Brooklyn College

GRADUATE BULLETIN

2024
2025

Brooklyn College Bulletin

Graduate Programs 2024–2025

Disclaimer
The 2024–2025 Graduate Bulletin represents the academic policies, services, and course and program offerings of Brooklyn College that are in effect through the 2024–2025 academic year. The most current information regarding academic programs and course descriptions, academic policies and services available to students can be found on the Brooklyn College website.

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

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

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

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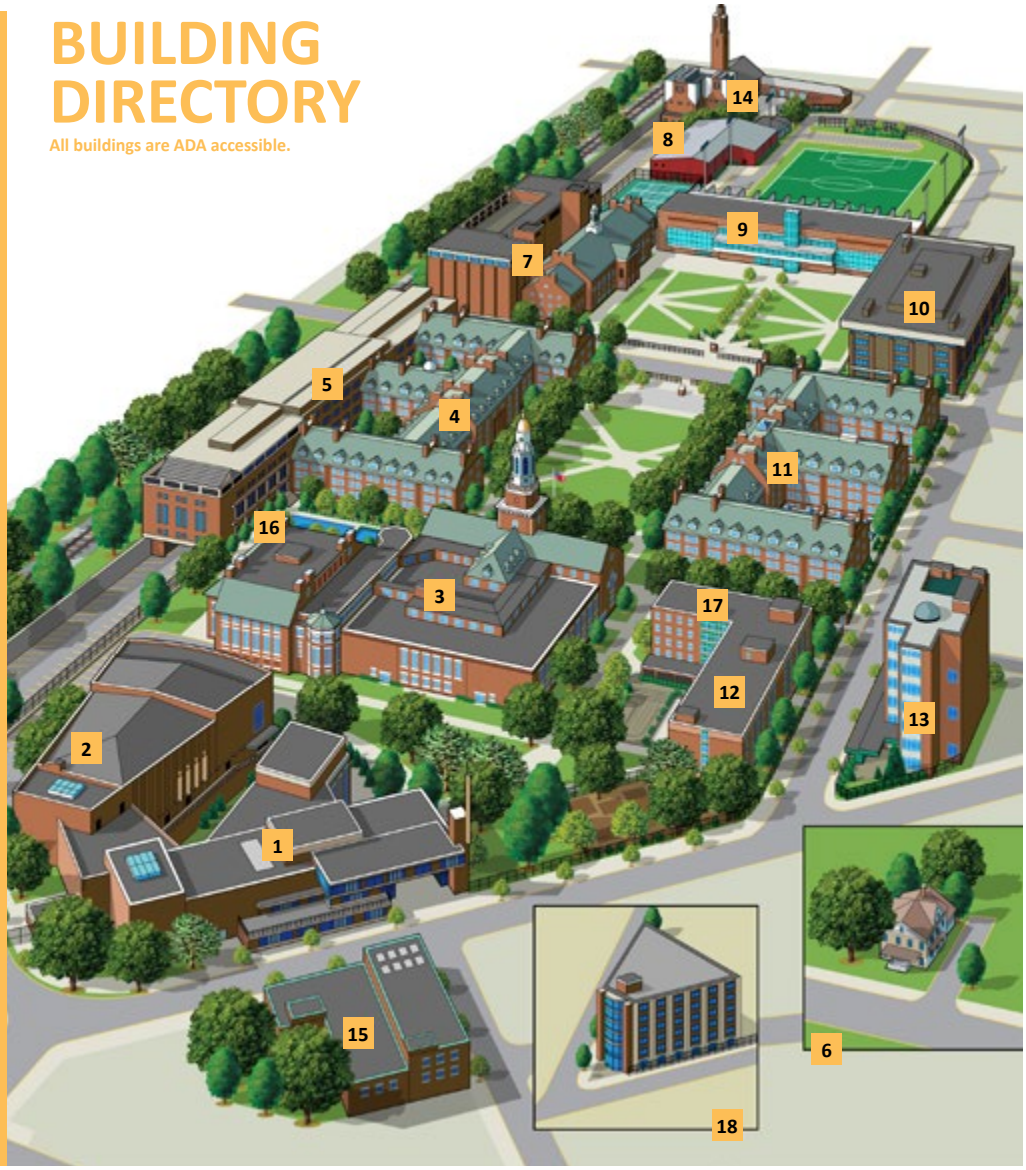
About Brooklyn College

Brooklyn College is an innovative liberal arts institution with a history of more than 90 years of academic excellence. Approximately 14,000 students are enrolled in 174 undergraduate and graduate degree programs in the humanities; social, behavioral, and natural sciences; education; business; and the arts. The college is renowned for its rigorous academics, study abroad programs, diverse student body, award-winning faculty, and highly affordable tuition. Located on a beautifully landscaped 35-acre campus, Brooklyn College offers a rich student life within an urban environment.

BUILDING DIRECTORY

All buildings are ADA accessible.

1. Leonard & Claire Tow Center for the Performing Arts
2. Whitman Hall
3. Brooklyn College Library
4. Ingersoll Hall
5. Ingersoll Hall Extension
6. Newman Catholic Center
7. Roosevelt Hall and Roosevelt Hall Extension
8. West End Building
9. West Quad Center
10. James Hall
11. Boylan Hall
12. Whitehead Hall
13. Student Center
14. Heater and Chiller Plants
15. Alexander and Brenda Tanger Hillel at Brooklyn College
16. Lily Pond
17. Morton and Angela Topfer Library Café
18. Residence Hall



Accreditation

Brooklyn College is accredited by the Middle States Commission on Higher Education (3624 Market Street, Philadelphia, PA 19104; 267.284.5000; info@msche.org), the Council on Education for Public Health, and the Academy of Nutrition and Dietetics. The Murray Koppelman School of Business is accredited by the Association to Advance Collegiate Schools of Business (AACSB). The master's program in school counseling is accredited by the Council for Accreditation of Counseling and Related Educational Programs, the master's program in 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 is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association. The B.S. program in chemistry and biochemistry is certified by the American Chemical Society. 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 are listed under their respective departments in the Programs and Courses of Instruction portion of this Bulletin.

Murray Koppelman School of Business, *Qing Hu, Dean*

- Accounting
- Economics
- Finance
- Management, Marketing, and Entrepreneurship

School of Education, *Maria Scharron-del Rio, Dean*

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

School of Humanities and Social Sciences, *Philip F. Napoli, Interim Dean*

- Africana Studies
- Communication Arts, Sciences, and Disorders
- English
- History
- Judaic Studies
- Modern Languages and Literatures
- Philosophy
- Political Science
- Puerto Rican and Latino Studies
- Sociology

School of Natural and Behavioral Sciences, *Peter Tolias, Dean*

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

School of Visual, Media and Performing Arts, *Stephanie Jensen-Moulton, Interim Dean*

- Art
- Barry R. Feirstein Graduate School of Cinema
- Music
- Television, Radio and Emerging Media
- Theater
- Interdisciplinary Program: Performance and Interactive Media Arts (PIMA)

Support for Academic Success in Graduate School

Brooklyn College provides numerous resources that support graduate students' academic success and help them navigate the procedures and processes of the college more easily Many are described in this Bulletin; below are highlights of resources that graduate students should be familiar with.

Websites

The college has two major Web resources. The main college site is designed primarily for external audiences, including prospective students.

For accepted and enrolled students, another resource, the BC WebCentral portal, contains customized information about college life and access to many online services. The portal has many resources. It is a significant gateway to students' academic needs and provides personalized access to numerous Brooklyn College Web applications and services in one place. Once students create a WebCentral ID, they will be able to access the portal from any Internet-enabled computer on and off campus. Students without Internet access at home may access the portal from one of the many computer facilities on campus (see "Information Technology Services" in the chapter "Additional Campus Services and Facilities").

E-mail is the principal way the college communicates with students about on-campus events. When students register for the portal, they are asked to supply a preferred e-mail address. To make sure information reaches them, students are strongly advised that the e-mail address in the college's records be current, checked regularly and updated if changed.

Students should review their contact information in CUNYfirst at least once a semester (during the registration period is a good time) and modify all contact information if they move or change names, e-mail address, or other contact information.

Enrollment Services Center, West Quad Center (lobby), 718.758.8150

Designed to provide students with a "one-stop" location for student services, the Enrollment Services Center (ESC) 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, visit our website, call, or e-mail the center.

Important Resources

The Course Schedules and Bulletins webpages contain important academic information, including the Schedule of Classes, which is posted for the fall and spring semesters, the two summer sessions, and the winter intersession in January, which includes some graduate classes that lend themselves to a short, intensive presentation. The Schedule of Classes lists the courses that are being offered, their times and locations, number of credits and, when possible, instructor. The Course Schedules and Bulletins pages also include the college calendar and general information, which lists critical dates for academic deadlines, such as the last day to add and drop courses, register for comprehensive exams, and file for graduation, and important information about tuition payment deadlines. All master's students are responsible for knowing these dates and adapting their academic schedule to them. Exceptions to these dates are made only under extenuating circumstances.

The Graduate Bulletin contains comprehensive information about the rules and procedures of the City University of New York and Brooklyn College, in addition to descriptive material about academic and co-curricular aspects of college life.

Until 2010, the Graduate Bulletin was a print publication, but starting with the 2011–12 edition it now exists only as an online resource that is revised annually. Students should familiarize themselves with the Graduate Bulletin when they first arrive at Brooklyn College and refer to it throughout their academic career here. It is important for students to monitor the other information sources for changes in tuition and fees, program requirements, academic policies, and location and contact information. The college curriculum is dynamic: New courses and programs are added every year; existing programs are modified or withdrawn.

For general information on how changes made officially for academic programs and other requirements affect enrolled students, see "Applicable Bulletin" in the chapter "Academic Regulations and Procedures."

Graduate Deputies and Program Heads

Each graduate program has a faculty member responsible for advising graduate students and handling academic transactions for the program. These individuals are designated as graduate

deputies. Graduate deputies provide personalized academic advising, course permissions and approvals required at the departmental level. Regular consultation with them is a key factor in graduate career success at Brooklyn College. Contact information for graduate deputies and program heads for each semester or academic year is available online on the Graduate Programs and Advisers webpage.

Office of Graduate Studies, 3208 Boylan Hall, 718.951.5771

The Office of Graduate Studies provides general academic advisement and assistance in support of such academic issues as waivers and exemptions, comprehensive exams, and theses. The Office of Academic Standing assists students who are on academic probation in becoming academically more successful, leading to attainment of a master's degree. It handles student petitions to the faculty committee that monitors compliance with the college's academic regulations. The staff members in both of these offices work directly with graduate deputies, program heads, and deans to assist students in all the college's master's programs and advanced certificates.

City University Ph.D. programs

Most graduate study at Brooklyn College leads to master's degrees and advanced certificates. The Graduate Center of The City University of New York (CUNY), however, offers and administers more than 30 doctoral programs. Depending on the field, doctoral courses are given at either the Graduate Center or the senior colleges of CUNY.

A student may apply to a CUNY doctoral program upon completion of a bachelor's or a master's degree. A maximum of 30 acceptable graduate credits taken prior to admission to the doctoral program at CUNY may be applied toward the degree, provided the courses were completed with a grade of B or higher within an appropriate period preceding the time of application. Should applicants wish to apply credits they earned at an institution other than CUNY, the courses they took must be equivalent to comparable courses at the City University.

Information about CUNY's doctoral programs and the many areas of specialization within each discipline may be found on the Graduate Center website. The Bulletin of the Graduate Center is available on the center's website. Applications may be obtained from the Graduate Center Office of Admissions or downloaded from the Graduate Center website.

Graduate Admissions

Applications to master's degree programs, advanced certificate programs, and graduate nondegree study are managed by the Office of Graduate Admissions.

Apply online.

Office of Graduate Admissions

222 West Quad Center
Brooklyn College
2900 Bedford Avenue
Brooklyn, NY 11210
P: 718.951.4536
E: grads@brooklyn.cuny.edu
W: www.brooklyn.edu/admissions-aid/graduate/

Admissions Criteria

The minimum graduate admission requirements are:

- a bachelor's degree or recognized equivalent from an accredited institution;
- a satisfactory scholastic average, usually a minimum grade point average (GPA) of 3.00 (B) on a 4.00 scale in your undergraduate major and a 2.70 overall; and
- sufficient undergraduate course work to do graduate work in your chosen program.

Satisfying minimal standards, however, does not guarantee your admission, as the number of qualified applicants exceeds the number of places available. As a result, many well-qualified applicants cannot be accommodated in competitive programs.

Applicants may apply to only one program for any given semester. Admission decisions are based on departmental review, using a combination of factors, including academic degrees and records, the personal statement, letters of recommendation, test scores, and relevant work experience. Brooklyn College also considers the appropriateness of your goals to the degree program in which you are interested. Note: The admission criteria are subject to change.

Application Components

Application fee

A nonrefundable $75 application fee is required of all applicants. You can pay your application fee by credit card when you submit your online application, or mail a check or money order to the Office of Graduate Admissions. Make checks or money orders payable to Brooklyn College.

Academic transcripts

Transcripts can be sent electronically to Brooklyn College from your previous institutions to graddocs@brooklyn.cuny.edu if your institution participates in electronic transcripts. If not, they must be mailed to the Office of Graduate Admissions in a sealed envelope from your previous institutions. An official transcript is required from all colleges and universities attended for academic credit, showing all courses, grades, and degrees received (if any).

International transcript credential evaluation

International transcripts must be evaluated by a professional agency recognized by the National Association of Credential Evaluation Services. Evaluations must include course-by-course analysis indicating the type of degree received, the U.S. equivalency of the degree, the graduation date, and a cumulative grade point average. This will help us understand your educational background and academic credentials. Allow plenty of time between the evaluation and the application deadline, especially if you are currently residing outside of the United States and require a student visa.

Letters of recommendation

You are required to send two letters of recommendation. Some programs require three recommenders. Letters should come from individuals who can assess your potential for graduate study, including college professors and professionals who have supervised your work in an area relevant to your intended field of study. We ask that you register your recommenders in our online application system, so that recommenders are able to submit their letters electronically.

Statement of Purpose / Essay

Most programs require a statement explaining your purpose in undertaking graduate study in your intended program. This is your opportunity to inform us about your goals, interests, and career plans as they relate to your intended academic study. Some programs require other essays in addition to, or in lieu of, the personal statement. Please review the program requirements to ensure you are writing about the correct topic.

Résumé

A copy of your most recent résumé is required by some programs.

Portfolios, manuscripts, and headshots

A portfolio of artwork, a manuscript, or headshots is required by some programs.

GRE

The Graduate Record Examination (GRE) is required by some programs. We accept test scores sent to us directly from ETS only. Our ETS Institution code is 2046.

GMAT

The Graduate Management Admissions Test (GMAT) is required for our M.S. in speech language pathology. Our ETS Institution code is 2046.

English language proficiency

A TOEFL, IELTS, or Pearson score report is required from applicants whose home country's first language is not English, and who did not receive the equivalent of a four-year undergraduate education from a U.S. institution where English is the official language of instruction and require an F-1 or J-1 visa to study in the United States. TOEFL, IELTS, and Pearson scores can be sent to us electronically. Our ETS code is 2046.

Teaching Certificate

Students applying for M.A., M.A.T., or M.S.Ed. programs in education might be required to submit copies of their state teaching certificates and/or Bilingual Education Assessment results.

Writing samples/Research papers

Some programs require applicants to submit writing samples or research papers on the subject they are planning to pursue at Brooklyn College.

Admission Status

Applicants for graduate study may be admitted with one of three statuses: matriculated, matriculated with conditions, or nondegree.

Matriculated

Degree-seeking applicants who fully meet college and departmental admission requirements are admitted as matriculated students into master's degree or advanced certificate programs.

Matriculated with conditions

Degree-seeking applicants who must complete a required prior degree prior to registration or do not fully meet college and departmental admission requirements must meet conditions that are stated in their offer of admissions from the Office of Graduate Admissions. Departments may specify that certain undergraduate classes be completed within a particular time frame. Grades in undergraduate classes do not contribute to the graduate grade point average.

Nondegree

Applicants who wish to take course work for personal or professional reasons without pursuing a degree may apply for nondegree status. They must still be academically qualified and admitted by a specific department that will oversee their course selection and academic progress.

Applicants for nondegree study complete the online application. They are to submit an unofficial copy of a transcript with bachelor's degree notation. No additional supporting documents are required, except an essay for some programs.

Not all programs offer nondegree admission.

Nondegree students are not eligible for federal financial aid or F-1 international student visas. International students interested in doing a semester or academic year at Brooklyn College as a visiting student can apply for a J-1 international student visa if accepted.

Admission as a nondegree student does not guarantee later admittance as a matriculated student.

Change of Status

Nondegree students may later request a change to matriculated status with the Office of Graduate Admissions using the Status Change form. Students are required to supply additional materials, such as official transcripts and supporting documents requested by the department. Up to 15 credits taken in nondegree status may be applied toward a master's degree. Nondegree students may register for courses beyond the 15-credit limit if they obtain the approval of the department chair and maintain a GPA of 3.00 or higher.

Application Deadlines

Some programs have a fixed, or "hard," application deadline, so that all applications can be reviewed together. Other programs offer rolling admissions after the deadline, whereby applicant files continue to be evaluated for a period of time until the program is full. Although there are admissions for both fall and spring semesters, not all programs admit for the spring. Details on application and processing deadlines may be found on the Graduate Admissions webpage.

Students who plan to attend in the fall may attend in the preceding summer if courses that fit their program are offered. However, in all cases, the applicable Bulletin will, at least initially, be that in effect in the fall semester of their official acceptance (see the section "Applicable Bulletin" in the chapter "Academic Regulations and Procedures").

Additional Admission Requirements for Students With International Credentials

1. Students who require an F-1 visa may apply only for full-time matriculated status (see the section "Admission Status," above). Exchange students on J-1 visas apply for nondegree study.
2. Applicants with international credits must have the equivalent of a U.S. bachelor's degree. International transcripts must be evaluated by a professional agency recognized by the National Association of Credential Evaluation Services. Evaluations must include course-by-course analysis indicating the type of degree received, the U.S. equivalency of the degree, the graduation date, and a cumulative grade point average. More information about this requirement, including information on the approved agencies, may be found on the Graduate Admissions webpage.

3. A TOEFL, IELTS, or Pearson score report is required from applicants whose first language is not English and who did not receive the equivalent of a four-year U.S. undergraduate education from an institution where English is the official language of instruction and needs an F-1 or a J-1 visa to attend Brooklyn College. Scores can be sent to us electronically. The minimum acceptable TOEFL score is 61 in the Internet-based version (iBT), the minimum acceptable IELTS score is 6, and the minimum acceptable Pearson score is 50. Many graduate programs require significantly higher scores.
4. Applicants who will require F-1 and J-1 visas to enter the United States for study at Brooklyn College must complete the confidential Declaration and Certification of Finances. Supporting financial documentation must be submitted in order to obtain the I-20 or DS2019, Certificate of Eligibility, from the college. J-1 international students admitted to the college are required to subscribe to a health insurance plan and to arrange for their own housing.
5. Soon after their arrival in New York, international students should check in with the Office of International Student and Scholar Services, 235 West Quad Center.

Admissions Decisions

A departmental admissions committee bases admission decisions on review of a complete application. Once the department has conducted its review, the Office of Graduate Admissions sends official notification of the department's admission decision to the applicant. Although the department or program may contact the student about admission, the college letter is the official indication of acceptance.

Deferring/Postponing Acceptance

Applicants who are admitted for the fall or spring and wish to defer or postpone their attendance must first receive permission from the graduate deputy. Admission for a particular semester does not guarantee that an applicant will be admitted to a subsequent semester. Most programs will require an applicant to reapply.

Commitment Deposit

Incoming students are required to pay a $250 deposit by a particular deadline to indicate their intent to enroll and secure their seat in the class. The deposit is credited toward their tuition and fees in their first semester.

Change of Program

Enrolled students who intend to transfer from one degree or advanced certificate program to another are required to file a Change of Curriculum/Program Form, available on the Graduate Admissions webpage. The form should be filed in advance of the beginning of the intended semester of transfer. The application will be reviewed by the program to which the student wishes to move. Students changing programs should be sure to submit any additional application materials required by the new program. Students who are not currently enrolled must apply to the new program using the online graduate application form and submit an application fee and any additional materials required by the new program.

Readmission

After two semesters of absence, matriculated students who have not yet graduated from their degree programs and who wish to register must apply for readmission. Readmission is managed by the Office of the Registrar.

After two semesters of absence, nondegree graduate students must apply for readmission through the Office of Graduate Admissions.

Visiting Students

Students from other CUNY colleges who wish to take courses at Brooklyn College must, prior to registration, submit an e-permit online by logging onto CUNYfirst. Note that permission to take a permit course is not the same as registration for that course. The permit registration is not completed until the student pays at the home campus and completes the registration process at Brooklyn College. All three steps—the e-permit request at Brooklyn College, payment at the home campus, and registration at Brooklyn College—must be completed, or the student is not officially registered for the course at Brooklyn College.

Students in attendance at colleges other than CUNY colleges may be admitted as visiting students. They must file a Visiting

Student Application Form and submit it to the Enrollment Services Center, along with an official letter certifying that they are in good academic standing at their home college and have permission to take course work at Brooklyn College. Visiting student status is valid for only one semester and requires a nonrefundable application processing fee.

Auditing Courses

Graduate students may register to audit graduate courses for no academic credit by presenting an approved Auditing Form to the Enrollment Services Center during the first week of classes. Courses audited may not be repeated for credit. The Auditing Form is available online and may also be obtained at the Enrollment Services Center as well as the Office of the Registrar. Students auditing a course must pay applicable tuition and fees. Unofficial auditing is not permitted.

New York State Health Law Requirements

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

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

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

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

Tuition and Fees

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

Failure to receive notices of balances due after a student has registered does not relieve the student of the responsibility of covering all payments by the stated due dates. Students are expected to verify whether any payments are due by accessing their account in CUNYfirst; failure to pay will normally lead to a student being dropped from classes.

However, a student who registers and fails to attend classes should not depend on the college to remove him or her from classes for nonpayment. Depending on the timing of registration, a student who has not paid may still continue to be registered for the semester; such students will be liable for tuition even if they do not pay tuition or attend classes. It is the responsibility of students, not the college, to officially drop or withdraw from any classes they have registered for because the failure to drop classes keeps another student from being able to register for that seat in a class.

Tuition for New York State Residents

Students residing in New York State who are enrolled for 12 or more credits per semester are classified as full-time students for tuition purposes. For them, tuition is $5,545. Students who are enrolled for fewer than 12 credits per semester are classified as part-time students for tuition purposes. All courses taken by part-time graduate students are billed on a per-credit basis. Part-time students residing in New York State pay tuition at $470 per credit. For courses in which the number of hours a class meets each week exceeds the number of credits, part-time students pay $470 per credit

plus $65 for each additional class hour. Some departments have noncredit thesis research and supervision courses that are billed as three-hour, three-credit courses.

New York State Residency Requirements

To be classified as a New York State resident, an applicant must be a citizen or permanent resident of the United States and 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 applicant enrolls.

Students classified by the Office of the Registrar as out-of-state residents must pay tuition as nonresident students. They may apply to have their status changed to New York State resident by filing a City University residence form in the Office of the Registrar. A list of required documentation that must accompany the residency form may be found on the Brooklyn College website.

Students must provide all documents proving residency status no later than the last day of classes of the semester in which that status would take effect. Documentation provided after that time will delay the new residency status until the following semester. An applicant for residency who does not provide the Office of the Registrar with the required information or documentation may be classified as an out-of- state resident. Students denied resident status by the Office of the Registrar may appeal the decision within 10 days of the date of notification.

Tuition for Nonresidents and International Students

There is no full-time tuition rate for nonresidents and international students. Regardless of the number of credits, all courses taken by nonresident students are billed at the rate of $855 per credit. For courses in which the number of hours a class meets each week exceeds the number of credits, students pay $855 per credit plus $85 for each additional class hour. Some departments have noncredit thesis research and supervision courses that are billed as three-hour, three-credit courses.

Maintenance of Matriculation

Master's students must be in a matriculated status to complete degree requirements. This includes resolving INC grades, taking comprehensive examinations, and filing theses as final requirements in preparation for graduation. Students must also be registered during the semester in which they intend to graduate. If they are not registered for any credit-bearing classes recognized as degree-related by their program, they must register for maintenance of matriculation status and pay the required fee. Students are required to register (and pay) for maintenance of matriculation for one semester only. International students should contact International Student and Scholar Services, as different requirements may apply to international students.

The nonrefundable fee for maintenance of matriculation is $225 for New York State residents and $370 for nonresidents and international students. Students should plan their academic program with this fee in mind and discuss options for credit-bearing courses that are acceptable in their program with their deputies as they plan their schedules near the point of graduation.

Graduate Students Taking Undergraduate Courses

Graduate students enrolling in undergraduate courses as part of their graduate program and receiving graduate credit pay the applicable graduate rate. Students taking undergraduate courses and receiving undergraduate credit pay the applicable undergraduate rate.

Generally, graduate students can enroll in undergraduate courses without any special permission, but in some cases the academic department may need to be consulted for course permissions, prerequisite overrides, or other enrollment permissions.

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 up to six credits in graduate courses each term. Employees must meet standards and requirements of the college and be accepted by the Division of Graduate Studies. They may be admitted as matriculated or nondegree students, but courses may not be taken during an employee's working hours. Exemption from payment of tuition does not include exemption from payment of non-instructional fees. Information and applications may be obtained in the Personnel Office, 1219 Boylan Hall. Waiver eligibility is dependent on the employee's human resources title.

Fees

Graduate students pay a Student Activity Fee, a University Student Senate Fee, a Technology Fee, and a CUNY Consolidated Services Fee each semester and summer session in which they enroll. Together, the fees cover the funding of student government, student organizations, college newspapers, and other student activities; funding to support the Early Childhood Center; and services and maintenance of the Student Center. The entire fee must be paid at registration. No part of the fee is refundable.

Fall and spring semesters

Student Activity Fee:	
Student Center	$ 32.50
Student Government	$ 10.00
Early Childhood Center	$ 5.00
Central Depository	$ 6.75
Health Clinic	$ 20.00
Total Student Activity Fee	$ 74.25
University Student Senate	$ 1.45
CUNY Consolidated Services Fee	$ 15.00
Technology Fee (Part Time)	$ 62.50
Technology Fee (Full Time)	$125.00

Summer 1 and summer 2 sessions

Student Activity Fee:	
Student Center	$32.50
Student Government	$ 2.50
Early Childhood Center	$ 5.00
Health Clinic	$20.00
Total Student Activity Fee	$60.00
University Student Senate	$ 1.45
CUNY Consolidated Services Fee	$15.00
Technology Fee	$62.50

Technology Fee

Students registered at the college must also pay a fee to cover the costs of equipment and technology used in teaching. The Technology Fee is $125 for full-time students, enrolled for 12 or more credits per semester, and $62.50 for part-time students, enrolled for fewer than 12 credits per semester. Graduate students taking either summer session must pay the part-time Technology Fee once during the summer.

Special fees

Application	$75
Readmission Fee	$20
Duplicate diploma	$30
Late registration	$25
Library fines	Students should consult the library for the policy on fines.
Material fees	Some courses entail a fee to cover the costs of special materials, film rental charges, transportation, field trip expenses or other non-instructional costs. Material fees are subject to change and are nonrefundable. Details may be found in each semester's Schedule of Classes.
Program change	$18 for adding a course, changing from one course to another, or changing from one section to another if changes are made at one time
Recreation and athletics	$18.60 for use of athletics facilities (optional); $10 for summer
Replacement of ID card	$10
Bad Check	$20 for a check returned by bank as uncollectible
Speech and Hearing Center	$200 for speech-language diagnostic evaluation; $175 for audiological evaluations; $770 for 14 45-minute individual speech therapy sessions (per semester) one time per week; $1,400 for 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% discount.
Transcript	$7 (waived for transcripts sent to the admissions offices of other units of the City University of New York)
Visiting student	$65 processing fee (non-CUNY students only)

Private music lessons	$250. This fee is for the following music courses and is charged per course, per semester: MUSC 7791, 7792, 7793, and 7950; MUSC 6791, 6792, 6793, and 6794; MUSC 7795, 7796, 7797, and 7798.
Excess Contact Hour Fee	$65 for in-state residents and $85 for out-of-state residents. This fee is charged for courses that meet beyond the established credit hours. These courses are listed in the Graduate Bulletin.

Note: Fees are subject to change.

The Barry R. Feirstein Graduate School of Cinema Academic Excellence Fee for the master of fine arts in cinema arts, mater of fine arts in media scoring, and master of fine arts in sonic arts is as follows:

Fall and spring semesters:

Resident and nonresident full-time students (12 or more credits; M.F.A. in cinema arts, sonic arts, or media scoring)	$5,022 per semester
Resident and nonresident part-time students (9–11 credits; M.F.A. in cinema arts, sonic arts, or media scoring)	$3,767 per semester
Resident and nonresident part-time students (fewer than 9 credits; M.F.A. in cinema arts, sonic arts, or media scoring)	$2,511 per semester

Winter intersession and summer sessions:

Resident and nonresident enrolled (M.F.A. in cinema arts, sonic arts, or media scoring)	$1,175 per course (fee is charged per course enrolled)

Payment of Tuition and Fees

Bills

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

Payment deadlines

Each semester, payment deadlines are posted online. If a student's account is not properly settled by the last specified due date, registration may be canceled.

Payment options

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

Online

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

By mail

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

In person

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

Monthly tuition payment plan

Under the terms of a CUNY-wide program, Brooklyn College students may enroll in the approved budgeted tuition payment plan. To maximize the benefit of this plan, students should complete their enrollment and begin making payments before the start of the semester. There is no payment plan for the January intersession term. There is an enrollment fee, and interest is not charged, but late payment fees do apply. More information about this plan is available online on the Bursar webpage.

