Journalism (See English.) | B.A. |
| 0309 | 01977 | Judaic Studies <br> Linguistics (See English.) | B.A. |


| HEGIS Code | SED Program Code | Certificate or Program Name | Certificate or Degree(s) Awarded |
| :---: | :---: | :---: | :---: |
| 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. |
| 0835 | 02006 | Physical Education | B.S. |
| 1299.30 | 32345 | Exercise Science | B.S. |
| 0835 | 26746 | Physical Education Teacher (all grades) | B.S. |
| 1902 | 02071 | Physics | B.A. |
| 1902 | 02070 | Physics | B.S. |
| $1902.0 \mid$ | 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. |
| \| $105.0 \mid$ | 26801 | Spanish Teacher | B.A. |
| 1506 | 81375 | Speech | B.A. |
| 1220 | 85189 | Speech-Language Pathology, Audiology, Speech and Hearing Science | B.A. |
| $\begin{aligned} & 5606 \\ & 1220 \end{aligned}$ | $\begin{aligned} & 29486 \\ & 29486 \end{aligned}$ | Speech <br> Speech Language, Pathology, Audiology, <br> Speech and Hearing Science | A.S. (Kingsborough C.C.) B.A. (Brooklyn College) |
| $\begin{aligned} & 5606 \\ & 1506 \end{aligned}$ | $\begin{aligned} & 29487^{1} \\ & 29487^{\prime} \end{aligned}$ | Speech Communication Speech | A.S. (Kingsborough C.C.) <br> B.A. (Brooklyn College) |
| 0603 | 76212 | Television and Radio | B.A. |
| 0605 | 83638 | Broadcast Journalism | B.S. |
| 1007 | 76210 | Theater | B.A. |
| 1007 | 83119 | Theater | B.F.A. |
| 4903 | 02117 | Women's Studies | B.A. |


[^0]:    * Exploring Global Connections will focus on Africa, Asia/Pacific Islands, the Caribbean, Latin America and/or the Middle East; it will not focus on Europe or North America except in relation to indigenous peoples or to questions of global migration and diaspora.

[^1]:    Writing-Intensive Requirement

[^2]:    Twelve credits of advanced electives in anthropology and archaeology with a grade of C or higher in each course.

[^3]:    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 107 I and 1072 or Biology 100 I ). These 18 credits must be completed with a grade of C - or higher in each course, and 10 or more credits must be completed at Brooklyn College. Specific course requirements for a B.A. degree are described above.

[^4]:    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 and Archaeology 2200, 3199, 3230, 3240, 3250, 3260, 3265, 3266, 3425, 3440, 3470 and 4665.

    Core Studies [5, 5.I, 5.2, 7.1, 7.2, 8.1 and 8.2], Core Curriculum I 300 through 1399, Core Curriculum 3301 through 3399.
    Economics 3400, 3410, 44I0, 4422.
    Philosophy 3203, 3204, 323I, 3232, 3422, 3423, 360I, 3605, and 3610.
    Physical Education and Exercise Science 3023, 327I, 3275, 328I, 3285, 4229, 425 I.
    Sociology 270 I.

[^5]:    Bachelor's degree programs for adolescence education (grades 7-12): biology, chemistry, earth science, English, mathematics, modern languages (French, Italian, Spanish), physics, social studies (Africana studies, American studies, anthropology, economics, history, political science, Puerto Rican and Latino studies, sociology), and special subjects (all grades): music, physical education
    See the corresponding academic department section for information regarding specific HEGIS and SED codes

[^6]:    Business Core (44-46 credits)
    Students must complete all of the following:

[^7]:    Admission requirements and academic standing
    Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 200I, 2002, 340 I or 3402 ; an average of 2.75 in Secondary Education 200 I and 2002 is required to continue to Secondary Education 340I and/or Secondary

[^8]:    Admission requirements and academic standing
    Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take Secondary Education 200I, 2002, 340 I or 3402 ; an average of 2.75 in Secondary Education 200 I and 2002 is required to continue to Secondary Education 340I and/or Secondary Education 3402; to take Secondary Education 4413 or $4401-4406$, students must have an overall GPA of 2.75 or higher and permission of the chair or deputy of the Department of Secondary Education; to take Secondary Education 4407-4406, 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 adolescence education and special subjects. A student who takes Secondary Education 4407-44I2 prior to Secondary Education 4401-4406 must earn a B- or better grade in Secondary Education 4407-44I2 to take Secondary Education 440I-4406.

[^9]:    Admission requirements and academic standing
    Students must have a GPA of 2.50 or higher based on a minimum of 30 credits in liberal arts and sciences to take SEED 200I, 2002, 340I or 3402; an average of 2.75 in SEED 200 I and 2002 is required to continue to SEED 340 I and/or 3402; to take SEED 44 I 3 or $440 \mathrm{I}-4406$, students must have an

[^10]:    Program requirements (21 credits plus a major in a department approved by the program director)
    Students must complete 21 credits chosen from the required courses listed below, in addition to completing a primary major in a related field approved by the program director.
    A dual major may apply up to three credits from his or her primary major toward fulfilling the requirements of the Program of Studies in Religion.
    Students must complete parts I through 5.
    I. Two introductory courses (6 credits):

    Studies in Religion 3003, Studies in Religion 3005.
    2. One of the following courses in methodological approaches to religion ( 3 credits), plus any prerequisite of the course:

    Anthropology 3I85, Philosophy 3730, Sociology 2700.
    3. Two of the following courses in the thought, literature, or the arts of religious traditions (6 credits), plus any prerequisite of the courses; courses must be chosen from different religious traditions:
    Art I I.5, Art I I.6, Classics 3200 (this course is the same as Studies in Religion 3030.), Classics I7, Comparative Literature 33.I, Comparative Literature 362 I, English 3183, Hebrew 445I, Judaic Studies 30I7, Judaic Studies I8.I or 30, Judaic Studies 18.2 or 303I, Judaic Studies 30I4, Judaic Studies 4022 (this course is the same as Studies in Religion 30 IO.), Judaic Studies 3037 or 4 I, Philosophy 3722, Puerto Rican and Latino Studies 31 I 0 , Puerto Rican and Latino Studies 3115 , Studies in Religion 3010 (this course is the same as Judaic Studies 4022), Studies in Religion 3030 (this course is the same as Classics 3200)
    4. One of the following courses in the history of religions ( 3 credits), plus any prerequisite of the course:

    Africana Studies 3210 , American Studies 3106 (this course is the same as History 3416), Classics 37, History 21.7, History 3033, History 3101 , History 3212 , History 3315 (this course is the same as Studies in Religion 3050), History 3416 (this course is the same as American Studies 3106 .), Judaic Studies 30 I2, Judaic Studies 3013, Studies in Religion 3050 (this course is the same as History 33I5.)
    5. Seminar in studies in religion:

    Studies in Religion 400 I.
    Courses other than those listed, including Studies in Religion 3060, may be credited toward requirements 3 and 4 with permission of the program director.
    Related courses (partial list): Anthropology 2408, Chinese 37I0, Comparative Literature 6 or 42.I.

[^11]:    Program requirements ( 42 credits)