Refund Policy

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

- 100% refund for withdrawal from courses before the official start date of classes
- 75% refund for withdrawal within one week after the scheduled start date of classes
- 50% refund for withdrawal during the second week after the scheduled start date of classes
- 25% refund for withdrawal during the third week after the scheduled start date of classes
- No refund for withdrawal later than the third week after the scheduled start date of classes

Tuition refunds are also processed for summer sessions and the January intersession. Unless a student's registration is canceled by the college, or he or she withdraws before the first scheduled day of classes, no portion of the Student Activity Fee or special fees is refunded.

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% refund for withdrawal before the beginning of the fifth calendar week (third calendar week for summer sessions) after the scheduled start date of the term
- 50% 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% refund of tuition and all other fees except application fees. Service must be documented with a copy of induction or service orders. No refund is made to a student who has been assigned a grade, whether the grade is passing or failing. To obtain a grade, a student must have been enrolled for approximately 13 weeks, or for five weeks in a summer session.

Financing Your Education

Office of Financial Aid

308 West Quad Center
Brooklyn College
2900 Bedford Avenue
Brooklyn, NY 11210
P: 718.951.5051
F: 718.951.4778
E: finaid@brooklyn.cuny.edu

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

The types of financial aid for graduate study administered by the Office of Financial Aid are:

- Federal Work-Study
- Federal Direct unsubsidized loans
- Federal Direct Graduate PLUS Loan
- Private alternative educational loans

A Note About Scholarships

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

Establishing Eligibility—Applying for Aid

Eligibility for federal student financial aid is determined by filing the Free Application for Federal Student Aid (FAFSA). The FAFSA should be filed as soon as a student plans to attend Brooklyn College. Students do not need to wait to be admitted to file the FAFSA. Certain federal financial aid programs have a limited allocation from the federal government, so students are encouraged to file early to improve the possibility of being considered for federal supplemental financial assistance. To receive federal or state student financial aid, students must meet and maintain academic, state, and federal eligibility requirements and academic progress standards.

How to Apply

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

Information resources

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

International Students

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

Financial Aid Services and Locations

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

The ESC is a point of in-person financial aid general inquiries and certain documents that cannot be submitted electronically. Check the website for updates.

Virtual Financial Aid Office

The Office of Financial Aid operates a Virtual Financial Aid Office through Zoom to assist students with general inquiries. Check the website for hours and instructions on how to access the Virtual Financial Aid Office.

Financial Aid Advisement Services, 217–218 West Quad Center

Financial aid advisement is available by appointment only. Advisement services are reserved for special- circumstance counseling and financial aid planning. All general inquiries, troubleshooting your CUNYfirst financial aid record, and questions about the financial aid process should be referred to the ESC or Virtual Office.

Available financial aid advisement service options are:

- financial aid planning for each year;
- students with special circumstances for federal aid;
- students with questions about the effect of withdrawing from courses on their financial aid eligibility; and
- students who are not meeting SAP and need additional assistance with the appeal process.

Only graduate students enrolled in the Feirstein Graduate School of Cinema or students who are U.S. veterans have an assigned financial aid adviser.

To schedule an appointment with a financial aid adviser:

1) Log in to the Navigate Student mobile app or desktop (using your CUNY login [Firstname.Lastname + last two digits of your EMPLI ID]). (The first time that you log in, you will be prompted to fill out a questionnaire.)
2) Go to “Schedule an Appointment.”
3) In the app, tap “Appointments” and then “Schedule an Appointment.” In the desktop version, just click “Schedule an Appointment.”
4) Select your appointment type (Financial Services and Financial Aid).
5) Select the type of service that best reflects the service you are seeking.
6) Choose from the available days and times and schedule/confirm your appointment.

Additional instructions are available in the Brooklyn College Navigate Appointment Scheduling Guide.

NOTE: Feirstein School of Cinema students should contact their assigned financial aid adviser directly to schedule an appointment.

Additional Financial Aid Resources Available Online

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

- Financial Aid TV (FATV)—Financial aid videos provide answers to questions 24/7.
- Financial Literacy Counseling Center—Self-paced video sessions to help students learn about managing finances, credit, and more.
- Student Forms and Dynamic Forms—Most forms at the Office of Financial Aid are electronic and can be submitted online through the above platforms. Students can submit documents 24/7 without having to visit the campus.

Cost of Attendance

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

- The student is enrolled for full-time study (12 credits).
- The student meets the New York State residency definition for tuition.
- Costs assume enrollment for nine months, which is the period of time for the fall and spring semesters.

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

Students living with parents

Books and supplies	$1,500
Transportation (MetroCard)	$1,188
Meals (including lunch)	$4,332
Personal expenses	$2,005
Housing	$5,590
Total variable cost	$14,615 + tuition and fees

Students living away from parents

Books and supplies	$1,500
Transportation (MetroCard)	$1,188
Meals (including lunch)	$4,332
Personal expense	$2,768
Housing	$17,928
Medical expenses	$2,381
Total variable cost	$30,097 + tuition and fees

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

FAFSA Verification

The U.S. Department of Education selects a certain percentage of FAFSA forms for review. This is called FAFSA Verification. If your FAFSA record is selected for verification you will see this information in the comments section of your Student Aid Report (SAR). You will also see a "Verify My FAFSA" To Do List item in your CUNYfirst Student Center. Log in to CUNYfirst and follow the instructions to submit the necessary documents to complete the process. No federal financial aid will be disbursed until your FAFSA Verification has been completed. Sometimes aid eligibility will change as a result of the FAFSA Verification process, so the estimated aid on your financial aid package is not final until FAFSA Verification is completed.

Types of Aid

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

Federal Grants/Work-Study

Federal TEACH Grant Program

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

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

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

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

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

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

Federal Work-Study Program (FWS)

Federal Work-Study is a financial aid program that allows students who meet FAFSA eligibility and Satisfactory Academic Progress requirements and have financial need to earn an hourly wage for work performed at approved sites at the college or at public or other nonprofit agencies. Students may work up to 20 hours per week while enrolled for a minimum of six credits in their division of matriculation.

To utilize Federal Work-Study, students must first accept the Federal Work-Study offer on their CUNYfirst financial aid package.

Federal Work-Study is a financial aid program with fiscal limitation. This means that the U.S. government provides an allocation of a specific dollar amount to award to students. As a result, not all students who meet the income and eligibility requirements will receive an offering. Therefore, students who do not accept their Federal Work-Study offer will have the offer cancelled so that other eligible students can be considered for the program. Students without a Federal Work-Study offer who have financial need may appeal for consideration.

In addition to accepting the FWS offer, students must complete the Work-Study placement process and hiring. This process requires students to submit the following documents through the Dynamic Forms Platform:

- FWS Fact Sheet and Placement Form (includes FERPA acknowledgment),
- IRS Form W-4,
- New York State IT2104 or 2104-EZ, and
- USCIS Form I-9 and supporting documentation (to prove eligibility to work in the United States—this is submitted to the hiring supervisor and the Office of Financial Aid FWS).

Notice and Acknowledgement of Pay Rate and Payday Under Section 195.1 of the New York State Labor Law—Notice for Hourly Rate Employees—Students must also apply for Federal Work-Study jobs in the Job/X system. Students who are hired by an FWS supervisor must submit their I-9 form and supporting documents to the supervisor and upload the documents into the I-9 Dynamic Upload Form.

Students can begin working only once they have been hired by a supervisor, submitted all required documentation, and been given permission from the FWS processing unit to start working.

Timesheets are completed and submitted bi-weekly by the FWS supervisor (not the student) in the Timesheet/X system. Students should coordinate with their supervisor to ensure timesheets are submitted prior to the deadline to avoid delay in payment. Due to technical reasons, timesheets that are received after the deadline will be processed on the subsequent pay-cycle.

Students may not continue working beyond what the allocation of their FWS offer allows. Students may also not work during the same time when their classes are scheduled nor for the first 15 minutes after a class ends. Students must stop working if they fall below six credits of enrollment of if there are reductions in their financial need/cost of attendance.

Federal Direct Student Loans

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

William D. Ford Direct Loan Program

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

Federal Direct Unsubsidized Loans

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

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

Graduate Federal Direct Unsubsidized Loan Borrowing Chart (from https://www.studentaid.ed.gov)

	Independent Students (all graduate and professional degree students are considered independent)
Graduate or Professional Student Annual Loan Limit	$20,500 (unsubsidized only)
Subsidized and Unsubsidized Aggregate Loan Limit	$138,500 for graduate or professional students. No more than $65,500 of this amount may be in subsidized loans. The graduate aggregate limit includes all federal loans received for undergraduate study.

How much can I borrow? The annual borrowing maximum for the unsubsidized loan (and/or Graduate Plus Loan) may be subject to reduction if the loan amount and all other aid received within the aid year exceed the cost of attendance. The numbers in the chart below represent only the maximum amounts that federal government permits to be awarded, not what may actually be packaged following a loan request. The reason for this is that the unsubsidized loan, for which financial need is not a factor, when combined with other aid cannot exceed the cost of attendance. Therefore, a requested loan amount may need to be reduced to ensure that total aid awarded does not exceed the cost of attendance. For more information about the unsubsidized loan, visit www.studentaid.ed.gov.

Aggregate Graduate Loan Limit

The aggregate or lifetime limit for graduate and professional student borrowing is $138,500 (no more than $65,500 of which can be subsidized), including any Federal Direct Loans received for undergraduate study.

Federal Direct Graduate PLUS Loan Program

Graduate students may borrow up to the cost of attendance less any other financial aid resources (including the unsubsidized loan) under the Graduate PLUS Program.

Applicants for the Graduate PLUS Loan is required to:

- Complete the Free Application for Federal Student Aid (FAFSA)
- Borrow the maximum amount of the unsubsidized loan for which they are eligible, which is generally the full $20,500
- Not have an adverse credit history as defined by the U.S. Department of Education (pass a credit check)
- Be matriculated in a degree-granting graduate program or a federal aid–eligible graduate advanced certificate program
- Be enrolled at least half-time (six credits)
- Still have expenses in their Cost of Attendance not already covered by other financial aid resources

Options for Students with an Adverse Credit History

Students who have no adverse credit history as defined by the U.S. Department of Education may be eligible. There is no aggregate limit for the Graduate PLUS Loan.

Students with an adverse credit history as defined by the U.S. Department of Education will not be eligible for the Graduate PLUS Loan unless they:

A) Obtain an endorser who does not have an adverse credit history. An endorser is someone who agrees to repay the Graduate PLUS Loan if the student does not repay it.
B) Appeal: document to the satisfaction of the U.S. Department of Education that there are extenuating circumstances relating to the student's adverse credit history.

With either option A or option B, students must also complete credit counseling for PLUS Loan borrowers to be eligible for a loan disbursement.

More information about the definition of adverse credit history and the appeal process is available on the Federal Student Aid website.

Origination fee. Borrowers are charged an origination fee and an insurance fee, which are deducted from the loan proceeds before disbursement. For more information, visit https://studentdaid.gov.

Federal Direct Loan proration. Federal Direct Loans for graduate or professional study (Unsubsidized and Graduate PLUS) are not subject to proration.

Private Educational Alternative Student Loans

Unlike Federal Direct Loans, this type of loan is available to nonmatriculated students, international students, students attending less than half-time, and students who have reached their federal aggregate or annual loan borrowing limits. Alternative loans are credit-based, private education loans facilitated by a nongovernmental third-party private lender. Students interested in alternative loans may borrow up to the full cost of their education minus all other aid. However, alternative loans generally carry a significantly higher interest rate because they are based upon individual credit score. These loans also do not have the benefit of the Federal Direct Loan repayment plans, public service loan forgiveness, or federal student loan consolidation options available to Federal Direct Loan borrowers.

Veterans Administration Educational Assistance

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

City University of New York Programs

Graduate Tuition Waiver

Tuition waivers may be available to students in certain graduate programs if they meet the following conditions. Speak with your academic department chair to determine if graduate tuition waiver is an option available in your academic program. You may also speak with a financial aid adviser about this program.

- Full-time degree seeking students who demonstrate financial need. Waivers are not granted to nondegree students.
- Part-time graduate students may be granted waivers if they meet the financial need criteria, provided they are also taking a minimum of six credits in the semester for which a waiver is granted.
- The total tuition assistance provided, including the tuition waiver, may not exceed tuition and other fees.
- Tuition waivers granted to part-time students should not exceed 50% of tuition and other fees except in the case of unusual financial hardship.
- Residents of New York City or New York State should be given tuition waiver priority.
- Out-of-state and foreign students are eligible for awards up to the resident student tuition rate.
- The maintenance of matriculation fee paid by graduate students who are not registered for any course or research credit may not be waived.

Graduate Assistantships

A small number of graduate assistantships are available primarily in departments awarding M.F.A. degrees, awarded to graduate students on the basis of academic qualifications. The duties of graduate assistants may include teaching, research, laboratory work, graduate program administration, and similar assignments as specified by the academic department. Students should contact their graduate deputy about such assistantships.

Fellowships

As a graduate fellow, a student teaches, does research, or engages in other related activities. Limited fellowship funds are available for master's students. Some appointments are made possible by college funds, others by research grants from outside agencies. Inquiry should be made to the department of program study or the Office of Scholarships.

There are also external fellowship opportunities for support both during the course of study and following completion of the degree or advanced certificate. Such programs include the Fulbright Scholars Program. Information on external fellowship opportunities is available in the Office of Research and Sponsored Programs, 2158 Boylan Hall, 718.951.5622, and the Office of Scholarships, 213 West Quad Center.

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 may provide 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 Career Center, 1303 James Hall, 718.951.5774, or visit the BC WebCentral portal.

CUNYCAP: A Graduate Internship Program

The City University of New York Counseling Assistantship Program (CUNYCAP) aims to provide graduate students who have CUNY undergraduate degrees with the opportunity to intern in college offices. At Brooklyn College, CUNYCAPs work in such offices as Admissions, Undergraduate Studies, Student Development, Athletics, and Student Affairs. Students work for up to 20 hours per week and receive six credits of in-state CUNY tuition remission. For an application or further information, contact the Office of the Vice President for Student Affairs, 2113 Boylan Hall, or the CUNY Central Office, 212.290.5709.

Withdrawing

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

Return of Title IV Funds Formula

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

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

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

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

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

For purposes of complete withdrawal and the Return of Title IV Funds Formula, Federal Work-Study is not considered. However, in all cases of total withdrawal, you cannot continue to work under the Federal Work-Study Program after your date of withdrawal. Also, any students whose enrollment falls below six credits because they drop or withdraw (officially or unofficially) or stop attending classes must stop working immediately. Students are responsible for notifying their site supervisor regarding changes in class schedule/enrollment and the Federal Work-Study staff at the Office of Financial Aid. If you have further questions specifically regarding FWS and the impact of withdrawing, contact the FWS staff at 718.951.5178 or .5816, or via e-mail.

Impact on Financial Aid From Official Withdrawal

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

- If the semester has not yet begun and you drop or cancel your registration, any financial aid transmitted to your account will be removed. However, failure to cancel your registration and failure to attend classes will result in the cancellation of your financial aid and you will be responsible for tuition and fee charges.
- If you drop all classes prior to the first day to officially withdraw (always check the academic calendar for each individual semester for these important dates), you may also be billed for tuition charges for that semester (see the bursar's tuition liability schedule tuition liability schedule).
- If you officially withdraw before the 60% point of the semester has lapsed, the Office of Financial Aid will recalculate your Title IV aid based on the Federal Return of Title IV Funds Formula. You will be responsible for any balance due to the college for that term. In addition, depending on your college entry date, there is a possibility

that you may not qualify for federal or state aid in future semesters. See Satisfactory Academic Progress, below.
- If you officially withdraw after the 60% point of the semester, you will not be required to return any Title IV aid you received for the semester up to the point of withdrawal. Note that any Federal Direct Loan funds used will apply toward your annual and lifetime aggregate limits.
- Federal Direct Loans will be subject to a Return of Title IV Funds calculation for the current semester. However, if funds have not yet been disbursed for the current and future semesters within the same academic year, the college will cancel your loan. Also, if your enrollment status drops to less than half-time (six credits), your loan will be cancelled.
- Each time you withdraw or drop to less than half-time, you must complete Federal Exit Counseling for any of your Federal Direct Loans, which will go into repayment six months after you are less than half-time.
- Courses attempted prior to withdrawal from Brooklyn College will count in the calculation of Satisfactory Academic Progress (SAP). SAP is calculated annually and is checked when you reapply for financial aid. You could be denied future aid if you do not meet the standards of SAP.

Impact on Financial Aid From Unofficial Withdrawal

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

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

Withdrawal Never Attended

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

Withdrawal Drop

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

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

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

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

Federal aid graduate programs governed by these regulations are:
- Federal TEACH Grant
- Federal Direct Unsubsidized Loan
- Federal Direct Graduate PLUS Loan
- Federal Work-Study (FWS)
- All other Title IV aid programs

Definition of SAP

SAP is defined in three components:
- Qualitative Standard: GPA
- Quantitative Standard: Pace of Progression
- Maximum Time Frame

Qualitative Standard: GPA

Graduate students must achieve and maintain a grade point average of at least 3.00.

Quantitative Standard: Pace of Progression (credits earned versus credits attempted)

Graduate students accumulate credits toward the degree greater than or equal to two-thirds of the cumulative credits attempted at the institution.

Quantitative Standard: Maximum Time Frame

Graduate students may not attempt more than 150% of the credits normally required for completion of the degree.

Determination of Cumulative Attempted Credits and Cumulative Earned Credits

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

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

Withdrawals

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

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

Incomplete grades

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

Repeated courses

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

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

Transfer of credit

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

Treatment of Nonstandard Situations

Readmitted students

A student not making SAP cannot re-establish eligibility for Title IV program assistance by re-enrolling after a one-year or longer period of non-enrollment. Upon readmission after any period of non-enrollment, the student's Title IV progress standing must be re-evaluated for SAP under the standard as the record stood at the end of his or her last term of attendance. If the student has taken any action during the

period of non-enrollment that would bring him or her into compliance with the progress standard (e.g., successfully completing transferable courses at another institution during the period of absence), this should also be factored into the reassessment. If the readmitted student has not taken any such action, or if the action taken is not sufficient to bring the student back into compliance with the progress standard, the student remains on financial aid suspension and must file a successful appeal to re-establish eligibility.

Second-degree students

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

Change of specialization

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

Change of degree

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

Additional Federal SAP Requirements

The following points are required by the U.S. Department of Education:

- Students' records are reviewed annually each academic year after the spring semester. A student who is found to be deficient in one or more components as defined above is placed on financial aid suspension ineligible for any future federal financial aid immediately.
- A student who is ineligible has the right to appeal to reestablish eligibility if there are extenuating circumstances that contributed to the deficiency.

Satisfactory Academic Progress (SAP) Appeal

The Office of Financial Aid has established an appeal process for suspension of financial aid related to Satisfactory Academic Progress. All students failing SAP will be notified of their SAP status. Students who have failed to meet the requirements and wish to submit an appeal must complete the Satisfactory Academic Progress Appeal Form. Students who wish to appeal their financial aid suspension should review the instructions and submit the SAP Appeal Dynamic Form.

Appeals are considered only for extenuating situations that can be documented. All appeal submissions must include adequate supporting documentation. Students who appeal will be considered for the following reasons:

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

The circumstance must have occurred during the time the student struggled academically. All appeals must have documentation of the circumstances claimed in the appeal. Approved appeals can result in no more than one term of financial aid eligibility. Students whose appeals are approved are granted one term of financial aid probation. For continued eligibility, students must resolve all SAP deficiencies and/or meet the terms of their academic plan during the period of probation. Students who cannot mathematically resolve all deficiencies within one term and/or who fail to meet the terms of their academic plan will once again become ineligible for federal financial aid.

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

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

Re-establishing eligibility

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

Students who choose to remain enrolled without receiving federal student financial aid may request a review of their academic record after any term in which they were on financial aid suspension to determine if they were able to re-attain appropriate standard.

Gainful Employment Disclosure

Federal regulations require higher educational institutions to report certain information about students who enrolled in federal student financial aid–eligible educational programs that lead to gainful employment in a recognized occupation (GE programs). This does not apply to regular degree-granting programs, but rather to certificates or vocational programs. Those regulations also provide that institutions must disclose to prospective students certain information about the institution's GE programs. Brooklyn College participates in graduate certificate programs only, which fall under the GE disclosure requirements. The Official of Financial Aid website has additional program disclosure information.

Financial Aid Appeals

The following financial aid appeals are available at Brooklyn College for students enrolled in a graduate program:

- Federal Special Circumstances—This includes students/families who have had a significant change in income/economic circumstances and/or expenses not accounted for when the FAFSA was filed.
- Federal SAP Appeal—Appealing to reestablish aid eligibility after being placed on financial aid suspension due to failing to meet academic progress standards (see above).
- Unusual Enrollment History (UEH) Appeal—Students who are determined to have an unusual enrollment history based on their academic transcripts may appeal the decision if their eligibility is denied after their transcripts have been reviewed by a financial aid adviser.

More information about these appeals and the appeals process is available on the Financial Aid Office Appeals webpage.

Scholarships, Awards, and Prizes

Brooklyn College Scholarships, Awards, and Prizes

Scholarships, awards, and prizes are given each year to Brooklyn College graduate 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. Entering graduate students are automatically considered based on their admissions application. Continuing graduate students may contact their departments to apply for Brooklyn College scholarship funding.

The selection of recipients is based on criteria that may include academic performance, financial need, field of study, community service, extracurricular activities, career plans, and/or other stipulations established by the donor. Scholarships and awards range from partial to full tuition for the academic year. 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.

External Scholarships

There is information about an extensive array of external scholarships on the Internet. Students may search for scholarships online by using such key words as graduate scholarships, fellowships, or financial aid. Some sites allow registration that will report scholarships fitting a student's profile. Searching the Internet for scholarships is free; check with the Office of Scholarships before contacting any external scholarship agency that requests a fee for its services.

In addition to the Internet, external scholarships may be located through places of employment, religious organizations, community and civic organizations, and libraries.

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

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 unless otherwise instructed by the donor. Some types of scholarships and financial aid may need to be adjusted prior to distribution of refunds.

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

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

Special Programs and Opportunities

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

Funded by the National Science Foundation, NYC-LSAMP is active at 11 of the CUNY campuses, including Brooklyn College. At each campus, NYC-LSAMP activities are organized by faculty coordinators. Faculty coordinators conduct the Intro to STEM Research seminars, make fellowship selections, organize mentor-matching, provide support to Fellows, assist with recruitment efforts, and much more. In addition to a credit-bearing seminar for first-semester students, NYC-LSAMP is open to second-year students who have completed the freshman research seminar and are interested in pursuing STEM majors and want to incorporate undergraduate research experience in their studies, including the opportunity to become NYC-LSAMP Fellows. Fellows receive guaranteed placement with a research mentor, a research stipend, and guidance and additional training from our faculty coordinators, and get to shape the STEM and undergraduate research communities in their home campus and throughout CUNY.

For more information, visit the NYC-LSAMP website or contact the program activity coordinator, 141 Ingersoll Hall Extension, 718.951.4346. Deadline for summer and fall application is May 1; deadline for spring application is December 1.

Latin/Greek Institute

Established in 1973, the Latin/Greek Institute is a collaboration between Brooklyn College and the CUNY Graduate Center. An intensive summer program, the LGI offers total-immersion instruction in Latin or Greek with four programs: Basic Latin, Basic Greek, and Upper-Level programs in Latin and Greek. In the Basic Programs, students cover four to six semesters' worth of college-level material in 10½ weeks. No previous knowledge of Latin or Greek is required, and students earn 12 undergraduate credits. In the Upper Level programs, experienced readers earn eight undergraduate credits over seven weeks.

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

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

The Upper-Level programs in Latin and Greek are for students who have completed the Basic programs, or the college-level equivalent (at least two years, or four semesters, of Latin or Greek). It allows them to read a substantial amount of literature at a high level of grammatical precision (approximately 200 lines a night). The program is seven weeks long: During the first week, students intensively review basic morphology and syntax and establish a common terminology; for the remaining six weeks, the major focus is on translating and analyzing a large body of material.

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

Academic Regulations and Procedures

This chapter outlines academic regulations and procedures. Part I explains how to plan a program of study; Part II discusses registration, grades, and transfer credit; Part III describes academic requirements that must be met to qualify for a degree or advanced certificate as well as miscellaneous other matters. Administration of academic regulations and procedures is the responsibility of the Office of the Associate Provost for Faculty and Administration.

Academic counseling for students in each program is available from the graduate deputy or program head in each department. Students should discuss their program of study and academic progress toward program completion with their graduate deputy or program head each semester either in person or by e-mail. For general academic advice and information, students should contact the office of the dean of their respective school or the Office of the Associate Provost for Faculty and Administration.

Students are responsible for fulfilling all admission, program, degree, and graduation requirements. Students are responsible for adhering to college deadlines, attendance dates, and rules and regulations published in the graduate Bulletin. Students are also responsible for knowing and abiding by the college regulations that appear in other official publications from the college.

I. Planning the program of study

At the beginning of course work, and no later than the first week of the semester, all graduate students should prepare a program of study with the appropriate departmental graduate deputy or program head. Programs and regulations are subject to change without notice and, therefore, current students should maintain regular contact with their graduate deputy or program head. They may also consult DegreeWorks via the CUNY portal.

Matriculated students are responsible for meeting all requirements in their degree or advanced certificate program. Students should consult the appropriate sections of this Bulletin for all official information regarding requirements for their degree or advanced certificate as well as general college requirements. Degree requirements for each program may also be found on the Program Finder webpage.

Length of time to complete degree or advanced certificate

A master's degree or advanced certificate must be completed within seven years inclusive of any official leave of absence, beginning with the student's initial registration for graduate courses in a program at Brooklyn College in any status: matriculated, matriculated with conditions, or nondegree. (See the chapter "Admission" for definitions of each.) Exceptions are sometimes granted with compelling justification or because of the size of a student's academic program but require the filing of a petition for extension of time to the Faculty Council Committee on Graduate Admissions and Standards. A student may petition the Committee on Graduate Admissions and Standards for an extension of time to complete their degree one time during their course of study at Brooklyn College. The committee will determine whether courses older than nine years can be counted toward the degree. In addition, the committee will typically require a student requesting an extension of greater than two years to complete additional credits toward their degree. The committee has final discretion over the additional credit requirement; a degree completed within 10 to 15 years of initial enrollment will typically require six to nine additional credits of course work; a degree completed more than 15 years after initial enrollment will typically require 12 to 15 additional credits of course work. Those courses will be determined by the program's graduate deputy. Information on how to develop a petition is available in the Office of Academic Standing, 3219 Boylan Hall, 718.951.4866.

Academic residency

At least 60% of the credits required for a degree must be earned at Brooklyn College. Departments and/or programs may have additional academic residency requirements. See the section "Rules about transfer courses and credits," below, for more information.

II. Registration, Grades, and Transfer Credit Registration for Courses

Prior to registration, students should review the degree requirements for their program, as well as their progress toward the degree, by checking the program requirements at the time of their entry or whatever set of requirements they elect

if eligible to change program requirements (see the section "Applicable Bulletin," below). Some programs require a pre-registration visit with the graduate deputy or program head; even if not required, such a consultation is often extremely important to keep moving efficiently toward graduation. The requirements of each program can be found online at the Brooklyn College website under "Academics" or in the electronic copy of previous Bulletins if the student is subject to an earlier Bulletin. Students may also monitor their degree progress by using DegreeWorks accessible through the CUNY Portal.

Registration takes place four times per academic year: fall, January Intersession (winter session), spring, and summer. Registration information is communicated via e-mail. All graduate students register via Schedule Builder in CUNYfirst on the first day of continuing student registration.

Students are expected to complete registration during the official registration period. Registration is not permitted after the last day to add a course for any given term. Under no circumstances will students who are dropped for nonpayment be allowed to reregister for the dropped classes after the end of the last day to add a course. The last day to add a course is listed each semester in the Academic Calendar.

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

Complete instructions on how to register and registration resources are available on the Brooklyn College website. Students who need assistance with registration should visit the Enrollment Services Center in the lobby of the West Quad Center.

Hours and credits

Statements in this Bulletin regarding a certain number of class hours or credits refer to the number of weekly class hours (or their equivalent). In general, one credit represents 15 semester hours of classroom work (or the equivalent). Weekly graduate seminars that do not have a final examination should hold their last meeting during the 15th week of the semester. The same is true for the following: a) two weekly hours of laboratory work, b) two weekly hours of supervised fieldwork, c) three hours of unsupervised honors work, or d) three hours of unsupervised fieldwork. Exceptions to this general rule apply in certain programs or courses and are specified in the Bulletin.

Statements in this Bulletin regarding class hours and credits usually refer to the *total number of semester class hours,* unlike undergraduate courses, which usually list weekly class hours. Thus, a listing that reads "30 hours plus conference" (or "plus conference and independent work"); "3 credits" means that the course will meet for two class (i.e., lecture) hours each week for 15 weeks, or for some other scheduling pattern that equates to this in terms of total class time in the course.

Modes of instruction

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

Modality	Value	Description
In Person	P In Person	In-person classes require all contact hours to take place on campus or a designated location during scheduled times. Contact includes instruction, learning activities, and interactions (both student-student and/or student-instructor). Students complete readings, assignments, projects, etc. outside of class time.
Online	OA Online Asynchronous	Online Asynchronous classes require all contact hours be held online asynchronously. Instruction takes place online asynchronously. The modality allows students to access materials and assignments on a flexible schedule in accordance with deadlines set by the professor. All required instructional hours are online. Contact includes instruction, learning activities, and interactions (both student-student and/or student-instructor). All the classwork, examinations, quizzes, writing assignments, lab work, etc. are fully online.

	OS Online Synchronous	Online Synchronous courses resemble on-campus in-person ones in that students must be (virtually) present at the same time. All required instructional hours are online. Contact includes instruction, learning activities, and interactions (both student-student and/or student-instructor). All the classwork, examinations, quizzes, writing assignments, lab work, etc. are fully online.
	OM Online Mix	Online Mix classes offer a combination of online synchronous meetings and online asynchronous work. Students attend some classes on designated online synchronous days, with the remainder of the course being delivered via asynchronous, deadline-based instruction and assignments. All required instructional hours are online. Contact includes instruction, learning activities, and interactions (both student-student and/or student-instructor). All the classwork, examinations, quizzes, writing assignments, lab work, etc. are fully online.
Hybrid	HA Hybrid Asynchronous	Hybrid classes offer a combination of in-person and online instruction/contact hours. Contact includes instruction, learning activities, and interactions (both student-student and/or student-instructor). Online portions of the course are offered asynchronously. Students participate in online portions of the course via asynchronous, deadline-based assignments.
	HS Hybrid Synchronous	Hybrid classes offer a combination of in-person and online instruction/contact hours. Contact includes instruction, learning activities, and interactions (both student-student and/or student-instructor). Online portions of the course are offered synchronously. Students participate in online portions of the course via designated online synchronous days. Synchronous class sessions will take place at an assigned class time(s).
	HF HyField	HyField classes offer a combination of in-person instruction hours that occur off campus doing field-based experiential learning (e.g., primary research, museum visits, local or international team-based projects for a nonprofit or company) during scheduled times and online instruction hours that may be asynchronous and/or synchronous. Contact includes instruction, learning activities, and interactions (both student-student and/or student-instructor). Synchronous class sessions will always take place at the assigned class time(s).
HyFlex	HX HyFlex	A HyFlex course provides students multiple learning paths and is distinguished from other mixed modality courses by relying on individual student choice from session to session, rather than having the instructor determine the modality for any given lesson. Contact includes instruction, learning activities, and interactions (both student-student and/or student-instructor).

Course numbers

Courses numbered 6000 are broadly based survey courses that do not require extensive undergraduate preparation. They are intended for students in other disciplines and may not be offered toward a degree by candidates in the field in which they are given.

Courses numbered 7000 require extensive undergraduate preparation and are intended for candidates for a master's degree or certificate in the field in which they are given. Other students may be admitted only with permission of the department chair or deputy chair.

Each course number is followed by G, T, or X. The letter G means that the course may be credited only toward a master's degree in liberal arts and sciences programs; T, that the course may be credited only toward a master's degree or an advanced certificate in the Teacher Education Program; and X, that the course may be credited toward a master's degree in either liberal arts and sciences programs or the Teacher Education Program. In some cases, a student may receive permission to apply credit for a course designated G toward a master's degree in the Teacher Education Program or to apply credit for a course designated T toward a master's degree in liberal arts and sciences programs. Courses whose number is preceded by the letter U are regular master's courses that may be credited toward a CUNY doctoral program.

Limitation on credits per semester

Full-time enrollment at the graduate level is defined as taking at least nine credits. Master's students may not register for more than 15 graduate credits a semester or more than eight graduate credits in either of the two summer sessions without special permission from the department and the Office of Academic Standing. Students on F-1 and J-1 visas must carry a full-time load unless a lower load is approved by the Office of International Student and Scholar Services. It is recommended that students with full-time employment or other major time commitments carry a maximum course load of no more than six to nine credits each semester.

Registration limitations for nondegree students

Some graduate courses and programs do not admit nondegree students. Nondegree students should seek permission from their department before attempting to enroll in graduate courses.

Adding, dropping, and withdrawing from courses

A registration adjustment consists of adding, dropping, or withdrawing from a course; changing from one course section to another; or making any other alteration after registration is completed. A student may add a course only up until the last day to add a course; the procedures for adding, dropping, and withdrawing depend on when they are done. Complete information about registration adjustments, including deadlines and penalties, is available on the Brooklyn College website. The academic (as opposed to financial) consequences of withdrawing from classes depend on when the official withdrawal takes place. A student may drop courses without academic penalty during the designated add/drop period, and no record of the course(s) will appear on the student's transcript. A student may withdraw from courses without academic penalty after the designated add/drop period until the deadline indicated on the college's academic calendar; a grade of W will be assigned and will appear on the student's transcript. Withdrawals are made via Schedule Builder in CUNYfirst.

A student who attended a minimum of one class session and stopped attending but did not officially withdraw will receive a grade of WU. A student who never attended a course but did not officially withdraw will receive a grade of WN. A WN and a WU grade, like a W, have no impact on the student's GPA (though the student may be liable for tuition payments associated with the course if the course is not formally dropped).

Students should note that there are financial implications for courses dropped after the first day of classes, as specified on the Tuition Payment Options webpage and in the section "Refund policy" of the "Tuition and Fees" chapter. A student who withdraws from a course after the third week of the term receives no refund of tuition.

Grade Glossary

The following glossary of uniform grading symbols shall be employed according to the interpretation provided below. Grades are assigned based on the definitions contained herein. Individual units of the university need not employ all symbols but must adhere to the following interpretation for those employed and may not use any symbol that is not included in the glossary. Quality points are to be used to calculate the grade point average (GPA) or index. A dash (—) indicates that the grade does not carry a numerical value and is not to be included in the GPA. Plus (+) and minus (-) grades shall be interpreted as equivalent to +0.3 and -0.3, except as noted.

Grade	Explanation	Quality Points
A+	Exceptional	4.00
A	Excellent	4.00
A-	Excellent	3.70
AUD	Auditor, Listener	–
B+	Good	3.30
B	Good	3.00
B-	Good	2.70
C+	Satisfactory	2.30
C	Satisfactory	2.00
C-	Satisfactory	1.70
CR	Credit Earned	–
FIN	F from incomplete (to be used when the INC grade lapses to an F grade)	0.00
NC/NP	No credit granted	–
P	Pass	–
PEN	Grade pending (temporary grade)	–
R	Course must be repeated; minimum level of proficiency not attained. Restricted to noncredit, remedial, and to developmental courses.	–
S	Satisfactory	–
SP	Satisfactory progress. Restricted to thesis and research courses requiring more than one semester for completion (temporary grade).	–
U	Unsatisfactory, Restricted to noncredit, remedial, and to developmental courses.	0.00
W	Withdrew. Student participated in an academically related activity at least once.	–
WA	Administrative Withdrawal. Nonpunitive grade assigned to students who had registered for classes at the beginning of the term but did not provide proof of immunization by compliance date. Student participated in an academically related activity at least once.	–
WD	Withdrew Drop. Dropped after FA cert date during the program adjustment period. Student participated in an academically related activity at least once.	–
WN	Never participated in an academically related activity	–
Y	Year or longer course of study must continue to completion (temporary grade)	–
H	Honor. Hunter College School of Social Work only.	–
NRP	No Record of Progress. Exclusive to Dissertation Supervision at the Graduate Center Only	–

F, WU, and INC Grades

Grade	Explanation	Quality Points
F	Failure: F is an earned grade based on poor performance and the student not meeting the learning objectives/outcomes of the course. A WU grade should never be given in place of an F grade.	0.00
WU	Withdrew Unofficially: A grade of WU is to be assigned to students who participated in an academic activity related to the class at least once, stopped participating, did not drop the class or receive approval for an incomplete, did not otherwise officially withdraw from the course, and did not complete enough work for the instructor to be able to calculate anearned grade using the criteria delineated in the course syllabus. An F grade should never be given in place of a 'WU' grade.	–
INC	Term's work incomplete (temporary grade): INC (Incomplete) should only be given by the instructor in consultation with the student when there is a reasonable expectation that a student can successfully complete the requirements of the course no later than the last day of the following semester, or its equivalent in calendar time, exclusive of Summer Session/Term	

Note. INC is a temporary grade awarded when the disposition of the final grade requires further evaluation for reasons other than the Procedures for Imposition of Sanctions related to the Board's Academic Integrity Policy. Transcript comments for INC grades should be added to the student record indicating the nature of the incomplete. The grade of INC lapses to an FIN grade no later than the last day of the following semester, or its equivalent in calendar time, exclusive of Summer Session/Term. Students who have officially withdrawn from a college and have these grades may be exempted from the limitations. –

Calculation of the GPA

A+ and A	=	4.00
A-	=	3.70
B+	=	3.30
B	=	3.00
B-	=	2.70
C+	=	2.30
C	=	2.00
F, FIN	=	0.00

The following table demonstrates how a student who has completed 24 credits should compute the GPA.

Grade		Value		Credits	Total
A	=	4.00	x	9	36.00
A-	=	3.70	x	3	11.10
B+	=	3.30	x	3	9.90
B	=	3.00	x	3	9.00
C	=	2.00	x	3	6.00
F	=	0.00	x	3	0.00
Total				24	72.00

The GPA is 72.00 ÷ 24 = 3.00.

General rule for calculating the GPA

Grades earned in all courses acceptable toward the degree or advanced certificate are included in the calculation of the GPA. In particular, this includes 1) all 7000-level courses in an academic department in which the student has taken one or more courses acceptable for the degree, and 2) all 6000-level courses in an academic department in which the student has taken one or more 6000-level courses acceptable for the degree. A student may not choose from among the courses that will be counted in calculating the GPA.

Calculation of the GPA when a student repeats a course

Credit cannot be earned twice for the same course. When a student repeats a course (or its equivalent) in which a grade of C or higher was earned, no credit is given for the repeated course. The grade for that course will appear on the transcript but is not included in computing the GPA. This rule applies when a student repeats courses taken at Brooklyn College or when a student completes courses at Brooklyn College that are equivalent to those taken at other institutions and that appear on his or her academic record. Some specified courses may be repeated for credit. Such exceptions are noted in the Bulletin description of these courses.

Calculation of the GPA when a student changes degree programs

When a student changes degree programs without having earned a degree in the first program, the GPA is calculated in accordance with the requirements of the new program. Only those courses from the prior record that are applicable to the new degree program become part of the GPA calculation. (See "Change of program" in the chapter "Admission.")

Calculating the GPA for a nondegree student who later becomes a degree candidate

Although a maximum of 15 credits earned in nondegree status may be applied to a degree, for a student who moves from nondegree to matriculated status in a program, all courses taken in nondegree status that would apply to the degree for a matriculated student must be included in calculation of the GPA. Students may not pick and choose which of these credits will be calculated in the GPA. This rule applies to both 7000-level and 6000-level courses. Additional information may be found in the "Nondegree" section of the chapter "Admission."

F-Grade Replacement Policy

A graduate student who receives certain failing grades (F, FIN, or WF, but not an F resulting from an academic integrity violation) in a Brooklyn College course and who retakes that course at the college and earns a grade of C or higher will have the failing grade excluded from the calculation of the GPA. The original failing grade remains on the transcript, followed by a note to indicate that the course grade is not included in the computation of the GPA. Students should monitor their transcripts through CUNYfirst. If there is a question regarding the calculation, students should check with the Enrollment Services Center.

Use of the F-Grade Replacement Policy is limited to a total of six credits for the duration of a student's graduate career in any of the institutions of the City University of New York. A student

who has used, for example, four credits of the six-credit total may replace only a failed two-credit course. After six credits have been used, the F-Grade Replacement Policy no longer applies; a student who fails a course and later repeats it will have both courses included in calculation of the GPA.

In order to take advantage of the F-Grade Replacement Policy, students must repeat the course at the same college where they originally received the failing grade. An F grade earned at Brooklyn College may not be made up by a course at another CUNY or non-CUNY school, and an F grade earned at another CUNY or non-CUNY school may not be made up at Brooklyn College. Note also that the F-Grade Replacement Policy may not be used to replace an F grade resulting from a violation of CUNY's policy on academic integrity.

Rules about transfer courses and credits

Transfer Credit

Enrolled graduate students may request to transfer in graduate credits from another college or university. To request transfer credits, complete the Graduate Transfer Credit Request Form, attach an official transcript with a photocopy of the course description from the catalog/Bulletin, and submit the package to your adviser for approval.

- You may only transfer courses that have not been applied to another degree or graduate certificate.
- Transfer credits are accepted only from accredited colleges and universities.
- Graduate courses must have been completed no more than five years prior to admission to Brooklyn College.
- Transfer credits are accepted up to a maximum of 40% of the total credits required for the degree program.
- Grades must be B or better (courses taken pass/fail will not be accepted).
- A maximum of six credits may transfer for courses for which there are no direct equivalents at Brooklyn College.

For non-CUNY colleges

Currently matriculated students must apply in person to their graduate deputy or program head for permission to use transfer credits. Permission is obtained using the transfer credit application that may be obtained in the ESC. The form is also available online on the WebCentral portal. If the course to be taken is in a department other than the program department, approval of the deputy chair or chair of the appropriate Brooklyn College department is also required. For programs in the School of Education, approval of the deputy for graduate studies is required. With the application, students must include the catalog of the college they plan to attend or a photocopy of the course description for each course they plan to take. Students who take a course at another college that has not been approved in advance may be denied transfer credit for the course.

For CUNY colleges

Currently matriculated students may apply for an e-permit online using CUNYfirst prior to registration. Instructions for filing a permit request electronically (an "e-permit") can be accessed through the college website. Note that receiving permission to take a course on e-permit is not the same thing as actually registering for that course at the other CUNY colleges. To complete the permit process, students must pay for the course(s) through Brooklyn College and then register for the approved course(s) at the host college. All three steps—the e-permit request, payment at Brooklyn College, and registration at the host college—must be completed or the student is not officially registered for the course(s). There are no restrictions on the number of courses that students can take on e-permit other than the satisfaction of residency requirements, nor on the number of colleges to which students can apply for course(s) on e-permit. Graduate students must have a 3.00 GPA to qualify for an outgoing ePermit.

Special considerations for transfer courses from non-CUNY institutions

Courses taken at non-CUNY institutions to be transferred must have been completed with a grade of B or higher; a grade of B- is not acceptable. The courses may not have been applied toward a degree earned previously. Grades in courses taken at non-CUNY institutions and accepted for transfer credit at Brooklyn College are not included in the calculation of a student's GPA.

Special considerations for courses taken by permit at other CUNY institutions

As of fall 2004, courses taken by Brooklyn College students at other CUNY colleges under the CUNY permit procedure are included in the calculation of a student's GPA and become part of the student's record, regardless of the grade earned. CUNY courses not approved by Brooklyn College under the permit procedure must have a B or higher in order to transfer.

Crediting courses to more than one master's degree and/or advanced certificate program

Departments and programs may choose to allow students to apply courses from a first Brooklyn College master's degree or advanced certificate to the required course work and credit requirements of a second master's degree or advanced

certificate up to the lesser of nine credits or 50% of the required credits of the second master's degree or advanced certificate. This dispensation applies only to course work taken at Brooklyn College; courses used toward a prior degree or advanced certificate outside of Brooklyn College may not be credited toward a second master's degree or advanced certificate at Brooklyn College. Furthermore, it applies only to courses that are required by the second program; courses taken in the first program may not be applied toward elective credits in a second program. If a program chooses to credit a student's Brooklyn College course work, as described above, toward a second master's degree or advanced certificate, the department chair, graduate deputy, or program head must specify the same in writing to the Office of the Registrar.

Note: Because Brooklyn College regulations do not permit students to receive two degrees or a degree and an advanced certificate in the same semester, a student must complete the requirements of the two credentials in different semesters.

Special application process for students applying for advanced certificate programs

Currently enrolled students in master's programs who wish to enroll in an advanced certificate program may apply through the streamlined "second credential" process. The student must complete a Certificate Admissions Form indicating the intention to obtain a graduate certificate. There is no application fee as long as the student maintains continuous enrollment. The student submits the Certificate Admissions Form and letter of interest to the certificate program director, who makes the decision to admit or deny the student.

Attendance in courses

The instructor may consider attendance and class participation in determining the term grade, although a student is not denied credit for a course solely on the basis of the attendance record. It is the student's responsibility to turn in all assignments on time.

A student late for class may be excluded from the classroom.

To obtain a grade for a course that was not completed due to enlistment in the armed forces, Peace Corps, or VISTA, a student must have been enrolled for approximately 13 weeks during the fall or spring semester or five weeks during the summer term.

Appeal of final grade

An instructor may not raise a student's grade in a class by accepting additional work after the end of the semester, except in cases of INC grades (see the section "Grades in courses," above) in which the student either takes a makeup final or submits the limited number of assignments still due at the end of the semester. In any other cases, a change of grade can be made only if the instructor certifies that an error was made in entering or calculating a grade. Such a change is made on a Change of Grade Form that must be signed by the instructor and the department chair, and approved by the Office of the Associate Provost for Faculty and Administration.

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

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

Option One: Informal appeal

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

Option Two: Formal appeal

If the matter is not resolved, the student has the right to appeal the grade to the department chair or designee. When the department chair or designee receives a formal grade appeal following the student's informal appeal to the instructor, the chair or designee may attempt mediation. Upon failure of mediation, the chair or designee shall convene a Grade Appeals Committee to investigate the appeal and to render a decision. To ensure that all departmental committees conform to the principles of due process, the following procedures apply:

1. The student must submit a completed form to show that he or she has met with the instructor and that informal resolution failed.

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

Time limits for appeal

A student who wishes to 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 must submit the written appeal to the Faculty Council Committee on Graduate Admissions and Standards through the Office of Academic Standing. The decision of the Committee on Graduate Admissions and Standards will be final.

Grades cannot be changed once a student has graduated and his or her academic record is closed.

III. Academic requirements and procedures

This section explains general academic requirements and procedures for graduate degree and advanced certificate programs, including minimum GPA requirement; academic probation and dismissal; comprehensive examination, thesis and language examinations; and applying for graduation.

Academic residency

At least 60% of the credits required for a degree must be earned at Brooklyn College. Departments and/or programs may have additional academic residency requirements.

Minimum GPA requirement

To receive a graduate degree or an advanced certificate, a candidate must maintain and graduate with a minimum GPA of 3.00. Individual departments may, with the approval of Faculty Council, set higher grade requirements in certain specified courses or groupings of courses accepted toward the degree or advanced certificate.

Academic probation and dismissal

Students must have a minimum grade point average (GPA) of 3.00 to be retained in the graduate program. An academic monitoring stop will be placed on graduate students whose GPA falls below a 3.00 during their initial semester of enrollment in a graduate program at the college. Students whose GPA falls below 3.00 in any semester after their first semester of enrollment in a graduate program will be placed on academic probation.

Students will be dismissed if, after attempting a maximum of 12 additional credits, their cumulative GPA remains below the required 3.00. In addition, a GPA greater than or equal to 3.00 per semester must be maintained during the 12 credits of probation. The student's graduate program may specify the courses that must be taken, and the program may impose a credit limit per semester. Students on academic probation whose term GPA falls below 3.00 will be dismissed whether or not 12 credits have been completed. INC grades are not permitted while on probation. The Office of the Registrar will notify the student that he or she has been dismissed from the program and will be barred from further registration in the program.

The Office of Academic Standing monitors the GPAs of all graduate students at the end of the fall and spring semesters.

Comprehensive examinations, thesis, and language examinations

To qualify for a master's degree, candidates in most programs are required to pass a written comprehensive examination and/or submit an acceptable thesis or major research paper. An oral examination may also be required. Requirements for each program are specified on the Program Finder webpage. When there is a choice between exit requirements such as a comprehensive examination and a thesis, a student who fails a comprehensive examination may not then choose to write a thesis, nor may a student who has registered for the department's thesis-writing course then choose to take a comprehensive examination. Students seeking a waiver of this regulation must file a petition with the Office of Academic Standing. A student in a program that requires a comprehensive examination or a program that requires the student to write a thesis must complete that requirement to earn their degree.

Comprehensive examinations

Comprehensive examinations are designed to assess how well students have mastered the curriculum in their degree program and are taken near the end of a student's work in the program. Students who choose or are required to take a graduate comprehensive examination in their program must:

- be matriculated,
- have a GPA of at least 3.00,
- have no outstanding admissions or matriculation conditions, and
- be scheduled to complete all course requirements for the degree by the end of the semester in which the examination is taken; in some cases, depending on the number of credits remaining, it may be preferable to take the comprehensive examination in the semester before the student expects to graduate, should all or part of the exam need to be repeated.

Comprehensive examinations are given in the fall and spring semesters on dates determined by individual graduate programs; students should consult with their graduate deputy about when the exam is scheduled each semester. Students apply to take comprehensive examinations online at the BC WebCentral portal under the "eServices/Student Transactions" tabs and are notified by e-mail about their eligibility status. The first date to apply for a comprehensive examination is the first day of classes of the semester in which the examination is to be taken, and students must apply within 30 days of this date. Students must apply each time they wish to take a comprehensive examination. See the section "Maintenance of matriculation" for the procedure to take a comprehensive examination in a semester in which the student is not registered for any classes.

A comprehensive examination may not be taken more than twice. In extraordinary circumstances, exceptions may be granted by the Faculty Council Committee on Graduate Admissions and Standards; students may obtain information on filing a petition to this committee in the Office of Academic Standing, 3219 Boylan Hall. Students who are unsuccessful after two attempts will have a stop placed on their record, preventing further registration. In order to take the exam a third time (and have the registration stop removed), students must petition the Committee on Graduate Admissions and Standards. A student may appeal a failing grade through the college's established grade appeals process.

Thesis

A student in a liberal arts or sciences program who chooses or is required to write a thesis must consult with the graduate deputy before registering for any required thesis research course. A student in a School of Education program who plans to write a thesis must consult with the appropriate program head.

The document "Guidelines for Thesis Preparation and Submission" is available on the BC WebCentral portal. Some programs provide supplemental instructions. Unless otherwise noted in the department requirements, a student registers for the thesis research course only once. The grade of SP (satisfactory progress) is assigned until the thesis is accepted. Thesis research credit is assigned and a grade of P (pass) is entered on the record when the thesis is accepted.

Language examinations

In some programs, students are required to pass one or more foreign language examinations given by the department or the Educational Testing Service. Language requirements, if any, are stated under a program's degree requirements on the Program Finder webpage.

Clinical or field experiences

Any candidate found to be in violation of any of the conduct guidelines detailed in the Brooklyn College Student Handbook and/or the candidate's discipline-specific code of ethics/conduct may not be recommended for student teaching/clinical placements/fieldwork experiences.

Applying for graduation and the diploma

Students file for graduation via the student self-service area on CUNYfirst. Students who expect to complete all degree requirements in the summer term should file for graduation by

the preceding March 15. Students who expect to complete all degree requirements in the fall semester or winter intersession should file for graduation by the preceding September 15. Students who expect to complete all degree requirements in the spring semester should file for graduation by the preceding February 15. Applications on file by the proper date will be processed in time for graduation. Failure to meet this deadline may delay graduation and may impact the student's ability to participate in Commencement. Students who previously filed for graduation but then did not graduate must file again via the student self-service area on CUNYfirst in the semester in which they plan to actually graduate. During the semester in which they intend to graduate, students must be registered for degree-related courses or for maintenance of matriculation (see "Maintenance of matriculation," below). All degree and advanced certificate requirements and all forms and procedures related to those requirements must be completed by the end of the term in which the student expects to graduate. Degrees are awarded to students in the semester they have completed all degree requirements provided that they have fulfilled all financial obligations to Brooklyn College.

Maintenance of matriculation

As required by CUNY, a nonrefundable maintenance of matriculation fee must be paid by students who do not register for degree-related courses in a given semester but 1) wish to take a comprehensive examination, submit a thesis or resolve an INC grade; 2) expect to graduate in that semester; or 3) wish to use the academic facilities of the college during that semester. Graduate students are required to register for maintenance of matriculation one time only; they are not required to register for multiple semesters of maintenance of matriculation.

Applicable Bulletin

A candidate for a degree or advanced certificate may complete the program requirements as stated in any single Bulletin in effect during the time of the student's continuous attendance in a department or program, including any official leaves of absence. If continuous attendance is broken for any reason without an official leave of absence, the applicable Bulletin requirements will be those in effect when the student re-registers. The student may not select particular requirements from different Bulletins.

Readmission

After two semesters of absence, matriculated students who have not yet graduated from their degree program and who wish to register must submit a readmission application and pay the readmission fee. To print the application, go to the Brooklyn College website, click on "Admissions & Aid," then on "Nontraditional Students," and then on "Re-entry Students." Students can only readmit into a program to which they have previously been accepted. Students who wish to readmit into a program other than the one in which they had previously been matriculated must apply for admission to that program through the Office of Graduate Admissions and the application will be reviewed by the graduate program to which the student has applied. Nondegree students who have taken a leave of absence from their studies cannot readmit but must submit a new application through the Office of Graduate Admissions.

Students who are maintaining matriculation for a term do not need to readmit. Students with a GPA below 3.00 must be approved by their department for readmission. Students who have been absent from their program for two or more semesters, without an approved leave of absence, must have their applications approved by their academic department. Students who would exceed the seven-year degree completion limit must file a petition with the Office of Academic Standing for approval of readmission. It takes one full term for the petition to be reviewed and approved. Students should file their petition one term prior to the one in which they wish to register.

Official leave of absence

A degree or advanced certificate candidate whose GPA is at least 3.00 may be granted an official leave of absence for up to a cumulative maximum of two years. The leave of absence system is available at BC WebCentral, eServices, Undergraduate/Graduate Student Transactions, under the Petitions channel. The length of an official leave of absence does not affect the deadline for completion of the requirements for the master's degree or advanced certificate. The seven-year time limitation includes all periods of nonattendance for any reason except service in the armed services, Peace Corps, or VISTA.

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 will be charged for a replacement ID.

Social Security number

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

EMPLID

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

Change of name

A change of name must be submitted with supporting documentation by e-mail or in person to the Enrollment Services Center, 102 West Quad Center. Change-of-name requests must be substantiated with a photo ID with the new name as well as a marriage certificate, U.S. passport, or court order.

Change of address

Students may change their address on CUNYfirst via Student Self-Service for many different types of addresses such as mailing or local. Change requests for permanent addresses, however, must be submitted to the Office of the Registrar at StudentRecords@brooklyn.cuny.edu. Students may access a Change of Address Form on the Registrar page.

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, staff, and faculty are required to comply with federal, state, and local laws, rules, and regulations as well as university and college policies that seek to enforce them. Those currently in effect are summarized below with links to relevant websites for the complete text of each, subject to change by the appropriate authorities.

Policies on Acceptable Standards of Behavior

Maintenance of public order

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

Notice of Nondiscrimination

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

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

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

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

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

The following people have been designated at Brooklyn College to handle inquiries and complaints relating to CUNY's Policy on Equal Opportunity and Non-Discrimination and Policy on Sexual Misconduct and to ensure compliance with CUNY's Procedures for Implementing Reasonable Accommodations and Academic Adjustments:

Michelle Vargas
Title IX Coordinator
2147 Boylan Hall
P: 718.951.4128

Chief Diversity Officer and Special Assistant to the President
2147 Boylan Hall
P: 718.951.4128

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

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

Workplace violence

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

Sexual misconduct

Every member of the Brooklyn College community, including students, employees, and visitors, deserves the opportunity to live, learn, and work free from sexual misconduct, including sexual harassment, gender-based harassment, and sexual violence. Sexual harassment is unwelcome conduct of a sexual nature—such as unwelcome advances and requests for sexual favors. Gender-based harassment is unwelcome conduct of a nonsexual nature based on an individual's actual or perceived gender, including conduct based on gender identity, gender expression, or nonconformity with gender stereotypes. Sexual violence is rape or attempted rape, forcible touching, sexual abuse, or dating/intimate partner violence.

Brooklyn College encourages individuals who have experienced sexual misconduct to report the incident(s) to campus authorities, even if they have reported it to outside law enforcement and regardless of whether the incident(s) occurred on campus. Investigations of sexual misconduct are conducted fairly, promptly, thoroughly, and as confidently as possible under the circumstances. After the investigation, if a complaint is found to be true, appropriate action can include formal disciplinary action, including but not limited to termination of employment, and suspension or expulsion of students. The college may also be able to provide victims of sexual misconduct with special accommodations to help them make it through their class or work assignments.

In cases of sexual assault, if the incident occurred on campus, call Campus Public Safety or 911. If the incident occurred off campus, call 911 or go to the local NYPD precinct. Contacting the police does not require you to file charges. Regardless of where the incident occurred, we also encourage you to contact the Brooklyn College Title IX coordinator. In all cases, seek medical attention as soon as possible. Campus Public Safety or the police can help you get medical care, or you can go on your own (or with a friend) to an emergency room.

Contact
Michelle Vargas
Title IX Coordinator
P: 718.951.4128

Donald Wenz
Public Safety Director
P: 718.951.5511 or 5444

Sexual and interpersonal violence prevention and response training

Article 129-B of the New York Education Law requires colleges and universities to provide ongoing education and training about sexual misconduct to their employees and students. To fulfil this requirement, CUNY requires students, staff, and faculty to complete its Sexual and Interpersonal Violence

Prevention and Response Course (SPARC). This training covers all forms of sexual misconduct prohibited under CUNY policy and applicable law and outlines the compliance and reporting responsibilities of students, staff, and faculty.

For employees

All employees are required to complete the Employee Sexual and Interpersonal Violence Prevention and Response Course (ESPARC) each calendar year of their employment. The course is provided via CUNY Blackboard. To access the course, log in to Blackboard. You will find Brooklyn College ESPARC under the "My Organization" section. Blackboard log-in instructions (PDF).

- If you have questions about the course content, e-mail Michelle Vargas, Title IX coordinator.
- For questions about your registration for this course, e-mail the Office of Human Resource Services.

For students

All freshmen, transfer students, club/organization officers, study abroad participants, student athletes, and residential life occupants are required to take the Sexual and Interpersonal Violence Prevention and Response Course Online Training (SPARC). Student athletes must complete SPARC annually to be eligible to play. The course is provided on CUNY Blackboard. To access the course, log in to Blackboard. You will find Brooklyn College ESPARC under the "My Organization" section.

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

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

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

Hate crimes

Bias or hate crimes are crimes motivated by the perpetrator's bias or attitude against an individual victim or group based on perceived or actual personal characteristics, such as their race, color, creed, national origin, ethnicity, ancestry, religion, age, sex, sexual orientation, gender, gender identity, disability, or alienage. Bias-related incidents are behaviors that constitute an expression of hostility against the person or property of another because of the targeted person's race, color, creed, national origin, ethnicity, ancestry, religion, age, sex, sexual orientation, gender, gender identity, disability, or alienage. According to New York Penal Law Section 485, a person commits a hate crime when he or she commits a specified criminal offense and either:

1) intentionally selects the person against whom the offense is committed or intended to be committed in whole or in substantial part because of a belief or perception regarding the race, color, national origin, ancestry, gender, religion, religious practice, age, disability, or sexual orientation of a person, regardless of whether the belief or perception is correct, or

2) intentionally commits the act or acts constituting the offense in whole or in substantial part because of a belief or perception regarding the race, color, national origin, ancestry, gender, religion, religious practice, age, disability, or sexual orientation of a person, regardless of whether the belief or perception is correct.

Examples of hate crimes include, but are not limited to: threatening phone calls, hate mail (including electronic mail), physical assaults, vandalism, destruction of property, and fire bombings. Penalties for bias-related crimes are very serious and range from fines to imprisonment for lengthy periods, depending on the nature of the underlying criminal offense, the use of violence, or previous conviction of the offender. Students, staff, or faculty who commit bias crimes are also subject to university disciplinary procedures and a range of sanctions up to and including suspension, expulsion, or termination of employment.
In order to effectively handle incidents of bias-related crimes and prevent future occurrences of such crimes, victims or witnesses of a hate crime are encouraged to immediately report incidents to the Public Safety Office. Victims of bias crime can also avail themselves of counseling and support services through the Office of Student Services.

Smoke-free policy

The use of tobacco is prohibited on all grounds and facilities of CUNY, including those at Brooklyn College. This includes all indoor and outdoor locations.

Drugs and alcohol

In accordance with the CUNY Policy on Drugs and Alcohol, the unlawful manufacture, distribution, dispensation, possession, or use of drugs or alcohol by anyone on Brooklyn

College property, in Brooklyn College buses or vans, or at Brooklyn College–sponsored activities is prohibited. In addition Brooklyn College employees are prohibited from illegally providing drugs or alcohol to CUNY students.

Students and employees who violate this policy are subject to sanctions under university policies, procedures, and collective bargaining agreements, as described below. Students and employees should be aware that, in addition to these CUNY sanctions, the university will contact appropriate law enforcement agencies if it believes that a violation of the policy should also be treated as a criminal matter. Students are expected to comply with the CUNY and college policies with respect to drugs and alcohol. Any student found in violation may be subject to disciplinary action under Article 15 of the Bylaws of the Board of Trustees, which may result in sanctions up to and including expulsion from the university.

In lieu of formal disciplinary action, CUNY may, in appropriate cases, seek to resolve the matter through an agreement pursuant to which the student or employee must see a counselor or successfully participate in a drug and alcohol treatment program.

Help is available for members of the college community struggling with alcohol or substance use disorders:

- CUNY employees may seek assistance through the CUNY Work/Life Program at 800.833.8707 or at this website.
- Students may seek assistance through Personal Counseling, 0203 James Hall, 718.951.5363; or Health Services, 114 Roosevelt Hall, 718.951.5580.

Records requests

All records requests should be directed to the Office of Legal Affairs and Labor Relations, which serves as the college's records access office.

Policies Concerning Students and Faculty

Policies on submission of fraudulent or incomplete admissions materials

The submission of documents that are forged, fraudulent, altered from the original, materially incomplete, obtained under false pretenses, or otherwise deceptive (collectively referred to as fraudulent documents) in support of applications for admission 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, the applicant received a degree or the courses were taken for credit, or the applicant is changing academic majors or fields. The complete text for this policy may be found on the CUNY website.

Student complaints about faculty conduct

The university recognizes its responsibility to provide students with a procedure for addressing complaints about faculty treatment of students that are not protected by academic freedom and are not covered by other procedures and has introduced a policy on student complaints about faculty in an academic setting, which is available here.

Academic integrity

The CUNY Board of Trustees has adopted a policy on academic integrity that applies to all students at Brooklyn College. A copy of the CUNY Academic Integrity Policy is available here.

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 has adopted a Policy on Acceptable Use of Computer Resources that is available here.

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 monetary damages and even subject to jail time. This kind of use is also in violation of CUNY's policy on the use of CUNY computer resources and may subject students to disciplinary action. A statement from CUNY about file-sharing and copyright may be found on the CUNY website.

Nonattendance because of religious beliefs

New York State Education Law § 224-a prohibits the college from expelling or denying admission to a student because he or she is unable to attend classes or participate in examinations or study or work requirements on any particular day(s) 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. No student may suffer adverse or prejudicial effects for availing themselves of this regulation.

Nondiscrimination for students with disabilities

Brooklyn College, as a unit of the City University of New York, does not and will not discriminate against qualified students with disabilities in access to its educational programs and services. For this purpose, disability means a physical, medical, mental, or psychological impairment, or a history or record of such impairment, that constitutes a disability under applicable federal, state, and city law. The college provides reasonable accommodations and academic adjustments to qualified students pursuant to the CUNY Policy on Reasonable Accommodations and Academic Adjustments, available here.

Students who need individual accommodations should direct their needs to the Center for Student Disability Services, 138 Roosevelt Hall, 718.951.5538. If a requested academic adjustment cannot be implemented or if a student believes that he or she is being discriminated against on the basis of a handicap or disability, the student should contact the director of the center. Students may also consult with the Office of Diversity and Equity, 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 and investigate a formal complaint.

Immunization requirements

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

Medical withdrawal and re-entry

As part of its commitment to the academic success and personal growth of its students, CUNY and its constituent campuses are responsible for providing a safe learning and working environment for students, staff, faculty, and other members of the university community. CUNY Policy 7.09 addresses students' behavior that presents a direct threat of harm to self or others or substantially disrupts the learning and working environment of others. This policy may be read in full here.

Policies Concerning Privacy and Student Records

Access to student records (FERPA procedures)

The college complies with the Federal Education Rights and Privacy Act (FERPA) of 1974. Under FERPA, students generally have a right to review their education records and must consent in writing before certain personally identifiable information is disclosed to third parties. 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. They are also available online.

Sale of term papers

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

Grievance procedures

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

Academic Resources

Libraries

Brooklyn College Library

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

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

The collections support both graduate and undergraduate study in the humanities, sciences, and social sciences. The library also holds important archival and special collections, among which are the Brooklyniana Collection and the Manuscripts Collection.

Brooklyn College Library faculty members provide extensive in-person and online reference service to students and faculty.

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

The Library Café, open for Brooklyn College students 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. Electrical outlets, WiFi, 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 founder and first librarian, teacher and scholar Walter W. Gerboth. It offers facilities for music study, research, and viewing. The collection comprises thousands of scores (including the Douglas Hedwig Brass Ensemble & Trumpet Music Collection and the Emeritus Professor Dorothy Klotzman Collection); books about music (classical, popular, world) and dance, many of which circulate for out-of-library use; sound- and video-recordings; and journals (both in print and on microfilm) and other serials, including critical, scholarly editions of composers' "complete works" and "monumental editions." Digital resources—of text, audio, and video files—accessible via the library's homepage and the "Music" subject (LibGuide) page, are an important component of the diverse, multimedia collections of the Music Library.

Costas Memorial Classics Library, 2405 Boylan Hall

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

Meier Bernstein Art Library, 5300 Boylan Hall

Located in an attractive suite of rooms in the Art Department, the art library's noncirculating collection of more than 3,000 art books, as well as textbooks, periodicals, digital materials, and computers with Internet access, may be used for reading, study, reviewing course materials, obtaining information about the art world, looking at pictures, browsing, or passing the time between classes. The library has sponsored artists-in-residence, lectures and studio critiques by guest artists, art historians, critics, museum curators, gallery directors, art magazine editors, and others, including famous people drawn from the New York art world. The library is named for the painter who established the Meier Bernstein Foundation

to promote fine-arts education, from which it received most of its funding; additional support comes from the Art Department and its faculty, alumni, and friends.

Centers and Institutes

Africana Research Center, 3105 James Hall, 718.951.5597

Founded in 1969, the Africana Research Center is dedicated to promoting research and the dissemination of knowledge in the field of Africana studies and related disciplines. The center's core mission is twofold: first, to augment the curriculum of the Department of Africana Studies by offering programs that speak to the study of Blacks in Africa, the Caribbean, and the United States and in other areas of the African diaspora; and second, to serve as a bridge between Brooklyn College and the African diasporan community of New York through research, sponsored programs, and community engagement. Through research and dialogue, the center highlights the importance of the African diasporan community in both historical and contemporary conversations as well as expands the intellectual and personal relevance of the Brooklyn College experience for students. The center is also the repository of a collection of books, a collection of African art, and documents memorializing the history of the Department of Africana Studies.

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

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

Brooklyn College Cancer Center

The Brooklyn College Cancer Center (CommUnity Outreach, Research and Education), or BCCC-CURE, was established in 2020. The mission of the center is to enhance the lives of patients affected by cancer with a special focus on Brooklyn residents. Through this center, Brooklyn College seeks to expand its fundamental (basic and applied) research on cancer and combine research forces with local (New York City) cancer treatment centers and hospitals, and Brooklyn communities, while delivering first-class educational opportunities to undergraduate and graduate students.

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

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

Center for Computer Music, 118 Roosevelt Hall Extension, 718.951.1418

The Brooklyn College Center for Computer Music (BC-CCM), part of the Conservatory of Music, is both a place and a community of artists and researchers, with a rich history dating back to the 1970s. The mission of the BC-CCM is to explore the creative possibilities of technology in relation to the creation of music, sound art, sound design, and multimedia arts. These explorations include composition of new artistic work, pursuit of research projects, and discussions of the role of new technologies in musical culture. The BC-CCM hosts guest artists and researchers, presents workshops, and sponsors conferences. Since 1990, the 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. Courses related to the BC-CCM are offered via our B.A. track in music technology as well as the M.F.A. programs in sonic arts and media scoring. These classes cover techniques of music creation with digital tools and instruments; theories and use of sound processing, analysis, and synthesis; design and creation of new music and multimedia performance instruments (both software and hardware); audio production; and history and aesthetics of electroacoustic music and sound art.

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

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

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

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

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

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

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

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

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

Graduate Center for Worker Education, 25 Broadway, New York, NY, 212.966.4014

Brooklyn College's Graduate Center for Worker Education (GCWE) is an interdisciplinary educational facility dedicated to the promotion of teaching, research, and community partnerships. The GCWE supports academic programs and course offerings, both credit and noncredit, that are of interest to working adults in the Lower Manhattan community and to students at Brooklyn College.

GCWE facilitates special events, such as conferences, symposia, and workshops, in coordination with Brooklyn College departments, interdisciplinary programs, and continuing education programs. Course offerings at GCWE include both degree-granting and noncredit classes and workshops scheduled during the day, in the evening, and on weekends. These offerings address the needs of working adults seeking advanced study to improve their career or new career opportunities, including English as a Second Language courses offered through Brooklyn College's American Language Academy.

Departments currently participating include Health and Nutrition Sciences; History; Political Science; Sociology; Television, Radio, and Emerging Media; Childhood, Bilingual, and Special Education; School Psychology, Counseling, and Leadership; and Early Childhood Education/Art Education. Because it is strategically located in Lower Manhattan, students taking classes and doing research at the center have access to an array of sites and institutions for research collaborations and internships, including unions, nonprofits, and city agencies. GCWE also houses the *Journal of Labor and Society*, formerly Working USA: *The Journal of Labor and Society*, edited by Professor Immanuel Ness; Impact

Iran, which is affiliated with Brooklyn College's Department of Political Science; and Labor Arts, which explores the contributions of working people through visual and material representation.

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

The H. Wiley Hitchcock Institute for Studies in American Music (HISAM) supports American music scholarship, pedagogy, and performances. The institute recognizes and seeks to connect diverse local, national, and global musical practices across a broad spectrum of oral, popular, and art music traditions. HISAM represents scholars, performers, and creators that reflect the racial, economic, and gender diversity of the college's students, faculty, community, and the world. Through a biannual publication, *American Music Review*, the Polycultural America Speaker Series, monographs, collection of oral histories, and forums for public musicology, the staff and faculty of HISAM seek to resist systems of oppression, acknowledge the privileges of whiteness, strive for social justice, and publicly promote antiracism.

The HISAM research collection, including books, periodicals, scores, and recordings, is open to students and scholars by appointment.

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

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

Preparatory Center for the Performing Arts

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

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

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

Science and Resilience Institute at Jamaica Bay

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

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

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

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

Urban 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.

Additional Campus Services and Facilities

Center for Student Disability Services, 138 Roosevelt Hall, 718.951.5538

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

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

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

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

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

This program is for students whose native language is not English. Students are assigned to the program on the basis of the CUNY Skills Assessment Tests in reading and writing, and take a variety of courses.

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

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

ESL Reading and Writing Laboratory, 1408 Ingersoll Hall

The laboratory is open to students enrolled in ESL courses.

Learning Center, 1300 Boylan Hall, 718.951.5821

The Learning Center offers free peer tutoring in a variety of courses across the curriculum, both in person and remotely via Zoom. Students working on writing assignments can get help with every stage of the writing process, from establishing assignment clarity and thesis development to final draft revisions. Students wishing to meet with a writing tutor

must make an appointment in advance—visit the website for step-by-step instructions. Those interested in course-specific tutoring need not make an appointment—simply stop by 1300 Boylan Hall or click on the relevant Zoom link in accordance with posted online schedules.

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

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

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

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

Television Center, basement, Whitehead Hall, 718.951.5585

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

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

Testing Office, 245 West End Building, Testing@brooklyn.cuny.edu, 718.951.5916

The Office of Testing is responsible for administering evaluative tests and assessments in accordance with CUNY's Testing Program. The Accuplacer ESL for incoming ESL students, and the Ability-to-Benefit test are administered. The 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, Castle Worldwide Testing, and PearsonVue.

Veterans and Military Programs, 1407 James Hall, 718.951.5105

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

Accounting

Department office: 202 Whitehead Hall
Phone: 718.951.5152

Full-time Faculty

Professors: Fischer, Kass-Shraibman, Tinkelman
Associate Professors: Gerstein, Paul
Assistant Professors: Lord, Vlady, Xie
Lecturers: Langer, Lefkowitz, Mintz, Prentice

M.S. degree program in accounting (C.P.A. qualifying)
HEGIS code 0502; SED program code 88398

This program is registered with the NYS Education Department as meeting the 150 semester-hour requirement for CPA candidates. Students who complete the program may sit for the CPA examination.
Course work emphasizes asset valuation and related problems of enterprise reporting, tax research and planning, comptrollership and managerial accounting, contemporary accounting topics, and accounting requirements of the SEC. Applicants must have coursework equivalent to the BS in accounting at BC.

This program is offered online.

Degree requirements

Thirty credits are required for the degree.

Students must complete the following courses:

Accounting:
All of the following: Accounting 7106X, 7107X, 7108X, and 7109X.
Two of the following: Accounting 7110X, 7120X, 7130X, 7140X, 7141X, 7150X, 7190X.

Economic analysis:
One of the following: Economics 7000X, Economics 7205X or Business 7205X, or Business 7206X, or Economics 7010X. Note that Economics 7000X has a mathematics prerequisite. Students who have not taken Economics 7025X or a comparable undergraduate mathematics course are advised to take Economics 7010X or Economics 7205Xor Business 7205X or Business 7206X.

Finance:
Economics 7215X or [Business 7215X] or Finance 7215X or [Business 7240X] or Finance 7240X or [Business 7216X] or Finance 7216X.

Quantitative methods:
Economics 7230X or Business 7230X or 7276X or 7278X.

Business Electives/Econometrics:
One course from the following: Accounting 7110X, 7120X, 7130X, 7140X, 7141X, 7150X, 7190X; Business 7200X, 7202X, 7204X, 7208X, 7216X, 7220X, 7240X, 7250X, 7255X, 7260X, 7276X, 7278X; Business 7131X or Accounting 7131X; Economics 7020X, 7021X.

With permission of the chair or graduate deputy chairperson, up to 12 graduate credits may be accepted for work done at other institutions.

CUNY Ph.D.

The City University of New York offers a doctoral program in business with a specialization in accounting. General information about CUNY Ph.D. programs is in the chapter "Support for Academic Success in Graduate School of the Graduate Bulletin.

Accounting Department courses may be credited toward the CUNY doctoral degree with permission of the executive officer of the doctoral program. For information, students should consult the deputy chairperson of the Accounting Department and the executive officer of the doctoral program.

Courses

ACCT 7101X Financial and Managerial Accounting

45 hours plus conference; 3 credits
Intensive study of accounting principles and managerial applications to introduce students specializing in fields other than accounting to basic analytic tools of corporate financial reporting and firm decision making. (Not open to students who have completed more than 6 credits in accounting courses. Not open to students who have completed Economics 701X.)

ACCT 7106X Advanced Accounting Theory

30 hours plus conference; 3 credits
Asset valuation and related problems of enterprise reporting. Financial accounting issues for complex business entities from both a conceptual and technical view. (Not open to students who have completed Economics 706X.)

Prerequisite: admission to the accounting specialization or permission of the chairperson or the chairperson's designee.

ACCT 7107X Federal Taxation: Planning, Current Developments, and Advanced Problems
30 hours plus conference; 3 credits
Methodology used in tax research and planning. Ethical and policy considerations in tax planning and tax decisions. Capital gains, reorganization, estate planning, exempt organizations, pensions, special purpose entities. (Not open to students who have completed Economics 707X.)

Prerequisite: admission to the accounting specialization or permission of the chairperson or the chairperson's designee.

ACCT 7108X Auditing Concepts, Standards, and Procedures
30 hours plus conference; 3 credits
Examination of theory and philosophy underlying verification of financial data. Changing standards and new levels of legal and moral responsibility. Role of control and supervisory agencies. Application of statistical methodology to the audit function. (Not open to students who have completed Economics 708X.)

Prerequisite: admission to the accounting specialization or permission of the chairperson or the chairperson's designee.

ACCT 7109X Financial Statement Analysis

30 hours plus conference; 3 credits
Analysis and interpretation of financial statements primarily by external decision makers. Fundamental analysis techniques in equity (share) evaluation decisions. Credit assessment and debt valuation decisions. Measures of liquidity, solvency, capital structure, return on investments, and operating performance. Impact of accounting conventions and alternative standards on analytical measures.

Prerequisite: two undergraduate courses in intermediate accounting or permission of the chairperson or the chairperson's designee.

ACCT 7110X Accounting Requirements of the Securities and Exchange Commission and Other Regulatory Agencies
30 hours plus conference; 3 credits
Accounting principles and auditing requirements of the Securities and Exchange Commission and other selected government agencies. Applicable statutes, regulations, court decisions. (Not open to students who have completed Economics 703X.)

Prerequisite: admission to the accounting specialization or permission of the chairperson or the chairperson's designee.

ACCT 7120X Comptrollership and Managerial Accounting
30 hours plus conference; 3 credits
Role, functions, and responsibilities of the corporate comptroller and treasurer. Relevant modern planning and control techniques and their underlying conceptual philosophy. Design, installation, and implementation of management information systems for planning operations, reporting performance, and administering the firm. Decision-making models, profit planning, and performance analysis. (Not open to students who have completed Economics 704X.)

Prerequisite: admission to the accounting specialization or permission of the chairperson or the chairperson's designee.

ACCT 7130X The Legal Environment of Business

30 hours plus conference; 3 credits
Survey of private substantive rights; government regulatory agencies as they relate to business activities; comprehensive examination of regulations concerned with the protection of consumers, investors, employees, and the preservation of the environment and competition. (Not open to students who have completed Economics 752X.)

Prerequisite: admission to the accounting specialization or permission of the chairperson or the chairperson's designee.

ACCT 7131X Tax Regulation & Strategy

45 hours; 3 credits
The practical application of accounting and government regulations regarding the taxation of individuals and entities. Legal aspects of operating a business, regulation, and corporate social responsibility. The federal tax process, procedures, accounting, and planning are explored. This course is the same as Business 7131X.

Prerequisite: At least 9 credits of undergraduate courses in accounting.

ACCT 7132X Tax Practice, Professional Responsibility & Research
45 hours, 3 Credits (Fully Online)
The purpose of this fully online course is to gain a thorough understanding of tax research today with the hands-on practice needed for success. The course will use the latest examples and engaging discussions to focus on the most important elements of tax ethics, tax law, tax practice and tax research.

Prerequisite or Corequisite: Admission to the accounting/tax specialization, completion of the Preliminary Core (unless waived) or permission of the Chairperson or Chairperson’s designee.

ACCT 7133X Tax Accounting

45 hours, 3 Credits (Fully Online)
To learn about tax accounting methods. This fully online course

will focus on an overview of the fundamentals of property transactions, general accounting methods, specific rues with respect to installment method, long term contracts, claim of right, tax benefit rule, at risk rules, passive activity rules, original issue discount, market discount, contingent debt. We will examine not only the rules themselves, but the rationale behind the rules.

Prerequisite or Corequisite: Admission to the accounting/tax specialization, completion of the Preliminary Core (unless waived) or permission of the Chairperson or Chairperson's designee.

ACCT 7134X Estate, Gift & Trust Planning

45 hours, 3 Credits (Fully Online)
This fully online course is designed to introduce students to fundamental principles of estate and gift taxation. Topics covered include transfers subject to estate and gift taxation, trusts, allowable deductions and credits, spousal transfers, gifts to charity, compliance issues, audit matters, and planning for the "digital afterlife." Current developments will also be discussed.

Prerequisite or Corequisite: Admission to the accounting/tax specialization, completion of the Preliminary Core (unless waived) or permission of the Chairperson or Chairperson's designee.

ACCT 7135X State & Local Taxation

45 hours; 3 credits (Fully Online)
The goal of this fully online course is to introduce the multitude of taxes levied by State and Local Governments with particular emphasis on Sales and Use Tax. This course explores practical approaches, tools and techniques used by State and Local Tax practitioners to provide effective consultation and tax planning. Topics included are: Overview of State Taxation, Sales & Use Tax Considerations, Income Tax Considerations, Employment Taxes, Credits & Incentives, and State and Local Due Diligence Reporting.

Prerequisite or Corequisite: Admission to the accounting/tax specialization, completion of the Preliminary Core (unless waived) or permission of the Chairperson or Chairperson's designee.

ACCT 7136X Taxation of Business Entities

45 hours; 3 credits (Fully Online)
This fully online course provides an introduction to the U.S. federal income taxation of corporations and their shareholders as well as partnerships. The course focuses on the relevant provisions of Subchapter C of the Internal Revenue Code, as well as related Treasury Regulations and judicial opinions, governing corporate formation, operations, distributions, and liquidation. Practical in-class study problems facilitate self-discovery of technical tax knowledge along with the development of a variety of professional skills and attitudes

Prerequisite or Corequisite: Admission to the accounting/tax specialization, completion of the Preliminary Core (unless waived) or permission of the Chairperson or Chairperson's designee.

ACCT 7137X Real Estate Taxation

45 hours; 3 credits (Fully Online)
This fully online course offers practical guidance to help practitioners uncover potential problems, apply appropriate remedies, and structure a transaction for maximum tax benefits. It examines fundamental and advanced aspects of deferring taxes and converting ordinary income to capital gain on real estate held for profit. It also looks closely at the tax treatment of property held for personal purposes.

Prerequisite or Corequisite: Admission to the accounting/tax specialization, completion of the Preliminary Core (unless waived) or permission of Chairperson or Chairperson's designee.

ACCT 7138X Taxation of Employee Benefits

45 hours; 3 credits (Fully Online)
The goal of this fully online course is to examine the major areas of employee benefits taxation such as traditional compensation and benefits law as well as loans to employees, stock compensation arrangements, deferred compensation plans, tax deferred annuities, retirement plans and other relevant topics such as Social Security and Medicare.

Prerequisite or Corequisite: Admission to the accounting/tax specialization, completion of the Preliminary Core (unless waived) or permission of the Chairperson or Chairperson's designee.

ACCT 7139X Taxation of Securities Transactions

45 hours; 3 credits (Fully Online)
This fully online course offers a comprehensive examination of the income taxation of securities as well as a discussion of how various transactions in all types of securities are taxed. Covers transactions in: notional principal contracts-financial derivatives, asset-backed securities, debt/equity issues and other types of security transactions.

Prerequisite or Corequisite: Admission to the accounting/tax specialization, completion of the Preliminary Core (unless waived) or permission of the Chairperson or Chairperson's designee.

ACCT 7140X Contemporary Accounting & Tax Topics

30 hours plus conference; 3 credits (Fully Online)
Current issues and problems in accounting, taxation and the accounting/tax profession.

Prerequisite: Admission to the accounting/tax specialization, completion of the Preliminary Core (unless waived) or permission of the Chairperson or Chairperson's designee.

ACCT 7141X International Tax

45 hours; 3 credits
An introduction to international taxation, emphasis on corporations. Topics include tax residence, transfer pricing, inbound and outbound taxation of passive and active income, international tax treaties, tax havens, enforcement. Contemporary issues in international taxation.

ACCT 7150X International Accounting

30 hours plus conference; 3 credits
Analytical approach in examining major international dimensions of financial and managerial accounting. National and cultural influences on accounting and the accounting profession. Financial regulations, international accounting standards, and transparency in financial reporting. Case studies.

Prerequisite: two undergraduate courses in intermediate

accounting or permission of the chairperson or the chairperson's designee.

ACCT 7190X Special Topics

30 hours plus conference; 3 credits
Topics vary from term to term. Students may take this course two times, but may not repeat topics.

Prerequisite: permission of the chairperson or his designee.

ACCT 7191G Independent Reading

Minimum of 135 hours of independent work and conference; 3 credits
Independent research for students concentrating in accounting. Supervised by a faculty member. This course may be used as a stage in the preparation of a master's thesis. One or more written reports and/or final examination. (Not open to students who have completed Economics 7091G [782G].)

Prerequisite: Accounting 7106X [706X], 7107X [707X], and 7108X [708X]; and permission of the chairperson or the chairperson's designee.

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

ACCT 7195G Thesis Research

Africana Studies

Department office: 3105 James Hall
Phone: 718.951.5597

Full-time Faculty

Professors: Cunningham, Day
Associate Professors: Byam, Cumberbatch
Assistant Professors: Fraser, Ranjitsingh
Lecturer: Gibson

Offering a multidisciplinary perspective on the study of people of African descent in Africa, the Caribbean, and the United States, the department offers courses focusing on the histories, cultures, politics, and societies of Africa and its diaspora. The department offers courses that augment other graduate majors. The department also offers study-abroad opportunities 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.

Courses

AFST 7040X Summer Seminar in Africa, the Caribbean, South America, or the United States
90 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 fieldwork, and library and empirical research. This course may not be taken more than once.

Prerequisite: completion of 6 graduate credits in the social sciences or the humanities; or permission of the chairperson.

AFST 7050X Social Change in Africa, 1750-1945
30 hours plus conference; 3 credits
Introduction to social change in sub-Saharan Africa from the era of the slave trade to the end of World War II. Emphasis on internal transformations sparked by industrialization, imperial expansion and colonization, including political innovations, changing market relations as well as transformations in kinship and gender relations. In depth coverage of slavery, women in the economy, the development of an African working class, religious transformations, the emergence of new elites, the growth of modern political activism, and resistance to colonization. This course is the same as History 7580X.

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

AFST 7010X Black Research Methodology

AFST 7020X Black Community Organizations and Participation

AFST 7030X The Political Economy of the Caribbean

AFST 7060X Modern South Africa

AFST 7070X Independent Research and Study

Anthropology

Department office: 3307 James Hall
Phone: 718.951.5507

Full-time Faculty

Professors: Antoniello, Cavanaugh
Associate Professors: Chester, Hejtmanek, Schiller
Assistant Professors: Britt, Chowdhury, Ference, Rahman
Lecturer: Pugh

In addition to coursework using the four-field approach, which includes cultural anthropology, archaeology, physical anthropology, and linguistics, the Department of Anthropology offers ongoing opportunities for hands-on research in laboratory and fieldwork studies led by full-time faculty members. A doctorate in anthropology is offered by the City University of New York at the Graduate School and University Center.

Courses

The following courses are offered as electives for students in other fields.

ANTH 7010X Special Topics in Anthropology

45 hours; 3 credits
Subjects of interest in any of the four fields of anthropology that are not treated systematically in the regular curriculum. Topics vary from term to term. Students may take this course twice but may not repeat topics.

Prerequisite: nine credits in advanced social science from an undergraduate program or permission of the chairperson.

ANTH 7011X Special Topics in Peoples and Cultures of Selected Areas

45 hours; 3 credits
Study of culture groups or areas, not usually encountered in the departmental offerings; institutions, historical and environmental influences, and/or effects of outside contact on specific ethnographic, or archaeological cultures. Physical, ethnographic, and theoretical analyses of culture groups. Cultural adaptations and retentions. Contemporary issues and problems. Students may take this course twice but may not repeat topics.

Prerequisite: permission of the chairperson based upon the topic to be offered.

ANTH 7470X Summer Archaeological Field School

15 hours plus 150 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. For Summer Archaeological Field School abroad, room and board fees and travel expenses are additional.

Prerequisite: permission of the chairperson.

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

ANTH 7440X Seminar in Zooarchaeology

ANTH 7510X North American Indians

Art

Department office: 5306 Boylan Hall
Phone: 718.951.5181

Full-time Faculty

Distinguished Professor: Cronin
Professors: Ball, Carlile, Conelli, Hadler, Kiel, Kousser, McCoy, Rand
Associate Professors: Adams, Richards
Assistant Professors: Otitigbe, Schwab
Lecturer: Simon

The Art Department, located in one of the world's most important art centers, draws on New York's vast community of notable artists and art historians for its faculty and for the many visiting artists and lecturers who supplement the curriculum. Students have easy access to the city's great museums and countless galleries. The department offers an M.F.A. in studio art, an M.A. in art history, an Advanced Certificate in museum education, and a concentration for education majors. An internationally recognized studio faculty, many represented in important museums and by commercial galleries in the U.S. and abroad, teach drawing, painting, sculpture, printmaking, photography, digital art, and combined media. A faculty of distinguished scholars offers art history courses ranging from ancient to modern, both western and non-western. The studio program, with a fine-arts rather than a commercial focus, seeks a balance between traditional and new in its mix of faculty, students, and course content. A large percentage of its graduates are successful artists, many represented by commercial galleries. Others have become commercial artists, illustrators, graphic designers, architects, cartoonists, art directors, art restorers, and fashion designers. A number have won such major honors as Guggenheims, Fulbrights, Pollock-Krasners, and the Prix de Rome. Art history graduates have become museum curators, gallery directors, art critics, art writers, art editors, and archivists, or work for public or private art-related organizations. Graduates of both programs teach in leading art schools and universities.

M.F.A. degree program in art
HEGIS code 1002; SED program code 02016

Students take courses in different areas of concentration in studio art and in art history. Periodically, their work is formally reviewed by the full studio faculty, who also visit their studios individually for informal critiques.

Applicants must offer at least 36 credits in studio art and art history courses including a well-balanced distribution of credits in two-dimensional, three-dimensional, and time-based art acceptable to the Art Department.

Applicants must submit directly to the Art Department a selection of work before the regular admissions deadline of February 15 for Fall admission. Applications submitted by January 19th will receive priority review. The work should be submitted through the program's Web site, http://artmfa.brooklyn.cuny.edu, following the instructions on the Web site.

Applicants must also submit a completed application to the Brooklyn College Division of Graduate Studies. General matriculation and admission requirements of the Division of Graduate Studies are in the section "Admission" of the Graduate Bulletin.

Degree requirements

Forty-eight credits are required for the degree.

Students must complete$dyn.link.crsinfo("ARTD.", " Art 7210X, 7910X, 7920X, 7940G, 7950G, and 7951G. Art 7940G, 7950G, and 7951G") must be taken in sequence, usually beginning in the first semester of matriculation.

Students must also complete 21 additional credits in studio art courses, internships, independent study electives, or other electives outside the Art Department.

Students must also complete nine additional credits in art history courses. $dyn.link.crsinfo("ARTD.", "Art 7198G") may be repeated for credit.

Independent creative work developed in $dyn.link.crsinfo("ARTD.", "Art 7940G, 7950G, and 7951G") must culminate in a final exhibition with an accompanying artist's statement about the work.

Courses in the Art Department offered toward the degree must be 7000-level courses.

The program of study must be approved by the deputy chairperson for graduate studio art.

Charles G. Shaw Awards

For distinction in painting, the Art Department grants awards each term to a number of graduate students matriculated in the M.F.A. program.

CUNY Ph.D.

The City University of New York offers a doctoral program in art history. General information about CUNY Ph.D. programs is in the chapter "Support for Academic Success in Graduate School" of the Graduate Bulletin. The Art Department offers courses at Brooklyn College in art history that are creditable toward the CUNY doctoral degree with permission of the executive officer of the doctoral program.
For information about the courses, students should consult the art history adviser in the Art Department and the executive officer of the doctoral program.

Courses

Unless a prerequisite is specific, students may apply graduate or undergraduate courses toward fulfillment of that prerequisite.

ART HISTORY

Ancient and medieval art

ARTD 7003G Topics in Egyptian and Near Eastern Art

30 hours plus conference; 3 credits
Specific topics are announced one year in advance. Students may take this course twice but may not repeat topics. (Not open to students who have completed the same topic in Art 706.1G.)

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7007G The Classical Period in Greek Art

30 hours plus conference; 3 credits
Architecture, sculpture, and painting of the Greek world in the fifth and fourth centuries B.C.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7011G Roman Imperial State Art

30 hours plus conference; 3 credits
Treatment of the human figure and ornament in manuscripts of the seventh and eighth centuries. Style of manuscripts, metalwork, and ivories of Carolingian courts and schools.

Prerequisite: Matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7015G Byzantine Art : From the Catacombs to Iconoclasm
30 hours plus conference; 3 credits
Catacomb art in fresco and sarcophagi. Church-building activities from Constantine to Justinian. Earliest Bible cycles in manuscript and mosaic. growing popularity of icons. Art of the imperial capital of Constantinople.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7019G Medieval Art to the Time of Charlemagne

30 hours plus conference; 3 credits
Treatment of the human figure and ornament in manuscripts of the seventh and eighth centuries. Style of manuscripts, metalwork, and ivories of Carolingian courts and schools.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7023G Romanesque Art

30 hours plus conference; 3 credits
Sculpture and architecture of the West from about 1050 to 1200.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7026G Gothic Art in Europe

30 hours plus conference; 3 credits
Major twelfth-century and thirteenth-century monuments of architecture, sculpture, painting, metalwork.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art, or permission of the deputy chairperson.

Early modern European art

ARTD 7033G Renaissance Painting in Florence and Vicinity during the Fifteenth Century
30 hours plus conference; 3 credits
Formation and development of the early Renaissance style in Florentine painting of the fifteenth century.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7036G The High Renaissance and Its Aftermath in Florence and Rome
30 hours plus conference; 3 credits
Inception, fruition, and disintegration of the High Renaissance style in painting and sculpture of central Italy.

Prerequisite: matriculation for the M.A. in art history or for the

M.F.A. in art or permission of the deputy chairperson.

ARTD 7039G Problems in Late Gothic and Renaissance Art and Architecture
30 hours plus conference; 3 credits
Seminar or colloquium. Students may take this course four times but may not repeat topics. (Not open to students who have completed the same topic in Art 762.1G, 762.2G, 762.3G.)

Prerequisite: a course chosen from Art 7030G [753G] through 761G in late Gothic or Renaissance art appropriate to the problem of the term or permission of the deputy chairperson.

ARTD 7043G Baroque Art in Italy

30 hours plus conference; 3 credits
Origins and development of the Baroque style in painting and sculpture in seventeenth-century Italy.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7051G Topics in Baroque Art and Architecture

30 hours plus conference; 3 credits
Specific topics are announced one year in advance. Students may take this course twice but may not repeat topics. (Not open to students who have completed the same topic in Art 772.1G.)

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7056G Latin American Art, 1492 to the present

45 hours, 3 credits
Examination of art and architecture of Latin America from the Conquest to the contemporary moment.

Prerequisite: Matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

Modern European and American art

ARTD 7061G Neoclassicism and Romanticism

30 hours plus conference; 3 credits
Sources and evolution of European Neoclassic and Romantic painting and sculpture from 1750 to 1850.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7064G Realism, Impressionism, and Post-Impressionism
30 hours plus conference; 3 credits
Major artists and themes in European art during the second half of the nineteenth century. Art and literature and new optical theories of color and light. Questions of politics and gender. Examination of changing exhibition strategies and the urban landscape's impact on the production of art.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7068G European Art since 1900

30 hours plus conference; 3 credits
Major trends in European painting and sculpture in the first half of the twentieth century.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7072G Postwar Art: From World War II to 1989

30 hours plus conference; 3 credits
Twentieth-century art from World War II to the fall of the Berlin Wall. Major movements: Abstract Expressionism, Fluxus and performance, Pop Art, Minimalism, Conceptual Art, Postmodernism. Issues of gender, race and politics.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7082G Topics in Modern European and American Art and Architecture
30 hours plus conference; 3 credits
Specific topics are announced one year in advance. Students may take this course four times but may not repeat topics. (Not open to students who have completed the same topic in Art 796.1G, 796.2G, or 796.3G.)

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7086G History of Photography

30 hours plus conference; 3 credits
Seminar or colloquium. Technical and aesthetic history of photography. Its relation to other arts.

Prerequisite: permission of the deputy chairperson.

ARTD 7091G Women in Modern and Contemporary Art

30 hours plus conference; 3 credits
Exploration of the changing image and practices of women artists in modern and contemporary art. Units include rape as a feminist issue, gaze theory and its implications, the masquerade and construction of identity, the queer body, crafts and the decorative, feminism and race, the women of the Black Arts Movement, Latinx women artists, global feminisms, the abject, and spirituality as a feminist practice. Key art historical and theoretical texts on gender and race prioritized.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7096G Building America: Architecture and Urban Design in the United States
45 hours; 3 credits
American architectural development, from pre-Columbian to the present. Significant building types and styles, prominent architects, and vernacular movements. Approaches to urban design.

Prerequisite: Prerequisite: Matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7097G Architecture and Urban Design in New York City
45 hours; 3 credits
Study of New York City's monuments and infrastructure. Contextualization of the city's built environment within its architectural discourse.

Prerequisite: None

Asian, African, and Oceanic art, and indigenous art of the Americas

ARTD 7100G Approaching "Non-Western" Art

45 hours; 3 credits
Examines the arts of selected cultures that developed outside the spheres of influence of major European civilizations. Investigates how European imperialism and colonization has affected the understanding and interpretation of cultures.

Prerequisite: matriculation for the M.A. in art history.

ARTD 7135G Foundations of Islamic Art

30 hours plus conference; 3 credits
Exploration of the foundations of Islamic art beginning with the Middle East in the seventh century, following the spread of these artistic developments through North Africa, Europe, and into Central Asia up to the early Ottoman Empire in the sixteenth century. Study of aniconism and iconoclasm, the presentation and collection of Islamic art in Western museums, and the influence of Islam on the intellectual and cultural life of the West.

Prerequisite: Matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7138G The Arts of Western Africa

45 hours; 3 credits
Examination of the visual arts and cultures of western Africa, with an emphasis on specific countries and their respective cultures, including Ghana, Nigeria, Benin, and Sierra Leone. The course will include both historical and contemporary art forms, such as masks and masquerades, textiles, wood carvings/sculptures, and architecture. Contemporary works of art will also be discussed, with an emphasis placed on artists who are influenced by historical forms of African art (such as El Anatsui and Yinka Shonibare).

Prerequisite: Matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7142G Subject, Creator, Consumer: Women and African Art

45 hours; 3 credits
Examination of the visual arts and cultures of the African continent, with an emphasis on the importance of women as subjects, creators, and consumers of art. Consideration of historical and contemporary art forms, including masks and masquerades, beadwork, pottery, textiles, and contemporary works of art, as well as an exploration of the role of women in various African societies.

Prerequisite: Matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7146G Topics in Native American Art of the U.S. and Canada

45 hours; 3 credits
Examination of the visual arts of native North American cultures from the Eskimo to Canada, the Northwest and Southwest areas of the United States, the Plains, and Eastern Indian societies. Consideration of the visual arts in their historical and contemporary contexts, and in media such as architecture, painting, pottery, sculpture, textiles, and performance.

Prerequisite: Matriculation for the M.A. in art history or permission from the department chair

ARTD 7150G Topics in Pre-Columbian Art of Mesoamerica and the Andes

45 hour lecture plus conference; 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: Matriculation for the M.A. in art history

ARTD 7151G The Art and Architecture of New Spain and the Andes, 1492-1821

45 hours; 3 credits
Examination of art and architecture of the former Spanish Viceroyalties of New Spain (Mexico), from 1521-1821, and the Andes, from c. 1534-1820.

Prerequisite: matriculation for the M.A. in art history.

ARTD 7152G Caribbean Art: From Colonization to Diaspora

45 hours, 3 credits
History of Caribbean art from indigenous and colonial objects to contemporary art from the Caribbean and the diaspora. Legacies of slavery and colonialism, issues of class, gender, and politics, and regionally specific topics including Vodou, the Haitian Revolution, and the postwar diaspora Caribbean in the United Kingdom. Students will become familiar with the art and current scholarship surrounding this diverse region.

Prerequisite: Matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7154G Visual Culture and Art of the Americas

45 hours; 3 credits
Examination of visual culture of the Americas, from 2000 B.C.E. to the present. Case studies from various countries will be selected such as death, dying, and the afterlife in Mexico and carnival culture in various locations.

Prerequisite: Matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

Architecture

ARTD 7156G History of Architecture: Ancient through Gothic

45 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: Matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7157G History of Architecture: Renaissance through Nineteenth Century

45 hours; 3 credits
Exploration of the history of architecture in Europe and the United States from the Renaissance through the 19th Century.

Prerequisite: Matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7158G History of Architecture: Modern through Contemporary
45 hours; 3 credits
Exploration of the history of architecture across the globe from the turn of the 20th century through contemporary practice. Key monuments and theories of the modern age.

Prerequisite: Matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7159G History of Urban Design and Planning

45 hours; 3 credits
Exploration of approaches to urban design and planning in Europe and the United States, beginning in the ancient world and continuing through the present day.

Prerequisite: Matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

Special studies

ARTD 7160G Visual Culture Studies

45 hours plus conference; 3 credits
Exploration of visual culture and design issues from ancient to modern times. 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: Matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7165G Global Contemporary Art

45 hours; 3 credits
Examination of the development of contemporary art internationally from the post-war era to the present. Consideration of the historical and contemporary contexts of the countries and artists discussed as well as theoretical issues of globalism, diaspora, and hybridity. Artists include but are not limited to: Mona Hatoum, Shahzia Sikander, Walid Raad, Ai Wei Wei, Do Ho Su, Yoko Ono, Santiago Serra, Christoph Schlingensief, Chris Ofili, Helio Oiticica, Lygia Clark, William Kentridge, Ghada Amer, Michal Rovner and Omer Fast. Current museum and gallery exhibitions will be discussed.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7170G Basic Studies in Connoisseurship

30 hours plus conference; 3 credits
Seminar or colloquium. Comprehensive study of art history through examination and evaluation of works of art, of various periods, in museums and private collections.
Meetings conducted by faculty and guest speakers.
Comprehensive examination.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7175G Ancient to Modern Iconoclasm

45 hours; 3 credits
Examination of the practice of destroying images from c. 1500 B.C.E. to the present, with a focus on religious and politically motivated attacks.

Prerequisite: Matriculation for the M.A. in art history or permission from the department chair.

ARTD 7180G Art Theory and Criticism

30 hours plus conference; 3 credits
Perspectives on art from different cultures and periods; interpretation and analysis of works of art through various approaches from art history, art criticism, and art theory. New materials and definitions of contemporary art. Topics include biography, formal analysis, iconography, social history, gender, race, psychoanalysis, modernism, post-structuralism.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7183G Museology

45 hours; 3 credits
Exploration of the museum exhibition from the curatorial, educational and administrative perspective. Examination of the creation of narrative, selection of objects, layout and installation, and writing of didactics and labels to give students a comprehensive understanding of exhibition planning and execution. Practical consideration given to budget, fundraising and the incorporation of technology.

Prerequisite: Matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7184G Museum Education I

45 hours, 3 credits
Exploration of a variety of methodological approaches to object-based learning within a museum setting. Achievement of a comprehensive understanding of methods in museum education.
Topics covered include discipline-based art education, visual thinking strategies, contextual model of learning, and other teaching/learning processes. Opportunity for students to observe onsite teaching in a museum setting and to learn how programs are developed.

Prerequisite: Matriculation for the M.A. in art history or for the M.F.A. in art or PIMA or permission of the deputy chairperson.

ARTD 7185G Museum Education II

45 hours, 3 credits
Exploration of the diverse areas within Museum Education, including public programs, school programs, family programs and community outreach. Application of the various teaching methods explored in Art 7184 to the disparate areas that comprise the education departments in museums today

Prerequisite: Art 7184G.

ARTD 7186G Exhibition Design and Installation for Galleries and Museums
45 hours; 3 credits
Introduction to the field of exhibition design and installation for both gallery and museum settings. Exploration of a variety of exhibition designs, ranging from permanent and temporary installations, to pop-up, to virtual and collection based, each emphasizing visitor experience, layout, graphics, lighting, didactics, labels and technology. An experiential course including interaction with artists, designers, gallerists and curators from a variety of NYC institutions to learn firsthand about the techniques and approaches to installing an exhibition.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7190G Seminar in Art Historical Methodology

30 hours plus conference; 3 credits
Research, writing techniques, and methodologies essential to the field of art history. Topics include studying oeuvre catalogues, doing on-site archival work, and conducting interviews.

Prerequisite: matriculation for the M.A. in art history or permission of the deputy chairperson.

ARTD 7193G Internship in a Museum

135 hours fieldwork, 3 credits
Work in a museum in one of the following departments: registrar, education, curatorial, or development.

Prerequisite: matriculation for the M.A. in art history and permission of the deputy chairperson.

ARTD 7194G Internship in an Arts Organization

135 hours fieldwork, 3 credits
Work in a museum, gallery, auction house, archival or private collection, arts foundation or other arts-related organization.

Prerequisite: matriculation for the M.A. in art history and permission of the deputy chairperson.

ARTD 7196G Special Topics in Art History

45 hours; 3 credits
Discussion of various periods and themes of art history. Course content varies from term to term. Students may not repeat topics.

Prerequisite: Matriculation for the M.A. in art history or for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7197G Independent Study for the M.A. Thesis

90 hours plus conference; 3 credits
Research supervised by a faculty member dedicated towards completion of the M.A. thesis. Students may take this course up to two times.

Prerequisite: Matriculation for the M.A. in art history and permission of the deputy chairperson.

ARTD 7198G Special Problems I

30 hours plus conference each term; 3 credits each term
Research supervised by a faculty member in the student's major area. Students may take these courses more than once.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art and permission of the deputy chairperson.

ARTD 7199G Special Problems II

30 hours plus conference each term; 3 credits each term
Research supervised by a faculty member in the student's area of concentration. Students may take these courses more than once.

Prerequisite: matriculation for the M.A. in art history or for the M.F.A. in art and permission of the deputy chairperson.

STUDIO ART

Introductory courses

ARTD 7210X Workshop in the History of Art

30 hours lecture, 30 hours lab; 3 credits
Study of past and present art using techniques of art history and the design workshop. Workshop assignments correlated with lecture material to develop historical insight through immediate experience.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education or permission of the deputy chairperson.

ARTD 7220X Workshop in the Theory and History of Design

30 hours lecture, 30 hours lab; 3 credits
Historical analysis of basic design concepts. Evolution of handcrafted design from ancient times to the present. Assigned readings. Seminars and workshop demonstrations.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education or permission of the deputy chairperson.

Drawing and painting

ARTD 7310X Advanced Drawing Techniques I

30 hours lecture, 30 hours lab; 3 credits
Advanced work in various drawing media. Emphasis on development of mastery in creative draftsmanship and black-and-white composition. Figure drawing.

Prerequisite: matriculation for the M.F.A in art or for the M.A. in art education; and a minimum of two undergraduate drawing courses or permission of the deputy chairperson.

ARTD 7311X Advanced Drawing Techniques II

30 hours lecture, 30 hours lab; 3 credits
Continuation of Art 7310X [733X].

Prerequisite: Art 7310X [733X].

ARTD 7420X Advanced Painting Techniques

30 hours lecture, 30 hours lab; 3 credits
Advanced creative work in easel painting. Analysis of various techniques. Utilization of a variety of media. This course may be taken for credit up to four times.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education; and a minimum of two undergraduate painting courses or permission of the deputy chairperson.

ARTD 7421X Material and Metaphor in Painting

30 hours lecture, 30 hours lab; 3 credits
Exploration of the physical and metaphoric dimensions of materials. Examination of how the interaction of painting with multiple materials and media parallels the experience of thinking. This course may be taken for credit up to two times.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education; and a minimum of two undergraduate painting courses or permission of the deputy chairperson.

ARTD 7422X Mural Art

30 hours lecture, 30 hours lab; 3 credits
Mural painting, including brainstorming concepts, community engagement, design, to result in the completion of a permanent mural on campus. Technical instruction in mural painting, collaborative art making strategies, and a history of public art. Participation in every stage of the community mural making process, including design proposals and revisions, engagement with campus community and project stakeholders, material management, and fabrication logistics. Study of the history of mural art, with field trips to visit murals in NYC. Course will culminate in the design and execution of a final permanent mural on campus.

Prerequisite: Matriculation for the M.F.A. in art; or for the M.A. in art education; or permission of the deputy chairperson.

Sculpture

ARTD 7520X Graduate Sculpture Studio I

30 hours lecture, 30 hours lab; 3 credits
Research, development, analysis, and critique of self-guided sculptural projects. Discussion of history and application of theoretical frameworks in the field of sculpture. Use of varied tools and fabrication techniques while emphasizing craft and experimentation.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education.

ARTD 7521X Graduate Sculpture Studio II

30 hours lecture, 30 hours lab; 3 credits
Continuation of ARTD 7520X. Research, development, analysis, and critique of self-guided sculptural projects. Discussion of history and application of theoretical frameworks in the field of sculpture. Use of varied tools and fabrication techniques while emphasizing craft and experimentation.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education; Art 7520X [751X] or a minimum of two undergraduate courses in three-dimensional design and sculpture media or permission of the deputy chairperson.

ARTD 7525X Public Art: Interventions, Monuments, and Memorials

60 hours; 3 credits
Introduction to the complexities of developing art for public spaces. Techniques for creating models and prototypes of public artworks. Consideration of temporary interventions, socially engaged practice, public memorials, and monuments. Readings, lectures and site visits to public artworks.

Prerequisite: Matriculation for the M.F.A. in art or for the M.A. in art education; Art 7520X or a minimum of two undergraduate courses in three-dimensional design and sculpture media or permission of the deputy chairperson.

ARTD 7530X Polymedia and Digital Fabrication

60 hours; 3 credits
Introduction to the tools and techniques for digital fabrication, including laser cutting, three-dimensional printing and scanning, electronics programming and prototyping, and computer-aided design and manufacturing CAD/ CAM. Consideration of art projects that incorporate interactive installation, generative art, rapid prototyping, data visualization, and wearable computing. Readings, lectures, and site visits.

Prerequisite: Matriculation for the M.F.A. in art or for the M.A. in art education; Art 7520X or a minimum of two undergraduate courses in three-dimensional design and sculpture media or permission of the deputy chairperson.

ARTD 7550T Ceramics

30 hours lecture, 30 hours lab; 3 credits
Workshop in the development of creative ceramics skills for elementary school teachers. Forming, texturing, and glazing. Firing techniques; use and maintenance of kilns.

Prerequisite: matriculation for the M.S. in Ed. in the liberal arts option in art; and Art 6210T [623.1T] or the equivalent of the course.

ARTD 7560X Graduate Ceramics Studio

30 hours lecture, 30 hours lab; 3 credits
Traditional and contemporary methods of form making, decoration, glaze chemistry, firing techniques.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education; and at least one undergraduate course in ceramics.

Printmaking

ARTD 7610X Printmaking I

30 hours lecture, 30 hours lab; 3 credits
Advanced work in a wide range of graphic techniques including etching, engraving, dry point, lithography, wood-block printing. Extensive work in drawing. Emphasis on individual creative achievement.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education.

ARTD 7611X Printmaking II

30 hours lecture, 30 hours lab; 3 credits
Advanced work in a wide range of graphic techniques including etching, engraving, dry point, lithography, and woodblock printing for the experienced printmaker. Emphasis on individual creative achievement.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education; Art 7610X [763X] or a minimum of two undergraduate courses in printmaking techniques or permission of the deputy chairperson.

Photography

ARTD 7720X Creative Photography I

30 hours lecture, 30 hours lab; 3 credits
Advanced creative work in camera and darkroom techniques aimed at developing individual expression and technical mastery. Independent research incontemporary trends. Seminar discussion.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education; and a minimum of two undergraduate courses in creative photography or permission of the deputy chairperson.

ARTD 7730X Advanced Creative Photography II

30 hours lecture, 30 hours lab; 3 credits
Continuation of Art 7720X [745X].

Prerequisite: Art 7720X [745X].

ARTD 7740X - Introduction to the Aesthetics and Practice of Digital Photography
30 hours lecture, 30 hours lab; 3 credits
Digital photography as creative art. Traditional and experimental practices explored. Critical texts analyzed. Introduction to the contemporary art produced in this medium by a wide range of diverse artists. Students must supply their own digital cameras.

Prerequisite: Matriculation for the M.F.A. in art or for the M.A. in art education. Knowledge of Basic Digital Photography Skills or permission of instructor

ARTD 7742G Analog-Digital Hybrid Photography

30 hours lecture, 30 hours lab; 3 credits
The use of film cameras, digital cameras, scanners, and inkjet printers as a means of generating digital negatives. These negatives will be used to create gelatin silver prints (GSP) in the conventional analog darkroom.

Prerequisite: Matriculation for the M.F.A. in art or for the M.A. in art education and permission of instructor

Digital art

ARTD 7810G The Aesthetics of Information

30 hours lecture, 30 hours lab; 3 credits
Examination of critical thought about art and technology. Issues of identity construction, interface, performativity, virtuality, and representation. Creative projects as well as short papers are required.

Prerequisite or corequisite: matriculation for the M.F.A. in art or for the M.A. in art education.

ARTD 7820G Advanced Digital Art I

30 hours lecture, 30 hours lab; 3 credits
Strategies of media translation, replication, and distribution, with an emphasis on cross-media creative work. Print, video, and net art projects.

Prerequisite or corequisite: matriculation for the M.F.A. in art or for the M.A. in art education.

ARTD 7821G Advanced Digital Art II

30 hours lecture, 30 hours lab; 3 credits
Techniques of incorporating viewer intervention into a perceptual environment. Interactive art possibilities and venues, including site-specific installations (custom interface design and physical computing) and network based work (VRML or Quicktime VR). This course is the same as Computer and Information Science 7642G.

Prerequisite or corequisite: matriculation for the M.F.A. degree in art or for the M.A. degree in art education or Computer and Information Science 7620X [741X] or 7640X [752X].

General and combined media

ARTD 7900G Special Topics in Studio Art

1 hour recitation, 1 hour lecture, 2 hours laboratory, a minimum of 4 hours independent work; 3 credits
Topics vary and reflect the interests of students and faculty. Emphasis on specialized techniques and art media or creative projects not otherwise covered in the regular design curriculum. Students may take this course for credit twice, but may not repeat topics.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education or permission of the deputy chairperson.

ARTD 7905G Techniques and Analysis of Contemporary Art
45 hours; 3 credits
Critical analysis of studio practice with an eye toward advanced techniques and a cross-disciplinary approach. This course may be taken for credit up to two times.

Prerequisite: Matriculation in MFA or MA Art Education

ARTD 7910X Writing and Practice

45 hours; 3 credits
A seminar taught by an eminent artist, critic, curator, or historian that aims to acquaint students with a broad range of critical thinking and to develop students' skills in verbal and textual analysis. It is intended as a stimulus to art-making and helps to form the critical and conceptual foundation for students to bring back to their studio practice. The course is taken in the third semester and includes artists' writings and the development of the students own thesis proposals.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education or permission of the deputy chairperson.

ARTD 7920X Collaborative Strategies

45 hours; 3 credits
A studio course in which students will work together to create co-authored artworks. Emphasis will be placed on experimental works bringing together disparate media. The role of collaboration in the arts will be discussed, including examples of important collaborative groups and examples of different models for collaboration. Students will be challenged to examine new communicative strategies vis-a-vis other artists. The course is taken in the first semester as an introduction to the ideas and art of all the students in the first year of graduate study.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education or permission of the deputy chairperson.

ARTD 7930G The Political Body

45 hours; 3 credits
In this practicum, students learn about the diversity of visual and conceptual strategies utilized by contemporary artists to address how the shifting political climate impacts the depiction of the human body. Topics that will be investigated include: gender, feminism, race, ethnicity, class, sexual orientation, and nationality, among others. The practical application of these various strategies will be discussed with students in group and individual studio critiques. The course will include weekly readings, five studio projects including a semester long art criticism project.

Prerequisite or corequisite: matriculation for the M.F.A. in art.

ARTD 7940G Master Seminar and Research

15 hours plus 90 hours independent work and conference; 3 credits
Evaluative and critical techniques in the visual arts, applying analytical criteria to the student's independent work in a medium. Examination of historical models of style and theory as

antecedents of contemporary practice. Emphasis on independent development and exploration within a chosen medium. Preparation of a written prospectus. Review and approval by the graduate faculty committee is required before taking Art 7950G [782.2G].

Prerequisite: matriculation for the M.F.A. in art or permission of the deputy chairperson.

ARTD 7950G Master Project I

90 hours independent work plus conference; 3 credits
Independent research, development, and production of creative work in the student's concentration. Written report. Review and approval of work in progress by the graduate faculty committee is required before taking Art 7951G [782.3G].

Prerequisite: Art 7940G [782.1G] and a minimum of two studio courses related to the concentration.

ARTD 7951G Master Project II

90 hours independent work plus conference; 3 credits
Continuation of Art 7950G [782.2G]. An exhibition of work and a written report are reviewed and must be approved by the graduate faculty committee at the end of the term.

Prerequisite: Art 7950G [782.2G].

Independent work

ARTD 7960G Internship

135 hours fieldwork, 3 credits
Some undergraduate art teaching. Preparing lessons and instructional materials, and assisting the instructor in presentations and evaluations.

Prerequisite: matriculation for the M.F.A. in art and permission of the instructor.

ARTD 7970X Special Problems in Visual Arts Media I

90 hours of independent work plus conference each term; 3 credits each term
Research supervised by a faculty member in media problems related to the student's area of interest in the visual arts. Portfolio and/or paper each term.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education and permission of the deputy chairperson and instructor.

ARTD 7971X Special Problems in Visual Arts Media II

90 hours of independent work plus conference each term; 3 credits each term
Research supervised by a faculty member in media problems related to the student's area of interest in the visual arts. Portfolio and/or paper each term.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education and permission of the deputy chairperson and instructor.

ARTD 7972X Special Problems in Visual Arts Media III

90 hours of independent work plus conference each term; 3 credits each term
Research supervised by a faculty member in media problems related to the student's area of interest in the visual arts. Portfolio and/or paper each term.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education and permission of the deputy chairperson and instructor.

ARTD 7973X Special Problems in Visual Arts Media IV

90 hours of independent work plus conference each term; 3 credits each term
Research supervised by a faculty member in media problems related to the student's area of interest in the visual arts. Portfolio and/or paper each term.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education and permission of the deputy chairperson and instructor.

ARTD 7974X Special Problems in Visual Arts Media V

90 hours of independent work plus conference each term; 3 credits each term
Research supervised by a faculty member in media problems related to the student's area of interest in the visual arts. Portfolio and/or paper each term.

Prerequisite: matriculation for the M.F.A. in art or for the M.A. in art education and permission of the deputy chairperson and instructor.

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

ARTD 6210T Introduction to Drawing and Color

ARTD 7030G Early Florentine and Sienese Painting

ARTD 7076G Modern Architecture to World War I

ARTD 7078G Modern Architecture since 1914

ARTD 7250T Projects in Creative Art for the Classroom

ARTD 7410T Painting

ARTD 7510T Sculpture

ARTD 7710T Photography

Biology

Department office: 221 Ingersoll Hall Extension
Phone: 718.951.5396

Full-time Faculty

Professors: Basil, Forlano, Ikui, Lipke, Muth, Polle, Quadri, Saxena, Singh, Tolias, Wilson
Associate Professors: He, Schvarzstein
Assistant Professors: Cevher, Staniczenko, Studamire
Lecturers: McEntee, Samaddar

No departmental program is currently accepting students for Master's degrees. As an alternate see the M.A.T. degree program in Adolescence Science Education (grades 7-12). Biology is a huge and diverse area of human knowledge that includes everything from the behavior of the molecules that code genetic information to enormous ecosystems that cover the surface of our planet. The Department of Biology offers courses and programs of study that reflect this tremendous range and depth of information. For some students, this means the study of crayfish and how they behave in muddy swamps, while for others there is the opportunity to dissect genes and see how they work. All students can discover something new about themselves and the world around them. Students in the master's programs have the opportunity to do their thesis research in one of the department's many research laboratories.

Fellowships

Some fellowships are available to qualified students. Inquiry should be made of the chairperson at the time of application.

CUNY Ph.D.

The City University of New York offers doctoral programs in biology and biochemistry. General information about CUNY Ph.D. programs is in the chapter “Support for Academic Success in Graduate School.” The Biology Department offers courses at Brooklyn College that are creditable toward the CUNY doctoral degree. For information about the courses, students should consult the deputy chairperson of the Biology Department and the executive officer of the doctoral program.

Sigma Xi

Sigma Xi, the Scientific Research Society, encourages original investigation in the natural sciences, pure and applied. The fields of activity of the society include the physical sciences, the life sciences, the earth sciences, and mathematics. The Brooklyn College Chapter elects students to associate membership in the society on the basis of academic excellence and marked aptitude for research in one of the fields listed above.

Courses

Unless a prerequisite is specific, students may apply graduate or undergraduate courses toward fulfillment of that prerequisite.

No course offerings are currently scheduled except for courses cross-listed with current undergraduate courses.

BIOL 7005G Genetics

60 hours; 4 credits
Prokaryotic and eukaryotic genetics; organization of DNA, replication repair, mutagenesis, recombination, control of gene expression, genetic engineering and molecular techniques.

Prerequisite: BIOL 7100G Molecular Biology

BIOL 7007G Molecular and Macroevolution

45 hours; 3 credits
Readings and commentary in molecular evolution and macroevolution. Exploration of the relationship between mutations and gene duplications with diversification, discussion of how natural selection leads to adaptation. Weekly written commentaries, and a major research project with oral presentation.

Prerequisite: Biology 7100

BIOL 7010T Modern Concepts in Biology I

60 hours each term; 4 credits each term
Significant contemporary concepts in biology. These courses may be taken more than once, with the permission of the chairman or graduate deputy.

BIOL 7013X Principles of Immunology

45 lecture; 3 credits
Innate and adaptive immunity with emphasis on the cellular and molecular mechanisms of immunity. Immune responses to viral, bacterial, fungal and protozoan pathogens, allergic hypersensitivity responses and autoimmune diseases. Recent

developments in modifying the immune system to respond effectively to cancer, the development of more effective vaccines and the role of inflammation in disease. Case studies will provide a clinical context. (Not open to students who have taken BIOL 4013 or equivalent.)

Prerequisite: None

BIOL 7020T Modern Concepts in Biology II

60 hours each term; 4 credits each term
Significant contemporary concepts in biology. These courses may be taken more than once, with the permission of the chairman or graduate deputy.

BIOL 7027G Model Systems in Biology

30 hours; 2 credits
Introduction to a selection of biological systems used in different areas of biological research. Exploration of how and why different biological systems are used to solve biological problems, the advantages of selected systems to solve specific problems, and how Biology faculty are using these systems in their research. It will give students an opportunity to see the types of research faculty are involved in and can help them choose a thesis research topic.

BIOL 7077G Molecular Phylogenetics and Evolution

45 hours; 3 credits
Introduction to conceptual foundations of molecular phylogenetics, the application of molecular data to the study of evolutionary relationships; analysis and interpretation of phylogenetic trees in the popular and scientific press; methods for the analysis of molecular data and construction of molecular phylogenies. Classroom lectures, complemented by hands-on practicals with real-world datasets. Weekly assignments, take-home quizzes and paper summary and presentation.

BIOL 7080G Journal Club

15 hours; 1 credit
Student presentation of current research papers provide an opportunity to read literature, develop an understanding of an area of research and present both an overview and a current paper that they have selected for critical analysis by the class. This course may be taken twice for credit.

BIOL 7100G Molecular Biology

75 hours; 5 credits
Structure and function of biomolecules; enzyme mechanisms; replication, transcription, translation; regulation of macromolecular biosynthesis; energy transformations.

Prerequisite: A course in genetics or molecular biology or biochemistry.

BIOL U7110X Biotechnology of Algae

30 hours lecture, 15 hour discussion section; 3 credits
Phylogeny, evolution, habitats, growth cycles, and genetic engineering of algae; biosynthetic pathways of algal products and their metabolic regulation; interdisciplinary topics including designing bioreactors, nutritional value of natural products from algae; the economic aspects of patent and management of companies dealing with algae. A required in-depth discussion of topics pertinent to algal biotechnology will take place following every lecture.

Prerequisite: Biology 1072 [29]; Chemistry *1100 [1] or its equivalent.

BIOL U7121X Introduction to Recombinant DNA Technology: Lecture

30 hours; 2 credits
This course is an introduction to the molecular biology of the gene and some of the methodologies used for the isolation and cloning of genes.

BIOL U7122X Introduction to Recombinant DNA Technology: Laboratory

120 hours; 4 credits
Laboratory work related to the subject matter of Biology U7121X [712.01X]

Prerequisite or corequisite: Biology U7121X [712.01X].

BIOL U7141G Cell Biology: Lecture

60 hours lecture and conference; 4 credits
Intensive study of major areas of cell biology; integration of cellular ultrastructure; metabolism; transmission of cellular information.

Prerequisite: BIOL 7100G Molecular Biology

BIOL 7150G Cell and Molecular Biology Techniques

60 hours lab, 15 hours recitation, 3 credits
Experiments designed for cell and molecular biology with a strong emphasis on modern lab techniques including molecular cloning and DNA recombination.

Prerequisite or corequisite: BIO7100G

BIOL U7160X Cells in Culture

60 hours laboratory, 15 hours recitation; 3 credits
A mixed-format course on the use of cells in culture, including laboratory experience and a recitation hour. In the laboratory, students perform a series of planned experiments on cell cultures to become familiarized with research techniques. In addition, students carry out a limited project of their own design after consultation with the instructor. The recitation hour includes discussions of essential techniques used to culture cells and discussions of representative papers from the research literature.

Prerequisite: permission of the instructor.

BIOL U7170X Advanced Cell Culture Techniques

60 hours laboratory, 15 hours recitation; 3 credits
An advanced course on cell culture techniques in which students are responsible for researching the literature and designing one or two advanced sets of experiments from a common list of project topics after consultation with the instructor. The planning of the projects is to include considerations of cost and sources of supply, timing of purchase, equipment availability, reagent preparation, a written proposal of objectives, detailed experimental protocols, appropriate control experiments, recording of results, potential statistical analysis, hypothesis testing, and final interpretation of results. Each project will be concluded with the submission of a written report and an oral presentation.

Prerequisite: Biology U7160X [716X] and the permission of the instructor.

BIOL 7180G Cancer Biology

45 hours, 3 credits
The fundamental principles of the molecular and cellular biology of cancer cells. The role of growth factors, oncogenes, tumor suppressor genes, angiogenesis and signal transduction mechanisms in tumor formation. Maintenance of genomic integrity and tumorigenesis. Discussion on recent therapeutic advances in cancer treatment and principles of drug action in cancer management.

Prerequisite: A course in genetics or molecular biology or biochemistry.

BIOL 7190G Macromolecular Structure and Bioinformatics
45 hours, 3 Credits
The fundamentals of biological macromolecular structures; an introduction to the computational tools important in determining biological functions.

Prerequisite: Biology 7100

BIOL U7321X Applied Microbiology: Lecture

30 hours; 2 credits
Applied methods in microbiology. Study of growth, metabolism, and genetics of bacteria and fungi, relating to industrial, environmental, food, and medical microbiology.

Prerequisite: a course in microbiology.

BIOL 7331G Global Bacterial, Protozoan and Viral Killers
45 hours; 3 credits
Global public health threats, global infectious diseases, tuberculosis, malaria and
AIDS epidemics, and Mycobacterium tuberculosis, Plasmodium falciparum, and HIV biology.

BIOL U7503X Developmental Biology

15 hours recitation, 45 hours lecture; 4 credits
Embryonic development of both invertebrates and vertebrates. Topics include transformation of a fertilized egg to a young animal, cell differentiation, formation of different organs/tissues, signal transduction during development, molecular bases of behavior and human neural disease models. (Not open to students who have completed BIOL 4011.)

Prerequisite: BIOL 7100G

BIOL 7650X Biology of Estuaries

45 hours; 3 credits
Survey of estuaries and coastal ecosystems; an introduction to major estuarine processes, habitats, and organisms; factors affecting community structure and function. Three all-day field trips.

Prerequisites: open to biology graduates; with permission of the instructor, open to graduates in geology, chemistry, and engineering.

BIOL U7910G Colloquium

15 hours; 1 credit
Discussion of recent contributions and research in progress in biology. No more than 2 credits in this course may be applied toward the degree.

BIOL U7921G Advanced Study

30 hours; 2 credits
Tutorial study with a faculty member in an area in which formal course work is not offered. Assigned reading, reports, and laboratory or fieldwork. Weekly discussion and examinations by arrangement with the instructor. May be taken only once.

BIOL U7922G Advanced Study

60 hours; 4 credits
Tutorial study with a faculty member in an area in which formal course work is not offered. Assigned reading, reports, and laboratory or fieldwork. Weekly discussion and examinations by arrangement with the instructor. This course can only be taken by students in Plan A. May be taken only once.

Prerequisites: BIOL 7100G and BIOL 7150G.

BIOL U7931G Seminar in Special Topics

15 hours each term; 1 credit ech term
Topical discussion of recent contributions in biology. Course content varies from term to term.

BIOL U7932G Seminar in Special Topics

30 hours ech term; 2 credits term
Topical discussion of recent contributions in biology. Course content varies from term to term. Students may take the course more than once but may not repeat topics.

BIOL U7933G Seminar in Special Topics

45 hours; 3 credits
Topical discussion of recent contributions in biology. Course content varies from term to term. Students may take the course more than once but may not repeat topics.

BIOL U7941X Experimental Biology: Lecture

45 hours; 3 credits
Experimental approach to problems in biology. Course content varies from term to term.

BIOL U7942X Experimental Biology: Laboratory

90 hours; 3 credits
Experimental approach to problems in biology. Course content varies from term to term.

BIOL U7951X Research Topics in Biology

45 hours; 3 credits
Lecture in selected areas of modern biology. Course content varies from term to term. Students may take this course twice, but may not repeat topics. (Not open to students who have completed the same topic in Biology 795.2X.)

BIOL 7991G Thesis Research

45 hours; 2 credits
Research for master's thesis supervised by a faculty member. No more than two credits may be counted toward the degree. Credit is not earned until the thesis is accepted.

Prerequisite: completion of all graduate laboratory courses recommended by the department graduate studies committee.

BIOL 7992G Thesis Research

45 hours; 2 credits
Research for master's thesis supervised by a faculty member. No more than two credits may be counted toward the degree. Credit is not earned until the thesis is accepted.

Prerequisite: completion of all graduate laboratory courses recommended by the department graduate studies committee.

Kinesiology courses

KINS 7000X Research Methods and Design in Kinesiology

45 hours; 3 credits
This should be the first course in which the newly admitted graduate student in the Department of Kinesiology should enroll. Common research methodologies and designs are explored. Quantitative and qualitative research methodologies/designs and statistical applications are covered in order to ensure that the student can effectively comprehend and interpret research in the field and with further preparation conduct their own research. Cannot be taken by students who successfully completed PEES 7092X

KINS 7059X Advanced Physiology of Exercise

30 hours lecture, 30 hours laboratory; 3 credits
Effects of exercise on humans. Selected topics in circulation, respiration, muscle physiology, thermoregulation, energy metabolism.

KINS 7151X Motor Development and Analysis

45 hours; 3 credits
Theoretical perspectives in motor development; principles of motion and stability; physical growth and aging; development of motor skills across the life span; perceptual-motor development; functional constraints to motor development; interaction of exercise and structural constraints; effects of practice regimens and feedback, and the theoretical perspectives relevant to motor development research. Students in this course will learn, examine and analyze the theories and principles that relate to skillful movement, physical activity, and fitness in one's life.

Prerequisite: none

KINS 7154X Exercise Psychology and Behavior Change

45 hours; 3 credits
This course provides an overview of the theoretical foundations for understanding exercise psychology and behavior including: social cognitive theory; trans theoretical model; and social ecological models. Physical activity behavior will be explored including: barriers to engagement in physical activity, cognitive and behavioral strategies for increasing physical activity, and theoretical strategies and approaches to increase exercise adoption and adherence.

KINS 7250X Fitness Assessment and Exercise Prescription

45 hours; 3 credits
Students study advanced processes and procedures of physical fitness evaluation and prescription. Emphasis is placed on the design of individual and group exercise programs.

Prerequisite: PEES/KINS 7059X

KINS 7260X Exercise Prescription for Special Populations

45 hours; 3 credits
Theory of individualized exercise programs for specific populations: cardiovascular, neuromuscularly impaired, diabetic, pediatric, geriatric, dialysis patients.

KINS 7262X Electrocardiography

45 hours; 3 credits
Fundamentals of the physiological basis of the electrical activity of the heart. Cardiac rate, rhythm, hypertrophy, axis, infarct, electrolyte abnormalities, and conduction. Evaluation of exercise electrocardiograms of healthy and of diseased hearts.

KINS 7263X Biomechanics

45 hours; 3 credits
The study of human motion and its underlying physical principles. Examination of forces that act on the human body and their effects on muscles, bones, and joints. Applications to physical therapy, rehabilitative medicine, and sports techniques. (Not open to students who are enrolled in or have completed Physics 7030X [690X].)

KINS 7267X Cardiopulmonary Rehabilitation

45 hours; 3 credits
Physiological, medical, administrative, and practical guidelines for conducting a comprehensive rehabilitation program for individuals with various cardiopulmonary diseases.

Prerequisite: Physical Education/Kinesiology 7262X [762X].

KINS 7279X Nutrition and Exercise

45 hours; 3 credits
Exploration of human nutritional requirements of exercise; the significance of intermediary metabolic pathways and the effect of dietary manipulation on exercise performance. (This course is the same as Health and Nutrition Sciences 7234X.)

Prerequisite: a college level course in human or animal physiology.

KINS 7290X Practicum in Exercise Science and Rehabilitation

45 hours seminar; 3 credits
Clinical skills for the Exercise Physiologist. Maximal exercise testing using various modes of exercise. Physical examination. Monitoring of physiologic variables and the electrocardiogram. Clinical decision making. Exercise prescription. Case studies.

Prerequisite: Completion of KINS 7262X and KINS 7267X.

Chemistry and Biochemistry

Department office: 359 Ingersoll Hall Extension
Phone: 718.951.5458

Full-time Faculty

Professors: Ciszkowska, Contel, Davenport, Gibney, Greer, Kobrak, Magliozzo, Murelli
Associate Professors: Dowd, Gallicchio, Gerona Navarro, Jarzecki, Juszczak, Mieszawska, Torrente
Assistant Professor: Jain
Lecturers: Mathias, Mohd, Vedad

The Department of Chemistry and Biochemistry has a distinctive history and is recognized by the American Chemical Society for its ability to prepare chemistry students to enter the workplace in industry, education, and health fields.

For over sixty years, the department's graduate programs have been a center of education and research for the city of New York. The many illustrious alumni in the field of chemistry include Nobel Laureate Stanley Cohen. With a supportive environment and small classes, students from a diverse population work closely with faculty.

The department offers exciting opportunities for graduate students to pursue their goals in diverse areas of research in a dedicated campus building with over fifty thousand square feet of research and lab space.

CUNY Ph.D.

The City University of New York offers doctoral programs in chemistry and biochemistry. General information about CUNY Ph.D. programs is in the chapter “Support for Academic Success in Graduate School.” The courses in the Department of Chemistry and Biochemistry may be credited toward the CUNY doctoral degree with permission of the executive officer of the doctoral program. For information, students should consult the deputy chairperson of the Department of Chemistry and Biochemistry and the executive officer of the doctoral program.

Courses

Registration for courses numbered 7000 and higher requires permission of the deputy chairperson.

Unless a prerequisite is specified, students may apply graduate or undergraduate courses toward fulfillment of that prerequisite.

CHEM 7110G Seminar

30 hours each term; 2 credits each term
Topics selected from various branches of chemistry. Seminars consist of library research and discussion of literature on selected topics or presentation of experimental methods and results.

CHEM 7120G Seminar

30 hours each term; 2 credits each term
Topics selected from various branches of chemistry. Seminars consist of library research and discussion of literature on selected topics or presentation of experimental methods and results.

CHEM 7130G Seminar

30 hours each term; 2 credits each term
Topics selected from various branches of chemistry. Seminars consist of library research and discussion of literature on selected topics or presentation of experimental methods and results.

CHEM 7420G Basic Laboratory Techniques for Research

30 hours lecture, 90 hours laboratory; 5 credits
Theories and application of modern approaches to the solution of chemical problems.

CHEM 7421G Basic Laboratory Techniques for Research

30 hours lecture, 90 hours laboratory; 5 credits
Theories and application of modern approaches to the solution of chemical problems.

CHEM 7550G Advanced Organic Chemistry

45 hours; 3 credits
Fundamentals of organic chemical principles, reactions, structures, and mechanisms.

Prerequisite: two terms of organic chemistry.

CHEM 7571G Biochemistry

45 hours; 3 credits
Properties and reactions of compounds of biological importance. Enzyme kinetics. Biological membranes. DNA replication and repair.

Prerequisite: two terms of organic chemistry.

CHEM 7581G Advanced Biochemistry

45 hours; 3 credits
Common metabolic pathways. Reaction mechanisms and regulation of principal biological pathways. Biochemistry of metabolic disorders with clinical implications.

Prerequisite: Chemistry 7571G [757.1G].

CHEM 7640G Quantum Chemistry

45 hours; 3 credits
Foundations of quantum mechanics with applications to atomic and molecular structure.

Prerequisite: two terms of physical chemistry.

CHEM 7761G Advanced Inorganic Chemistry

45 hours; 3 credits
Theoretical and experimental fundamentals of atomic and molecular structure. Emphasis on physical interpretation.

Prerequisite: two terms of physical chemistry.

CHEM 7800G Special Topics in Chemistry

45 hours; 3 credits
Lectures on selected topics or recent advances.

CHEM 7810G Introduction to Laboratory Research

60 hours laboratory; 2 credits
For students who want to explore the feasibility of different research problems before choosing a thesis topic. Students may work with one or more research supervisors during the term.

CHEM 7820G Introduction to Laboratory Research

90 hours laboratory; 3 credits
For students who want to explore the feasibility of different research problems before choosing a thesis topic. Students may work with one or more research supervisors during the term.

CHEM 7830G Introduction to Laboratory Research

120 hours laboratory; 4 credits
For students who want to explore the feasibility of different research problems before choosing a thesis topic. Students may work with one or more research supervisors during the term.

CHEM 7910G Thesis Research

Minimum of 45 hours laboratory and conference; 2 credits
Research for master's thesis supervised by a faculty member. Credit is not earned until the thesis is accepted. Laboratory hours to be arranged.

CHEM 7920G Thesis Research

Minimum of 45 hours laboratory and conference; 2 credits
Research for master's thesis supervised by a faculty member. Credit is not earned until the thesis is accepted. Laboratory hours to be arranged.

CHEM 7930G Thesis Research

Minimum of 45 hours laboratory and conference; 2 credits
Research for master's thesis supervised by a faculty member. Credit is not earned until the thesis is accepted. Laboratory hours to be arranged.

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

CHEM 6160T Chemistry for Secondary School Teachers

CHEM 7450G Chemistry Teaching Laboratory Management

CHEM 7670G Chemical Thermodynamics

CHEM 7950T Independent Development of Laboratory Curriculum Materials

Childhood, Bilingual and Special Education

Department office: 2105 James Hall
Phone: 718.951.5447

Full-time Faculty

Professor: Ascenzi-Moreno
Associate Professors: Haydar, Lee
Assistant Professors: Dembek, Hwu, Kaya, Reed
Lecturer: Eng
Clinical Professor: Kyprianou

M.S. in Education degree program: childhood education teacher (grades 1-6) - bilingual education HEGIS code 0802.00; SED program code 26823

Interviews and writing samples in English and the language other than English are required for admission to the Bilingual Education MSED.

The course seminars/lectures for the program are online; courses may require in-person fieldwork/student-teaching in childhood and bilingual settings.

Degree Program Requirements: Option A (36 credits); Option B (54 credits)

The program in bilingual education prepares candidates to teach in bilingual settings where two languages are used as the mediums of instruction. This program provides candidates with a solid foundation in the theory and practice of bilingual education; courses include the following topics: bilingualism, research, methodology, biliteracy, content instruction in bilingual settings and multicultural education. Option A is designed for candidates who already hold certification in Childhood Education. Option B is designed for career changers and includes an additional 21 credits of education course work as well as one semester of student teaching in a bilingual setting. These courses of study include a 15-credit bilingual extension which can be taken as an advanced certificate (see Advanced Certificate in Bilingual Education, Birth-12).
Students will enroll in the appropriate course of studies listed below (Option A or B) based upon teaching experience, previous course work, and the teaching certificates they hold.

Option (A): 36 credits

Matriculation requirements

This program applies to students who hold a New York State Initial Certificate in Childhood Education and wish to attain a Professional Certificate in Childhood Education with an Extension in Bilingual Education. This program also applies to students who have a Professional Certificate in Childhood Education and wish to pursue an Extension in Bilingual Education. All students who wish to enroll should speak to the Bilingual Program Adviser.
Applicants must have a minimum undergraduate grade point average of 3.00.
Applicants must demonstrate proficiency in both English and in a language other than English (the language in which they seek the extension.) Proficiency in the language other than English is determined by the Bilingual Education Assessment (BEA) which is offered by New York State. International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test, before being considered for admission.
Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures" of the Brooklyn College Bulletin of Graduate Programs.

Degree requirements: Thirty-six credits are required for the degree.

Required courses are listed below; courses marked with an asterisk (*) are bilingual extension courses.
CBSE 7200T, CBSE 7202T, CBSE 7203T, CBSE 7204T, CBSE 7215X, CBSE 7350T*, CBSE 7351T*, CBSE 7353T*, CBSE 7355T*, Puerto Rican and Latino Studies 7145X*, Mathematics 7141T. Any graduate level course in General Science or 7000-level course in Earth and Environmental Sciences.

During the first semester, students must file a program of study approved by the program adviser. All courses in the childhood education degree sequence and in childhood bilingual extension programs require departmental permission for registration.

Option (B): 54 credits

The following program applies to students who do not hold a New York State Initial Certificate in Early Childhood Education or Childhood Education or Special Subjects or equivalent course work and teaching experience, or who are teaching but do not hold initial certification. This program leads to both New York State Initial and Professional Certificates in Childhood Education (grades 1-6) and a bilingual extension.

Matriculation requirements

This program applies to students who do not hold a New York State Initial Certificate in Early Childhood Education or Childhood Education and wish to attain a Professional Certificate in Childhood Education with an Extension in Bilingual Education.
Applicants must have a minimum undergraduate grade point average of 3.00.
Applicants must demonstrate proficiency in both English and in a language other than English (the language in which they seek the extension.) Proficiency in the language other than English is determined by the Bilingual Education Assessment (BEA) which is offered by New York State. International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test, before being considered for admission.
Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures" of the Brooklyn College Bulletin of Graduate Programs.

Degree requirements: Fifty-four credits are required for the degree.

Required courses are listed below; courses marked with an asterisk (*) are bilingual extension courses.
CBSE 7205T, 7216X, 7440T, 7213T, 7671X and 7358.
CBSE 7200T, CBSE 7202T, CBSE 7203T, CBSE 7204T, CBSE 7350T*, CBSE 7351T*, CBSE 7353T*, CBSE 7355T*, Puerto Rican and Latino Studies 7145X*, Mathematics 7141T.
Any graduate level course in General Science or 7000-level course in Earth and Environmental Sciences.

During the first semester, students must file a program of study approved by the program adviser. All courses in the childhood education degree sequence and in childhood bilingual extension programs require departmental permission for registration.

Nonmatriculated students

Students with a New York State Initial Certificate in Childhood Education and/or a New York State Professional Certificate in Childhood Education or their equivalents who wish to complete an Extension in Bilingual Education without completing a master's degree in Childhood Education, may do so as a nonmatriculated student. The bilingual extension can be applied to all New York State Certifications including Teachers of Students with Speech and Language Disabilities (TSSLD). Permission from the head of the Program in Bilingual Education is required.
The Bilingual Extension (Birth-12) consists of 15 credits. Required courses are listed below. This option is applicable for candidates who hold initial certification, except TSSLD students.
CBSE 7350T, 7351T, 7353T, and 7355T; and Puerto Rican and Latino Studies 7145X. TSSLD students must complete the following course sequence: CBSE 7350, CBSE 7351, CBSE 7353, SPEC 7535/CBSE 7360, and SPEC 7536/CBSE 7359.
All courses in childhood education and in bilingual extension programs require departmental permission for registration.

M.S. in Education degree program: childhood education teacher (grades 1-6) - liberal arts
HEGIS code 0802.00; SED program code 26826

The program in childhood education prepares teachers of children in first through sixth grade for initial and/or professional certification in liberal arts, bilingual education, science and environmental education, and mathematics. Through collaborative action, teaching and research, we develop our students' capacities to create socially just, intellectually vital, aesthetically rich, and compassionate communities that value equity and excellence, access and rigor. We design our programs in cooperation with liberal arts and sciences faculties and in conjunction with local schools in order to provide our students with opportunities to develop the knowledge, proficiencies, and understandings needed to work with New York City's racially, ethnically, and linguistically diverse populations. Our program is unique in that our students become highly skilled in content and methodology courses, adept in diversified literacy skills, and have the ability to integrate pragmatic tools of technology, including free and interactive Web 2.0 tools such as blogs, wikis, and podcasts. Our reflective graduates are astutely aware of the digital divide and the need to use source ware (free software) so no child is left behind in the Information Age, and the need to produce globally competitive students regardless of their socioeconomic status.

Students will enroll in the appropriate course of studies listed below (Option A or B or C) based upon teaching experience, previous course work, and the teaching certificates they hold. This program is offered fully online.

Option (A): 30 credits

The following program applies to students who hold a New York State Initial Certificate in Childhood Education (grades 1-6) or its equivalent. This program leads to a New York State Professional Certificate in Childhood Education (grades 1-6).

Matriculation requirements:

Applicants must hold a New York State Initial Certificate in Childhood Education (grades 1-6) or its equivalent.
Applicants must have a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate courses is required to maintain matriculation.
International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test, before being considered for admission.

Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures" of the Brooklyn College Bulletin of Graduate Programs.

Degree requirements: Thirty credits are required for the degree.

CBSE 7200T and CBSE 7549Xor English 7602X or 7701X or 7502X or 7503X.
CBSE 7203T and CBSE 7206T or History 7110X or 7430X or Political Science 7030X or 7610X or Puerto Rican and Latino Studies 7415X or 7420X or Africana Studies 7020X or 7030X.
CBSE 7204T and Mathematics 7141T or 7142T or 7143T or 7145T or CBSE 7405T.
Any graduate level course in General Science or 7000-level course in Earth and Environmental Sciences.
CBSE 7202T and an elective in education and CBSE 7671X or a course in teaching students with disabilities with permission of the Program Head.

Any liberal arts course requested by students must be approved by the Program Head.

During the first semester, students must file a program of study approved by the program adviser. All courses in the childhood education degree sequence require departmental permission for registration.

Option (B): 33 credits

The following program applies to students who hold a New York State Initial Certificate in Early Childhood Education (birth through grade 2) or its equivalent or a New York State Initial Certificate in Special Subjects (all grades) or its equivalent. This program leads to a New York State Professional Certificate in Childhood Education (grades 1-6).

Matriculation requirements:

Applicants must hold a New York State Initial Certificate in Early Childhood Education (birth through grade 2) or its equivalent or a New York State Initial Certificate in Special Subjects (all grades) or its equivalent.
Applicants must have a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate courses is required to maintain matriculation.
International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test, before being considered for admission.

Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures" of the Brooklyn College Bulletin of Graduate Programs.

Degree requirements: Thirty-three credits are required for the degree.

CBSE 7200T and CBSE 7549X or English 7602X or 7701X or 7502X or 7503X.
CBSE 7203T and CBSE 7206T or History 7110X or 7430X or Political Science 7030X or 7610X or Puerto Rican and Latino Studies 7415X or 7420X or Africana Studies 7020X or 7030X.
CBSE 7204T and Mathematics 7141T or 7142T or 7143T or 7145T or CBSE 7405T.
Any graduate level course in General Science or 7000-level course in Earth and Environmental Science.
CBSE 7202T and an elective in education and CBSE 7671X or a course in teaching students with disabilities with permission of the Program Head.
And CBSE 7214T.
Any liberal arts course requested by students must be approved by the Program Head.

During the first semester, students must file a program of study approved by the program adviser. All courses in the childhood education degree sequence require departmental permission for registration.

Option (C): 45 credits

The following program applies to students who do not hold a New York State Initial Certificate in Early Childhood Education or Childhood Education or Special Subjects or equivalent course work and teaching experience, or who are teaching but do not hold initial certification. This program leads to both New York State Initial and Professional Certificates in Childhood Education (grades 1-6).

Matriculation requirements:

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate courses is required to maintain matriculation.
International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test, before being considered for admission.
Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures" of the Brooklyn College Bulletin of Graduate Programs.

Degree requirements: Forty-five credits are required for the degree.

CBSE 7205T, 7216X, 7440T, 7213T, 7671X, and CBSE 7358T.
CBSE 7200T and CBSE 7549X
or English 7602X or 7701X or 7502X or 7503X.
CBSE 7203T and History 7110X or 7430X or Political Science 7030X or 7610X or Puerto Rican and Latino Studies 7415X or 7420X or Africana Studies 7020X or 7030X.
CBSE 7204T and Mathematics 7141T or 7142T or 7143T or 7145T.
Any graduate level course in General Science or 7000-level course in Earth and Environmental Science and CBSE 7202T.

During the first semester, students must file a program of study approved by the program adviser. All courses in the childhood education degree sequence require departmental permission for registration.

M.S. in Education degree program: childhood education teacher (grades 1-6) - mathematics
HEGIS code 0802.00; SED program code 26826

The program in childhood education prepares teachers of children in first through sixth grade for initial and/or professional certification in liberal arts, bilingual education, science and environmental education, and mathematics. Through collaborative action, teaching and research, we develop our students' capacities to create socially just, intellectually vital, aesthetically rich, and compassionate communities that value equity and excellence, access and rigor. We design our programs in cooperation with liberal arts and sciences faculties and in conjunction with local schools in order to provide our students with opportunities to develop the knowledge, proficiencies, and understandings needed to work with New York City's racially, ethnically, and linguistically diverse populations.

Our program is unique in that our students become highly skilled in content and methodology courses, adept in diversified literacy skills, and have the ability to integrate pragmatic tools of technology. Our reflective graduates are astutely aware of the digital divide and the need to use source ware (free software) so no child is left behind in the Information Age, and the need to produce globally competitive students regardless of their socioeconomic status.

This program leads to the M.S. in Education and a New York State Professional Certificate in Childhood Education (grades 1-6) with a specialization in mathematics education.

General matriculation requirements

Applicants must have a minimum of 6 credits in mathematics.

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate courses is required to maintain matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test, before being considered for admission.

Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures" of the Brooklyn College Bulletin of Graduate Programs.

General degree requirements: Thirty to 45 credits are required for the degree depending on applicants' qualifications.

Students will enroll in the appropriate course of studies listed below (Option A or B or C) based upon teaching experience, previous course work, and the teaching certificates they hold.

Students must complete the following education courses in the stated sequence: CBSE 7400T, 7401T, 7402T, 7403T. All required education courses and some education electives require permission for registration as indicated in the Schedule of Classes.

Option (A): 30 credits

Matriculation requirements

Applicants must hold a New York State Initial Certificate in Childhood Education (grades 1-6) or its equivalent.

Degree requirements: Thirty credits are required for the degree.

In addition to CBSE 7400T, 7401T, 7402T, and 7403T, the following courses are required:
(a) four of the following mathematics courses, or mathematics courses approved by the program adviser: Mathematics 7141T, 7142T, 7143T, 7144T, 7145T, 7146T;
(b) CBSE 7215X;
(c) one of the following elective education courses, or an education course approved by the program adviser: CBSE 7451X, 7671X, 7672X, 7207X, 7019T, 7684T, 7472X, 7545X, 7220X.

Option (B): 33 credits

Matriculation requirements

Applicants must hold a New York State Initial Certificate in Early Childhood Education (birth through grade 2) or its equivalent or a New York State Initial Certificate in Middle Childhood Education (generalist, grades 5-9) or its equivalent.

Degree requirements: Thirty-three credits are required for the degree.

In addition to CBSE 7400T, 7401T, 7402T, and 7403T, the following courses are required:

(a) four of the following mathematics courses, or mathematics courses approved by the program adviser: Mathematics 7141T, 7142T, 7143T, 7144T, 7145T, 7146T;
(b) CBSE 7215X;
(c) one of the following elective education courses, or an education course approved by the program adviser: CBSE 7451X, 7671X, 7672T, 7207X, 7019T, 7684T, 7472X, 7545X, 7503X;
(d) CBSE 7214T.

Option (C): 45 credits

This option leads to both New York State Initial and Professional Certificates in Childhood Education (grades 1-6) with a specialization in mathematics education.

Matriculation requirements

See "General matriculation requirements" for Childhood Education: Mathematics, above.

Degree requirements: Forty-five credits are required for the degree.

Students must complete CBSE 7205T, 7216X, 7440T, 7213T prior to taking other education courses required for the degree. Students must obtain departmental permission to register for these courses.
In addition to CBSE 7400T, 7401T, 7402T, and 7403T, the following courses are required:
(a) four of the following mathematics courses, or mathematics courses approved by the program adviser: Mathematics 7141T, 7142T, 7143T, 7144T, 7145T, 7146T;
(b) CBSE 7358T

M.S. in Education degree program: childhood education teacher (grades 1-6) - science and environmental education
HEGIS code 0802.00; SED program code 26826

The program in childhood education prepares teachers of children in first through sixth grade for initial and/or professional certification in liberal arts, bilingual education, science and environmental education, and mathematics. Through collaborative action, teaching and research, we develop our students' capacities to create socially just, intellectually vital, aesthetically rich, and compassionate communities that value equity and excellence, access and rigor. We design our programs in cooperation with liberal arts and sciences faculties and in conjunction with local schools in order to provide our students with opportunities to develop the knowledge, proficiencies, and understandings needed to work with New York City's racially, ethnically, and linguistically diverse populations. Our program is unique in that our students become highly skilled in content and methodology courses, adept in diversified literacy skills, and have the ability to integrate pragmatic tools of technology, including free and interactive Web 2.0 tools such as blogs, wikis, and podcasts. Our reflective graduates are astutely aware of the digital divide and the need to use source ware (free software) so no child is left behind in the Information Age, and the need to produce globally competitive students regardless of their socioeconomic status.

Students will enroll in the appropriate course of studies listed below (Option A or B or C) based upon teaching experience, previous course work, and the teaching certificates they hold.

Option (A): Thirty (30) credits

The following program applies to students who hold a New York State Initial Certificate in Childhood Education (grades 1-6) or its equivalent. This program leads to a New York State Professional Certificate in Childhood Education (grades 1-6).

Matriculation requirements:

Applicants must hold a New York State Initial Certificate in Childhood Education (grades 1-6) or its equivalent.
Applicants must have a minimum undergraduate grade point average of 3.00 and a minimum grade point average of 3.00 in courses required for matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 650 on the paper-based test or 280 on the computer-based test or 114 on the internet-based test before being considered for admission.

Applicants who have not completed all the specific course requirements are given individual consideration and may be admitted with conditions, with the approval of the program head.

A minimum grade point average of 3.00 in graduate courses is required to maintain matriculation. Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures" of the Brooklyn College Bulletin of Graduate Programs.

Degree requirements: Thirty credits (30) are required for the degree.

Students must complete the following four courses:
Two of the following: CBSE 7213T, and/or SEED 7314X, and/or SEED 7324X;
CBSE 7320T or SEED 7320T; and CBSE 7321T or SEED 7321T;

Twelve (12) credits in any 7000-level course in General Science, Biology, Chemistry, Earth and Environmental Sciences or Physics;

Six (6) elective credits in education and/or computer science, and/or mathematics and/or art education and/or science, including general science; to be determined in consultation with and approval of the science education coordinator.

During the first semester, students must file a program of study approved by the program adviser. All courses in the childhood education degree sequence require departmental approval for registration.

Option (B): Thirty to thirty-three (30-33) credits

The following program applies to students who hold a New York State Initial Certificate in Early Childhood Education (birth through grade 2) or its equivalent, or a New York State Initial Certificate in Middle Childhood Education (grades 5-9) or its equivalent, or a New York State Initial Certificate in Special Subjects (all grades) or its equivalent. This program leads to a New York State Professional Certificate in Childhood Education (grades 1-6).

Matriculation requirements:

Students must hold a New York State Initial Certificate in Early Childhood Education (birth through grade 2) or its equivalent, or a New York State Initial Certificate in Middle Childhood Education (grades 5-9) or its equivalent, or a New York State Initial Certificate in Special Subjects (all grades) or its equivalent.

Applicants must have a minimum undergraduate grade point average of 3.00.
International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 650 on the paper -based test or 280 on the computer-based test or 114 on the internet-based test before being considered for admission.

A minimum grade point average of 3.00 in graduate courses is required to maintain matriculation.

Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures" of the Brooklyn College Bulletin of Graduate Programs.

Degree requirements: Thirty to thirty-three (30-33) credits are required for the degree.

Students must complete the following four courses:
Two of the following: CBSE 7213T, and/or SEED 7314X, and/or SEED 7324X;
CBSE 7320T or SEED 7320T; and CBSE 7321T or SEED 7321T;
The following courses are also required:

Twelve (12) credits in any 7000-level course in General Science, Biology, Chemistry, Earth and Environmental Sciences, and/or Physics; CBSE 7214T;

Six (6) elective credits in education and/or computer science, and/or mathematics and/or art education and/or science, including general science; to be determined in consultation with and approval of the science education coordinator.

During the first semester, students must file a program of study approved by the program adviser. All courses in the childhood education degree sequence require departmental permission for registration.

Option (C): Thiry to thirty-nine (30-39) credits

The following program applies to students who do not hold a New York State Initial Certificate in Early Childhood Education, Childhood Education, Middle Childhood Education, or Special Subjects or equivalent course work and teaching experience, or who are teaching but do not hold initial certification. This program leads to both New York State Initial and Professional Certificates in Childhood Education (grades 1-6).

Matriculation requirements:

Applicants must have a minimum undergraduate grade point average of 3.00.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 650 on the paper-based test or 280 on the computer-based test or 114 on the internet-based test, before being considered for admission.

A minimum grade point average of 3.00 in graduate courses is required to maintain matriculation.

Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures" of the Brooklyn College Bulletin of Graduate Programs.

Degree requirements: Thirty to thirty-nine (30-39) credits are required for the degree.

Students must complete the following four courses: CBSE 7205T; 7216X; 7440T, 7885T.

Students must complete the following six courses; . CBSE 7213T or 7300T; General Science 7030T or any GSCI 703X life science course; CBSE 7301T or SEED 7314T or SEED 7324T; CBSE 7471T or 7358T; and either two course sequence CBSE 7320T and CBSE 7321T, or SEED 7320T and SEED 7321T.

Six credits of the following:
Any 7000-level course in General Science, Biology, Chemistry, Earth and Environmental Sciences, and/or Physics; and CBSE 7671X or SEED 7671X.

During the first semester, students must file a program of study approved by the program adviser. All courses in the childhood education degree sequence require departmental permission for registration.

M.S. in Education degree program: teacher of students with disabilities generalist (grades 7-12) HEGIS code 0808; SED program code 31136 (Option A); 31137 (Option B)

This program is offered fully online.

Matriculation requirements

Applicants must present a minimum undergraduate scholastic index of 3.0. A minimum grade point average of 3.0 in graduate education courses is required to maintain matriculation. International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a minimum score of 650 on the paper-based test, or 280 on the computer-based test, or 114 on the internet-based test, before being considered. For graduate studies.

Applicants must present evidence of six credits of prior upper division undergraduate or graduate work in each of four areas: humanities, including English; social sciences; mathematics; physical and/or life sciences.

Applicants are required to demonstrate written proficiency in English and must submit three appropriate letters of recommendation.

Applicants are interviewed and required to demonstrate written proficiency in English during the interview process

Applicants are admitted to this program only for the fall semester. Students should note additional requirements found at the beginning of this section as well as in the sections "Admissions" and "Academic Regulations and Procedures" in the Graduate Bulletin.

Option A: 33 credits

This option is for candidates who do not possess Transitional B Alternative Certification Certificates.

Thirty-three credits are required for the degree.
33 credits in the following courses:

Students must complete 21 credits in the following education courses: CBSE 7674T, 7676T, 7678T,7664T, 7657T, 7659T, 7503 or SEED 7503; and 12 credits in graduate liberal arts and sciences courses.

Students may be counseled to take CBSE 7699 and/or CBSE 7681 in addition to these courses.

In addition, students must complete a research project under advisement of a faculty member in Education - CBSE 7657T.

Option B: 33 credits

This option is candidates who qualify for a New York State Transitional B Certificate as a Teacher of Students with Disabilities Generalist (7-12). Option B is consigned to candidates sponsored by entities such as the New York City Teaching Fellows program.

Thirty-three credits are required for the degree.
33 credits in the following courses:

Students must complete 21 credits in the following education courses: CBSE 7674T, 7676T, 7678T,7664T, 7657T, 7659T, 7503 or SEED 7503;
and 12 credits in graduate liberal arts and sciences courses.

Candidates will also be required to register for SEED 6002T, the course which provides for onsite supervision, as required for NYS Transitional B Certificate holders.

In addition to these courses, candidates must complete a research project under advisement of a faculty member in CBSE 7657T.

After a student completes approximately 12 credits, the faculty members review the students' progress and potential and recommend continuation or withdrawal. This evaluation is based on criteria described in the "Program Statement of Expectations" made available to students when they enter the program.

Students must maintain a cumulative grade point average of at least 3.0(B). A student who earns 3 credits of a B- or below will be advised based on their performance and receive consultation about next steps required for completing a M.S. in Education in this program. After the consultation, students will continue to be evaluated to assess their completion of requirements for the program. A student who earns 6 credits of a B- or below will not be awarded an M.S. in Education in this program.

M.S. in Education degree program: teacher of students with disabilities in childhood education (grades 1-6)
HEGIS code 0808; SED program code 26729

The graduate program in special education prepares candidates to work in schools and other educational settings that serve individuals with disabilities and their families. Candidates are provided experiences in varied educational settings that prepare them to work in culturally and linguistically diverse urban school settings. A range of 30-45 credits is required. The number of credits and their sequence are determined by the candidate's previous teacher preparation.

Applicants are admitted to this program only in the fall semester. This program is offered fully online.

Matriculation requirements

Applicants must complete the on-line Graduate Admission Application with listed Supporting Documents [see above]. All applicants attend group interviews. Applicants are interviewed and required to demonstrate written proficiency in English during the interview process.

Applicants must present a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate education courses is required to maintain matriculation. International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a minimum score of 650 on the paper-based test or 280 on the computer-based test or 114 on the internet-based test before being considered for admission.

Applicants who do not meet these standards may be considered for admission based on other evidence of high capacity for graduate studies.

Applicants must have successfully completed a New York State Initial Certificate in one of the following New York State approved teacher certification areas:
a) early childhood education,
b) childhood education,
c) special certification; or have a baccalaureate degree in a liberal arts and sciences major, or 36 credits in a liberal arts and sciences concentration and demonstrated undergraduate preparation in English, science, mathematics, the social sciences and foreign language or qualify for a New York State Transitional B Certificate as a Teacher of Students with Disabilities in Childhood Education.

Applicants are required to demonstrate written proficiency in English.

Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures."

Degree requirements

Thirty or 33 or 45 credits are required for the traditional and bilingual options; there are also two alternative options of 39 and 44 credits for the degree. The courses of study and credit options are determined by previous course work, teaching experience, and the certificates that the applicants have.

During the first term students in all options (30, 33, or 45 credits) must file a program of study approved by the head of the Program in Teaching Students with Disabilities in Early Childhood and Childhood Education.

Option A: 30 credits

This option is for candidates who have an Initial Certificate in one of the New York State approved teacher certification areas and an Initial Certificate in Teaching Students with Disabilities.

Candidates complete 15 credits in the following courses: CBSE 7676T, 7677T, 7679T, 7680T, and 7657T; and 6 credits in elective courses in teaching students with disabilities. The remaining 9 credits consist of CBSE 7405T, or 7440T or 7693T, 7203T or 7205 and 7300T or 7305T with approval from program heads of the Programs in Childhood Education: Liberal Arts, Childhood Education: Science and Environmental Education, and Childhood Education: Mathematics.

Candidates are required to complete a research project under advisement of a faculty member in CBSE 7657T).

Option B: 33 credits

This option is for candidates who have an Initial Certificate in one of the New York State approved teacher certification areas, but who do not have certification in teaching students with disabilities in grades 1-6.

Candidates must complete 33 credits in the following sequenced courses, which should be taken in this order: CBSE 7674T and 7672T; 7676T and 7678T; 7679T and 7664T; 7677T and 7680T; 7675T and 7657T; and CBSE 7681T, Seminar and Student Teaching: Students with Special Needs.

Candidates must complete at least 50 hours of supervised field experience and at least 20 days of student teaching (teaching students with disabilities in childhood). In addition, candidates must complete a research project under advisement of a faculty member in CBSE 7657T.

Option C: 45 credits

This option is for candidates who have a baccalaureate degree in a liberal arts and sciences major, or 36 credits in a liberal arts and sciences concentration and demonstrated undergraduate preparation in English, science, mathematics, the social sciences, and foreign language, and do not possess Initial Certification in any teacher certification area.

Candidates must complete 45 credits in the following courses: CBSE 7205T, 7679T, 7440T, 7213T, 7674T, 7672T, 7676T, 7678T, 7664T, 7677T, 7680T, 7675T, 7657T, and CBSE 7688T Seminar and Practicum in Special Education: Students with Special Needs.

Candidates must complete at least 100 hours of supervised field experience and at least 40 days of student teaching. In addition candidates must complete a research project under advisement of a faculty member in CBSE 7657T.

Option D: 30 credits

This option is for candidates who have a baccalaureate degree in a liberal arts and sciences major, or 36 credits in a liberal arts and sciences concentration and demonstrated undergraduate preparation in English, science, mathematics, the social sciences, and foreign language who are teaching or have secured a position teaching students with special needs and qualify for New York State Alternative Certification as a Teacher of Students with Disabilities in Childhood Education or holding such certification. Students should take the following courses: CBSE 7653T, 7657T, 7659T, 7664T, 7674T, 7676T, 7677T, 7678T, 7679T, and SEED 7503X or CBSE 7503. Candidates will also be required to register for SEED 6002T, the course which provides for onsite supervision, as required for NYS Transitional B Certificate holders.

Option D is consigned to candidates sponsored by entities such as the New York City Teaching Fellows program. In addition, candidates must complete a research project under advisement of a faculty member in CBSE 7657T. Candidates may qualify for additional certification in Childhood 1-6 with additional courses in Childhood teaching methods. See advisor for information.

Option E: 44 credits

This option is for candidates who have a baccalaureate degree in a liberal arts and sciences major, or 36 credits in a liberal arts and sciences concentration and demonstrated undergraduate preparation in English, science, mathematics, the social sciences, and foreign language who are teaching or have secured a position teaching students with special needs and qualify for New York State Alternative Certification as a Teacher of Students with Disabilities in Childhood Education or holding such certification. Candidates take the following courses in the recommended order: CBSE 7653T, 7674T, 7679T, 7440T, 7672T, 7205T, 7213T, 7676T, 7677T, 7678T, 7680T, 7657T, 7664T and 7695T, 7696T, 7697T, and 7698T Inclusive Teaching Practicum.

In addition, candidates must complete a research project under advisement of a faculty member in CBSE 7657T.

Option F (Childhood-Bilingual): 45 credits

This option is for candidates who hold an Initial Certificate in one of the New York State approved teacher certification areas and an Initial Certificate in Teaching Students with Disabilities.
Candidates complete 15 credits in the following courses: CBSE 7676T, 7677T, 7679T, 7681T, and 7657T; and 6 credits in elective courses in teaching students with disabilities. The course of study includes a 15-credit bilingual extension consisting of courses in bilingualism, research, methodology, and multicultural education and additional credits of student teaching in the classroom: CBSE 7350T, 7351T, 7353T, 7355T and PRLS 7145X. The 9 credits consist of CBSE 7405T, or 7440T or 7693T, 7203T or 7205T and 7300T or 7305T with approval from program heads of the Programs in Childhood Education: Liberal Arts, Childhood Education: Science and Environmental Education, and Childhood Education: Mathematics.

Students must complete at least 50 hours of supervised field experience and at least 20 days of student teaching (teaching students with disabilities-bilingual). In addition, students must complete a research project under advisement of a faculty member in CBSE 7657T.

Option G (Childhood-Bilingual): 45 credits

This option is for candidates who have an Initial Certificate in one of the New York State approved teacher certification areas, but who do not have certification in teaching students with disabilities in grades 1-6.
Students must complete 30 credits in the following sequenced courses: CBSE 7674T, 7672T, 7677T and 7679T, 7675T, 7657T and 7678T, 7664T and 7676T, and 7681T. The course of study includes a 15-credit bilingual extension consisting of courses in bilingualism, research, methodology, and multicultural education and additional credits of student teaching in the classroom: CBSE 7350T, 7351T, 7353T, 7355T and PRLS 7145X.
Students must complete at least 50 hours of supervised field experience and at least 20 days of student teaching (teaching students with disabilities-bilingual). In addition, students must complete a research project under advisement of a faculty member in CBSE 7657T.

After a student completes approximately 12 credits, the faculty members review the students' progress and potential and recommend continuation or withdrawal. This evaluation is based on criteria described in the "Program Statement of Expectations" made available to students when they enter the program.

Students must maintain a cumulative grade point average of at least 3.0(B). A student who earns 3 credits of a B- or below will be advised based on their performance and receive consultation about next steps required for completing a M.S. in Education in this program. After the consultation, students will continue to be evaluated to assess their completion of requirements for the program. A student who earns 6 credits of a B- or below will not be awarded an M.S. in Education in this program.

M.S. in Education degree program: teacher of students with disabilities in early childhood education (birth-grade 2)
HEGIS code 0808; SED program code options A & B 26726, Trans B option C 26728

The graduate program in special education prepares candidates to work in schools and other educational settings that serve individuals with disabilities and their families. Candidates are provided experiences in varied educational settings that prepare them to work in culturally diverse urban school settings. The number of credits and their sequence are determined by the candidate's previous teacher preparation.

Applicants are admitted to this program only for the fall semester. This program is offered fully online.

Matriculation requirements

Applicants must obtain and file an application form in the program office in addition to the regular college admissions form. Applicants are interviewed and must submit three appropriate letters of recommendation.

Applicants must present a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate education courses is required to maintain matriculation. International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a minimum score of 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test, before being considered for admission.

Applicants who do not meet these standards may be considered for admission based on other evidence of high capacity for graduate studies.

Applicants must have successfully completed a New York State Initial Certificate in one of the following New York State approved teacher certification areas:
a) early childhood education,
b) childhood education,
c) middle childhood education,
d) adolescence education,
e) special subjects, or
f) teacher of students with speech and language disabilities, or the equivalent preparation and/or certification.

Applicants are interviewed and required to demonstrate written proficiency in English.

Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures."

Degree requirements

Thirty or 33 credits are required for the degree. Students take different education courses and credit options depending on their previous course work, teaching experience, and the certificates they hold.
During the first term students in either option (30 or 33 credits) must file a program of study approved by the head of the Program in Teaching Students with Disabilities in Early Childhood and Childhood Education.

Option A: 30 credits

This option is for students holding an Initial Certificate in one of the New York State approved teacher certification areas and an Initial

Certificate in Teaching Students with Disabilities.
Students complete 15 credits in the following courses: ECAE 7115, ECAE 7104T or CBSE 7665T, CBSE 7113T, 7680T, and 7656T; and 6 credits in elective courses in teaching students with disabilities. The remaining 9 credits consist of ECAE 7108T, 7109T, and 7116T with approval from program heads of the Program in Early Childhood Education. Students are required to complete an independent research project under advisement of a faculty member in CBSE 7656T.

Option B: 33 credits

This option is for students holding an Initial Certificate in one of the New York State approved teacher certification areas, and having had no course work in teaching students with disabilities and no student teaching experience with students with disabilities in Birth - Grade 2. Students must complete 33 credits in the following courses, which should be taken in this order: CBSE 7674T and 7672T; CBSE 7665T or ECAE 7104T and ECAE 7115T; CBSE 7113T and 7663T; 7678T and 7680T; 7675T and 7656T; and CBSE 7681T, Seminar and Student Teaching: Students with Special Needs.
Students must complete at least 50 hours of supervised field experience and at least 20 days of student teaching (teaching students with disabilities in early childhood). In addition, students must complete a research project under advisement of a faculty member in CBSE 7656.

Option C: 30 credits

This option is for candidates who have a baccalaureate degree in a liberal arts and sciences major, or 36 credits in a liberal arts and sciences concentration and demonstrated undergraduate preparation in English, science, mathematics, the social sciences, and foreign language who are teaching or have secured a position teaching students with special needs and qualify for New York State Alternative Certification as a Teacher of Students with Disabilities in Early Childhood Education or holding such certification. Students should take the following courses: CBSE 7656T, 7672T, 7663T, 7674T, 7675, 7665T, 7113T, 7678T, 7683 and ECAE 7115T. Candidates will also be required to register for CBSE/SEED 6002T and/or CBSE 6003T, the course which provides for onsite supervision, as required for NYS Transitional B Certificate holders.
Option C is consigned to candidates sponsored by entities such as the New York City Teaching Fellows program or the New York City Teaching Collaborative. In addition, candidates must complete a research project under advisement of a faculty member in CBSE 7656T. Candidates may qualify for additional certification in Early Childhood Birth-Grade 2 with additional courses in Early Childhood teaching methods. See advisor for information.

Advanced certificate in bilingual education
HEGIS code 0899; SED program code 31826

This advanced certificate provides a New York State Bilingual Extension for graduate students who already possess an initial or professional certificate (from Birth-Grade 12 including teachers of Students with Disabilities and for Teachers of Students with Speech and Language Disabilities). This program of study prepares candidates to teach in bilingual settings where two languages are used as the mediums of instruction. The advanced certificate provides candidates with a solid foundation in the theory and practice of bilingual education; courses include the following topics: bilingualism, research, methodology, biliteracy, content instruction in bilingual settings and multicultural education.

The course seminars/lectures for the program are online; courses may require in-person fieldwork/student-teaching bilingual settings.

Applicants must have a minimum undergraduate grade point average of 3.00.
Interviews and writing samples in English and the language other than English are required for admission to the Advanced Certificate for Bilingual Extension (Birth-Grade 12)

Applicants must demonstrate proficiency in both English and in a language other than English (the language in which they seek the extension). Proficiency of the language other than English is determined by the Bilingual Education Assessment (BEA) which is offered by New York State.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test, before being considered for admission.

Degree requirements: Fifteen credits are required for the degree.

The Bilingual Extension consists of 15 credits. Required courses, which may be taken in any order, are listed below. This sequence of courses is applicable for candidates who already possess a certificate, except Teachers of Students with Speech and Language Disabilities (TSSLD) students.

7350T, 7351T, 7353T, and 7355T; and Puerto Rican and Latino Studies 7145X.

TSSLD students must complete the following sequence of courses:
CBSE 7350T, 7351T, 7353T, Communications Arts, Sciences, and Disorders 7535/CBSE 7360, and Communications Arts, Sciences, and Disorders 7536/CBSE 7359.

All courses in the childhood bilingual education programs require departmental permission for registration.

Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures" of the Brooklyn College Bulletin of Graduate Programs.

Advanced certificate program in autism spectrum disorders
HEGIS code 0808; SED program code 31638

With the prevalence of autism increasing in recent years from 1 in 1000 to 1 in 54*, learning to work with children with autism spectrum disorders has become important to professionals in many fields, including:
Speech-language pathology
Psychology
Education
Occupational Therapy
Physical Therapy

Skills in working with individuals on the spectrum are critical not only to people already in these fields, but also to those seeking to enter these fields.

The Brooklyn College advanced certificate program in Autism Spectrum Disorders was the first program in New York that has a cross-paradigm perspective to working with individuals on the spectrum. Students enrolled in the program learn about the strengths and weaknesses of different approaches that are available for individuals on the spectrum and learn with those from different fields and disciplines.

Students with either bachelor's or master's degrees can apply to the 15-credit ASD certificate. The program can be completed in one year (with a fall, spring, and summer sequence), and can be applied towards continuing education credits and salary increments in the Department of Education. Classes are scheduled in the early evening for the convenience of working professionals.

The coursework and practicum opportunities will reflect a range of approaches available for children on the autistic spectrum, including applied behavioral analysis, both discrete trials and natural learning paradigms, and developmental social-pragmatic approaches. Students will participate in lecture, discussion, observation, and practice, incorporating a range of philosophical, educational, and clinical paradigms. Students from varying disciplines, including education, speech-language pathology, school psychology, and occupational and physical therapy will have the opportunity to train and work collaboratively with future colleagues.

*Centers for Disease Control and Prevention, 2021

Program description

Provides interdisciplinary foundational and advanced knowledge in the area of autism spectrum disorders incorporating a range of philosophical, educational, and clinical paradigms, including applied behavioral analysis, discrete trials and natural learning paradigms, and developmental social-pragmatic approaches.

Matriculation requirements

Applicants must have completed an undergraduate or graduate degree in special education, speech-language pathology, or a related field. Applicants must present coursework in language acquisition and child development. Additional coursework may be required to meet any matriculation deficiency.

An applicant must have earned a baccalaureate degree with a grade point average of at least 3.0 in the undergraduate major, and a minimum overall grade point average of 3.0.

General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Advanced certificate requirements (15 credits)

Fifteen credits of coursework completed with a grade point average of B or better are required for the advanced certificate. No more than one course with a grade below B may be offered toward the completion of the certificate requirements. Students must complete all of the following courses:
- CASD 7317X/CBSE 7685T: Introduction to Autism Spectrum Disorders
- CASD 7319X/CBSE 7686T: Speech, Language, and Communication in Individuals on the Autistic Spectrum
- CBSE 7666T/CASD 7316X: Special Issues in Education: Classroom and School-wide Learning Environments
- CBSE 7691T/CASD 7320X: Classroom Organization, Management, and Curriculum Modifications for Teaching Students with Autism Spectrum Disorders
- CBSE 7682T/CASD 7394: Seminar in Teaching Students on Autism Spectrum Disorders

Courses

College-verified fingerprint clearance may be required for some School of Education courses. Refer to the School of Education website, Fingerprint Verification instructions at https://www.brooklyn.edu/soe/certification/fingerprints/

CBSE 6000X Experiencing Education: Individuals and Communities
45 hours; 3 credits
Comparative analysis of individual experience and social expectations of schooling and higher education in the United States and other countries; autobiographical, descriptive, and critical accounts; comparative readings in history and philosophy of education; contemporary issues and daily life in schools.

Prerequisite: permission of the coordinator for secondary education.

CBSE 6001X Skillful Teaching: Strategies for Effective Instruction and Classroom Management
45 hours; 3 credits
Strategies to assist the in-service teacher in the application of principles of teaching that contribute to student achievement and appropriate student behavior, using the resources of the school and community.

CBSE 6002T Issues and Strategies in Education
15 hours; 1 credit
Timely issues, strategies, and techniques of modern educational practice. Course content varies from term to term. This course is not creditable toward the degrees in education. May be repeated for credit.

Prerequisite: license or certificate to serve as teacher, paraprofessional, or supervisor in day care center, kindergarten, or elementary or secondary school.

CBSE 6003T Issues and Strategies in Education
15 hours; 1 credit
Timely issues, strategies, and techniques of modern educational practice. Course content varies from term to term. This course is not creditable toward the degrees in education.

CBSE 6200X Schools and Communities: The Societal Context of Schooling and the Teaching of Social Studies
30 hours lecture, 30 hours laboratory; 3 credits
Examination of the historical, philosophical, social, political, and cultural contexts of schooling and the roles of schools in a multicultural urban setting. Making the insights of history and the social sciences accessible to children through the social studies curriculum. Strategies for promoting active learning of historical and social science knowledge, processes, and understandings in children in grades PreK-6.

Prerequisite: permission of the department.

CBSE 6201X Introduction to Literacy and the Reading/Writing Process
30 hours lecture, 30 hours laboratory; 3 credits
Approaches to teaching reading/writing; perspectives from theories of psycholinguistics; emergent literacy in the pre-school years; methods and materials for teaching reading/writing as integrated processes in grades K-6; integration with content area subjects; adaptation to meet special needs of children; assessment; supervised field experiences with children. (Not open to students who are enrolled in or have completed Childhood and Special Education 7023T.)

Prerequisite: a course in literature.

CBSE 6202X Teaching Mathematics in the Elementary School
30 hours lecture, 30 hours laboratory; 3 credits
Approaches to teaching mathematics; perspectives from theories of cognitive development; methods and materials for teaching key concepts, skills, and thinking processes in mathematics, grades PreK-6; analysis of curricula; integration of mathematics with other subject areas; adaptation of instruction to meet special needs of students; assessment; supervised field experiences with children.

Prerequisite: Mathematics *1401 or a 3-credit mathematics course.

CBSE 6203X Models of Teaching Science in the Elementary Classroom
30 hours lecture, 30 hours laboratory, including field experience; 3 credits
Exploration of effective teaching practices in science; analysis of the connections among curriculum, instruction, and assessment of elementary and early childhood science. Science as a way of knowing the world and a tool for problem solving. Examination and evaluation of cognitive and affective foundations of materials from national curriculum projects; methods and materials for teaching key concepts, skills, and thinking processes in science, grades PreK-6. Integration of science with other subject areas; adaptation of instruction and assessment to meet special needs of students. Issues of gender bias in science teaching. Supervised field experience.

Prerequisite: a 3-credit science course.

CBSE 6204X Integrated Teaching Methods and Student Teaching in Elementary and Early Childhood Grades
30 hours seminar, 240 hours student teaching; 6 credits
Instructional methods for integrating the teaching of communication arts, social studies, science, and mathematics in the elementary and early childhood grades. Development and analysis of curricular materials for urban children of varying cultural backgrounds. Application of the principles of teaching to all aspects of the curriculum. Instructor's approval for site and schedule of hours required.

Prerequisite: Completion of methods courses in communication arts, social studies, science, and mathematics.

CBSE 7001T Introduction to Foundations of Literacy Instruction
45 hours; 3 credits
Concepts and discourses in educational foundations of literacy. Study of the teacher's role, focus on interactions of people and environments in an educational setting. Topics in educational foundations provide concepts for examining teacher and pupil diversity and teacher role. History of literacies, study of literacy instruction and relationship to diverse students; literacy as

related to interdisciplinary curriculum. Organizing and teaching of the language arts in the childhood classroom.

Corequisite: Childhood and Special Education 7380T.

CBSE 7003T Historic Innovations in Educational Method and Curriculum
30 hours plus independent work; 3 credits
Critical study of major historical developments in educational method and curriculum. Conditions and motivations that relate to curriculum change and development of method.

CBSE 7004T Education and Culture in the United States

45 hours; 3 credits
Analysis of the implication for education of major cultural developments in the United States today. Actual and potential role of the school considered from cultural perspectives.

CBSE 7005X Educational Programs and Practices in Comparative Perspective
30 hours plus independent work and conference; 3 credits
Comparative analysis of curriculum practices and teaching methods in selected countries. Innovations, experiments, and other aspects of special interest. Evaluation of foreign educational research. Trends in the international coordination of school curricula.

CBSE 7006X International Dimensions in American School Curricula
30 hours plus independent work and conference; 3 credits
Analysis of the effectiveness of school programs, practices, and materials in developing bases for international understanding. Emphasis on problems of nationalism, ethnocentrism, and prejudice. Analysis and use of community resources for international features of the curriculum.

CBSE 7007T Learning Theory and the Education Process
45 hours; 3 credits
Critical exposition, in light of recent research, of present developments in learning theory and their import for education. Examination of the psychological approach to such representative educational problems as drill, rewards, punishment, meaning, organization, motivation, programmed learning.

Prerequisite: a course in educational psychology and a course in child or adolescent psychology and a course in an additional area of psychology.

CBSE 7008T Education and Theories of Mind

30 hours plus independent work; 3 credits
Logic of learning (believing, knowing, thinking, understanding). Analysis of the concept of learning in educational theory and practice. Implications of the philosophy of mind for the evaluation of teaching and learning.

CBSE 7009T Programmed Instruction

30 hours plus conference and independent work; 3 credits
Critical evaluation of the theories underlying programmed instruction. Examination of research findings concerning the effectiveness of teaching machines, programmed texts, and related devices. Practice in the preparation of programmed materials.

CBSE 7010X The Use and Interpretation of Intelligence, Diagnostic, and Aptitude Tests
30 hours lecture plus independent projects and conferences; 3 credits
Evaluation of tests commonly used for measurement of intelligence, personality, achievement, individual interests, and special aptitudes. Study of procedures for construction, selection, and interpretation of standardized testing materials and of computer-referenced testing are considered in relation to needs of members of the class. Class and individual student projects appropriate to subject specialization of students.

Prerequisite or corequisite: a course in student teaching.

CBSE 7011X Measurement and Evaluation in Teaching

30 hours lecture plus independent projects and conferences; 3 credits
Applied course designed for teachers, and subject and curriculum specialists. Participants plan, develop, try out, and evaluate procedures for assessing student performance. Procedures covered include criterion-referenced tests, formative and summative evaluation techniques, evaluation through the curriculum, and applications of microcomputers to classroom assessment. Class and individual projects appropriate to subject specialization of students.

CBSE 7012T Supervised Practicum in Teaching

15 hours, 1 credit
College supervised internship for 14 weeks of full time teaching with Transitional B certification or Internship license in teaching or in private schools. Informal evaluations consist of observation of course activities and formal observations, including lesson planning and lesson implementation, are conducted by college supervisors in the field. Alignment of teacher practices with New York State Teaching Standards. May be repeated for up to 6 credits.

Prerequisite: Full time employment in teaching and departmental permission.

CBSE 7013X Mental Hygiene and Behavior Problems

45 hours; 3 credits
Contributions of mental hygiene to understanding dynamics of behavior. Dynamic aspects of personality development. Typical behavior problems in school, home, and community. Clinical methods in diagnosing and treating personality difficulties. Study and evaluation of typical case materials. Teacher's role in dealing with behavior problems.

CBSE 7015T Language Structure and Development in the Middle and Secondary School and Their Relationship to Literacy
45 hours lecture; 3 credits
Analysis of recent research findings in the development and use of verbal and nonverbal communication skills. A study of the structure of the English language with particular attention to concept development and figurative language. Study of the effects of dialect, second language learning, and language disabilities on the reading, writing, speaking, and listening skills of students in grades 5 through 12.

CBSE 7017T Contemporary Thought and Education

30 hours plus independent work; 3 credits
Original source materials are used to develop a philosophical perspective characteristic of the twentieth-century mind that bears on educational theory and practice.

CBSE 7018T Sexism in American Education

45 hours; 3 credits
Nonsexist child rearing; sex stereotyping and personal development; child-rearing practices; societal attitudes toward men and women; the role of the media and linguistic sexism. The schools and sex roles, "Hidden Curriculum"; courses, books, materials and toys, resources for nonsexist education. Nonsexist career preparation and educational leadership; creating options, nonsexist counseling; role of community centers and women's groups; anatomy of change; legislation; feminist studies for men and women.

CBSE 7019T Moral Development and Moral Education

45 hours; 3 credits
Cognitive development and moral development; perspective taking, social development and delinquency; moral development and guidance; presocial behavior: altruism, caring, kindness; fostering moral growth in classrooms: science, literature, social studies; children's rights and moral education.

CBSE 7021T Diagnosis and Correction of Reading Difficulties

45 hours; 3 credits
Symptoms and causes of reading disabilities. Use and interpretation of achievement tests, diagnostic instruments, and alternative assessments. Materials and methods of remedial instruction. Preparation of teacher-made reading materials. Work with children and case studies.

Prerequisite or corequisite: Employment or certification as a teacher and Childhood and Special Education 7023T or its equivalent.

CBSE 7022X Reading Science Findings for 3rd-12th Grade

45 hours, 30 hours supervised field experience; 3 credits
Theoretical and methodological approaches to fostering literacy in 3rd-12th grade students, including multilingual learners and children with special needs. Study of relationships between speaking, reading and writing are included. Current research on development and teaching of literacy from the field of reading science is the focus. Fieldwork includes 30 hours of training and implementation in a research- and evidence-based literacy program.

CBSE 7023T Principles and Emerging Practices in Reading Instruction in the Elementary School

30 hours plus independent reading and fieldwork; 3 credits
Study and assessment of current research and experimentation in reading instruction. New developments in principles of learning, compilation and use of materials, group and individual work, the use of programmed materials and self-instructional devices, and techniques of teaching and evaluation. Appraisal of representative experimental programs.

Prerequisite: Childhood and Special Education 7043T.

CBSE 7026X Seminar and Applied Research in Reading

45 hours; 3 credits
Advanced concepts of educational research, including design of research proposals and data collection. Application of techniques of research using an integrative approach of quantitative methods supported by qualitative findings to study the acquisition of literacy. Consultation and application in field settings. Design and implementation of an original research project. This is the same course as ECAE 7381X.

CBSE 7027X Workshop in School Curriculum Development, Experimentation, and Evaluation

45 hours; 3 credits
Investigation of newer practices and experimentation in selected areas of school curriculum. Students are expected to plan and/or implement a practical project applicable to their school situation.

CBSE 7028T Improvement of Teaching: Behavior Modification and Whole-Class Teaching

45 hours; 3 credits
Teaching models and strategies to extend the in-service teacher's conceptual scheme of teaching. Self-analysis systems are explored and applied by means of feedback mechanisms. Practice in behavior modification and whole-class teaching skills.

CBSE 7029T Improvement of Teaching: Open Classroom, Individual, and Small-Group Teaching

45 hours; 3 credits
Continuation of Childhood, Bilingual and Special Education 7028T. Practice with models and strategies applicable to open classroom, individualized, and small-group teaching.

CBSE 7037X Teaching Lexicography and Vocabulary across the Curriculum

30 hours lecture, 30 hours laboratory; 3 credits
Methods and techniques of vocabulary improvement in the classroom setting. Application to classroom practice of the study of the history of the English language, the science of lexicography, and principles of etymology and semantic change. Analysis of selected words and word roots from subject areas taught throughout secondary schools with special emphasis on vocabulary development, the nature of language, and the relationships among languages.

CBSE 7038X Special Topics in Education

45 hours; 3 credits
Selected topics or recent advances in education that reflect current interests, professional needs, and educational problems of teachers and other school personnel. Topics vary from term to term.

Prerequisite: license or certificate to serve as teacher, paraprofessional, or supervisor in day care center, kindergarten, elementary, or secondary school. Additional prerequisites may be required for a specific topic.

CBSE 7039X Special Topics in Education

45 hours; 3 credits
Selected topics or recent advances in education that reflect current interests, professional needs, and educational problems of teachers and other school personnel. Topics vary from term to term.

Prerequisite: License or certificate to serve as teacher, paraprofessional, or supervisor in day care center, kindergarten, elementary, or secondary school. Additional prerequisites may be required for a specific topic.

CBSE 7040X Special Topics in Education

45 hours; 3 credits
Selected topics or recent advances in education that reflect current interests, professional needs, and educational problems of teachers and other school personnel. Topics vary from term to term.

Prerequisite: License or certificate to serve as teacher, paraprofessional, or supervisor in day care center, kindergarten, elementary, or secondary school. Additional prerequisites may be required for a specific topic.

CBSE 7043T Workshop in the Language Arts

45 hours; 3 credits
Problems in teaching language arts: reading and oral and written communication. Attention is given to the particular needs and interests of students, with provision for individual and group study.

CBSE 7101T Child Development in Social, Cultural, and Educational Contexts

30 hours plus conference; 3 credits
Advanced seminar that focuses on childhood development from birth through grade two. Childrearing and early education in diverse cultural contexts, with a focus on urban settings. Theoretical approaches to understanding child development; parental ethnotheories about the structuring of everyday social and educational experiences for the acquisition of culture-specific social and cognitive skills in young children, including English language learners and children with special needs. Culture and early childhood education practice from a comparative perspective; teacher-child and peer relationships; educational policies.

CBSE 7113T Curriculum Modifications for Young Children with Special Needs

45 hours; 3 credits
Special programs, modification of curriculum in the content areas, life skills, teaching strategies and approaches designed to meet the individual and group needs of culturally and linguistically diverse young children with special needs including giftedness, across the developmental spectrum in early education settings. Focus on family, community, and interagency partnerships; appropriate use of technology, including assistive technology; multiple assessment strategies. Field experiences in a variety of schools and community settings.

CBSE 7117T Theories and Practices in the Study of the Young Child's Progress

30 hours; 2 credits
Experimental development of informal situations in which the progress of individuals and/or groups may be assessed. Use of unstructured media in studying children's feelings and competencies. The place of standardized tests in the evaluation program. Survey of pertinent research and current literature. Practices in planning and carrying through small-scale evaluation projects.

CBSE 7200T Contextualizing Literacy Instruction: Teacher/Learner Interactions

45 hours; 3 credits
Concepts and discourses in educational foundations and human development as related to interdisciplinary curriculum; classroom application in childhood education with focus on literacy. Study of the teacher's role and impact upon diverse student learning; organizing and teaching of the language arts in the childhood classroom. Pedagogical implications of literacies.

Corequisite: an approved graduate course in English.

CBSE 7201T Seminar in Applied Theory and Research I

45 hours plus conference; 3 credits
Concepts and methods of educational theory and research. Application of techniques of research, with focus on classroom research and its impact on student learning, integrating instruction relevant to science inquiry and research technology. Formulation and development of a preliminary research project relevant to teaching and learning in childhood education.

CBSE 7202T Seminar in Applied Theory and Research II

45 hours plus conference; 3 credits
Introduction to concepts and methods of educational theory and research. Development and implementation of research project; with focus on classroom practices and impact on student learning; focus on current pedagogical inquiry, educational research, and innovative practices related to effective teaching in education, English language learners and students with special needs.

CBSE 7203T Advanced Study of Pedagogy and Curriculum in Childhood Education I

45 hours; 3 credits
Development, application, and implementation of curriculum based upon the theories and research findings studied and discussed in childhood education. Focus on advanced techniques of pedagogical practice, including aesthetic education, assessment and use of technology in childhood education, and the development of interdisciplinary curriculum in democratically modeled classrooms. Emphasis on integrating the social sciences into the social studies curriculum.

Corequisite: an approved course in the social sciences.

CBSE 7204T Advanced Study of Pedagogy and Curriculum in Childhood Education II

45 hours; 3 credits
Continuation of Childhood and Special Education 7203T. Development, application, and implementation of curriculum based on the theories and research findings in childhood education. Advanced pedagogical practice and interdisciplinary curriculum development; focus on learning and teaching mathematics in childhood education, including use of technology; English language learners and students with

special needs; national, state, and local curriculum standards and guidelines.

CBSE 7205T Social Discourses in Education: Integrating Social Sciences in Childhood Education
45 hours plus conference, 20 hours field experience; 3 credits
Implications for education of educational, social, historical, and political factors influencing urban schooling and exploration of the role of schools in a multicultural society. Consideration of the implications of the social and cultural contexts of integrating social sciences and humanities into the curriculum. Approaches to teaching, including English language learners and students with special needs. Analysis of recent research in social studies curricula, technology and education, and citizenship education.

CBSE 7206T Childhood and Adolescence in the Urban Community
30 hours plus independent work; 3 credits
Cultural, social, and economic composition of urban communities. Effects of social background on attitudes, behavior, and learning. Implication for guidance, especially in large urban areas. Fieldwork.

CBSE 7207X Multicultural Education

45 hours; 3 credits
Examines diverse cultures, in the broadest sense (race, class, ethnicity, language, and gender), that constitute American society. Similarities and differences of various cultures in the context of education. Examination of curriculum bulletins, textbooks, and journals. Development of materials for use in classrooms.

CBSE 7208T The Teaching of English to Language-Handicapped Children in Primary School
30 hours plus independent work and conference; 3 credits
Specific teaching problems at this level. Application of guiding principles and research findings in linguistics, methodology, psychology, and sociology as applied to the study of English. New media procedures. Evaluative instruments and practices. (Not open to students who are enrolled in or have completed ECAE 7208T or the equivalent)

CBSE 7209T The Teaching of English to Language-Handicapped Children in Upper Elementary and Early Secondary Grades
30 hours plus independent work and conference; 3 credits
Social, cultural, linguistic, and psychological problems of language-handicapped children. Integrating language learners into the regular classroom at various levels of linguistic development. Application of guiding principles and research to the teaching of English as a second language. Use of new media equipment. Appraisal procedures.

CBSE 7210T Human Relations Problems and Practices in Childhood Education
30 hours; 2 credits
Problems and practices in parent education, inter staff relations, and supervision of students and volunteer workers. Teacher's role in group discussion. Interviews and use of films. Survey of pertinent studies and current literature.

CBSE 7211T Teaching Literature for Children and Adolescents
30 hours plus independent work and conference; 3 credits
Planning balanced programs of reading, and school and library services. New media equipment and procedures in the use of books to study people and culture, places, science, historical heritage, biography. Interpretation of literature through art media.

Prerequisite: a course in methods and student teaching in early childhood education or elementary education or a course in methods and student teaching in English in secondary education; and a graduate workshop.

CBSE 7213T Teaching and Learning Science in Childhood Education
45 hours plus conference; 20 hours field experience; 3 credits
Introduction to research-validated models of teaching science to all students, including students with special needs and English language learners; classroom management; school-community relationships; individual and collaborative inquiry; reflective practice; analysis of national, state and local learning standards in science and technology; integrating technology into the classroom; developing, implementing and evaluating science curriculum in urban classrooms.

CBSE 7214T Childhood Education: Student Teaching Practicum
30 hours seminar; 150 hours or 20 days of supervised student teaching in Childhood Education grades; 3 credits
Supervised field work in teaching all aspects of the childhood education curriculum. Emphasis on the development of an interdisciplinary approach to teaching children from diverse backgrounds, those who are English language learners, and those with special needs. Integration of instructional technology, interdisciplinary curriculum and topics required by New York State standards in Professional certification. Student teaching is 14 weeks in length, full-time, in an educational setting, and in alignment with the daily schedule and annual calendar of that educational setting.

Prerequisite: Initial Certification in Early Childhood Education or in a Special Subject.
An application process is required for student teaching. Completed application must be submitted and accepted a semester prior to the beginning of your student teaching placement. Only accepted students will be given permission to register for student teaching. Fingerprint clearance required.

CBSE 7215X Introduction to Technology in Childhood Education
30 hours, 30 hours laboratory; 3 credits
Introduction to educational uses of technology. Definition and development of computer literacy. Evaluation and use of software in reading, writing, science, social studies, and mathematics. Media, calculators, and other instructional tools. The internet as a resource for teaching and learning. Project-based instruction. Roles of technology in classrooms and in relation to school curricula, and the consequent new roles for teachers. Survey of relevant education research.

Prerequisite: 12 credits in education and permission of the program head of Childhood and Special Education: Mathematics.

CBSE 7216X Literacy: Issues and Analysis

45 hours plus conference; 20 hours field experience; 3 credits
Review and analysis of research in the teaching and learning of literacy. Application of reading and writing, learning theories and research findings in teaching children of varying abilities and in interdisciplinary language arts curricula in childhood education. Pedagogy and instructional practices, focus on English language learners and students with special needs; literacy development and learning process; formal and informal assessment.

CBSE 7217T Humane Education

45 hours; 3 credits
Connections between human rights, animal welfare/animal rights and their links to environmental preservation. Develop compassionate, responsible and fair-minded individuals integral to an evolving and just society. Current and emerging national and international concerns for children, families, schools, communities and societies. Focus on critical thinking and ethical decision-making and preventive measures through curriculum development, education, awareness, and advocacy.

CBSE 7300T Methodology in Childhood Science and Environmental Teaching and Learning I
45 hours plus 15 hours conference and fieldwork; 3 credits
Implementation, adaptation, and assessment in practice of research validated science curricula for childhood education. Emphasis on life and environmental science. Approaches to integrating science in teaching and learning language arts, humanities and social sciences; children's science and environmental literature; development of oral and written communication skills in the context of childhood science inquiry. Adapting pedagogy to the needs of English language learners and students with diverse learning styles. Examination of environmental ethics and issues. Field trips will be required.

Corequisite: General Science 7030T.

CBSE 7301T Methodology in Childhood Science and Environmental Teaching and Learning II
45 hours plus 15 hours conference and fieldwork; 3 credits
Continuation of Childhood and Special Education 7300T. Methods of integrating science with math and technology in childhood education with an emphasis on physical and earth science. Developing quantitative and critical thinking skills. Design and assessment of inquiry- and problem-based curriculum integrating mathematics. Adapting methods to the needs of students with disabilities, and students with diverse learning styles. Purposes and types of student assessment. Field trips will be required.

Prerequisite: Childhood and Special Education 7300T.

CBSE 7305T Science Instruction Beyond the Classroom

30 hours lecture, 30 hours fieldwork; 3 credits
Designing appropriate learning environments for science in classrooms, schoolyards, and at such nonformal science settings as museums, parks, botanical gardens, and environmental centers. Field experience at nonformal science institutions. Implications for pedagogy and curriculum development.

CBSE 7315X Historical, Philosophical, and Social Foundations of Education and Science
45 hours seminar plus conference ; 3 credits
Historical, philosophical, social and legal foundations of education. History of Western and non-Western science; history of science education. Cultural embeddedness of science; issues in science and science education.

CBSE 7317T Human Tracks in the Urban Landscape: A practicum in art, technology and the environment
45 hours; 3 credits
Exploration of the visual arts and the natural sciences as complementary forms of active inquiry. Investigation of representational codes, epistemologies, and habits of mind common to the artistic and scientific endeavors. Construction of site-specific, artistic installations and digital imagery as strategies for observation, documentation, and reflection upon contemporary environmental and aesthetic issues. Introduction to designing interdisciplinary curriculum, instruction, and evaluation of learning across visual art and environmental science content areas. Pedagogical focus on Pre-K-12 students from diverse cultural and linguistic backgrounds; including gifted and talented and students with disabilities. Topics include affordances of natural and man-made materials, tools, and resources; digital image technology; place-based instruction, theories and research-validated pedagogical methodology. Studio and on-site field work required. This course is the same as ECAE 7546T and SEED 7317T.

Prerequisites and/or corequisites: Matriculation in the MA or Advanced Certificate Program in Teaching Art (PK-12); the MS in Childhood Education Teacher of Science and Environmental Education (1-6); the M.A.T in Adolescence Science Education (grades 7-12), or post-graduate, in-service teachers of Art or Science.

CBSE 7320T Foundations and Analysis of Teaching I

30 hours lecture, 30 hours laboratory; 3 credits
Educational research as applied to analysis of teaching and learning with an emphasis on science and environmental education. Discussion of a range of research methodologies including action research and uses of technology to access and process information in educational research to analyze functioning of teachers in urban schools with children of diverse abilities and backgrounds. Field trips will be required.

CBSE 7321T Seminar in Applied Theory and Research: Science and Environmental Education
30 hours lecture, 30 hours laboratory; 3 credits
Advanced concepts of educational research, including research study design and utilization of results of research. Application of techniques of research, using materials relevant to science and environmental education. Consultation and application in appropriate field settings. Design and implementation of an original research project. Field trips will be required.

CBSE 7350T Bilingual and Multicultural Education

45 hours; 3 credits
Examination of theories of bilingual education and the development of models of bilingual education
within a national and an international context. Multicultural perspectives in education with specific
focus on the similarities and differences found in diverse cultures. Focus on developmental and
educational needs of all emergent bilingual students, including those with special needs.

CBSE 7351T Methods and Research in Teaching English Language Arts to Emergent Bilingual Students
30 hours plus conference, 25 hours supervised field experience; 3 credits
Introduction to methods and research in the teaching of English language arts to all emergent bilingual
students using a variety of techniques and materials. Review of theoretical formulations that have
shaped contemporary understandings of English language learning among linguistic minority students
and those with special needs with an emphasis on effective pedagogical practices for these students within a variety of programmatic settings.

CBSE 7352T Teaching English as a Second Language: The Arts of Expression
45 hours; 3 credits
Introduction to the philosophical ideas underlying first-and second-language acquisition and their application to the arts in the classroom.

CBSE 7353T Biliteracy and Content Instruction

30 hours plus conference, 25 hours supervised field experience; 3 credits
Examination of various methods used for literacy development in both the home language and the new language of emergent bilingual students through content area instruction, in particular social studies. Approaches to integrating the teaching of reading, writing, speaking and listening in the content areas for emergent bilingual students and those with special needs employing the use of both English and the home language.

CBSE 7354T ESL Approaches Across Content Areas (1-6)
45 hours; 3 credits
Teaching of English as a second language through the communication arts (including listrening, speaking, reading and writing) and through the disciplines of the social sciences.

CBSE 7355T Mathematics, Science, and Technology for Linguistically Diverse Students
45 hours; 3 credits
Introduction to theory and methods of teaching emergent bilingual students science, mathematics, and
technology content through use of both home language and English. Adaptation of curriculum for both
emergent bilingual students and emergent bilingual students with special needs.

CBSE 7356T ESL Approaches Across Content Areas (7-12) Science and Technology
45 hours; 3 credits
Integrated approaches and strategies for the teaching of mathematics, science, and technology to students learning English as a second language in elementary and secondary classrooms.

CBSE 7357T Practicum: Bilingual Teaching 1-6

30 hours lecture, 30 hours laboratory; 3 credits
Pedagogical approaches and application of instructional methods used in transitional, developmental, and dual language models in bilingual teaching. Seminar and college-supervised field experience, grades 1-3 and grades 4-6.

CBSE 7358T Student Teaching: Childhood Clinical Practice, 1-6
30 hours seminar, 300 hours student teaching; 6 credits
Seminar and college supervised student teaching. Supervised fieldwork in teaching childhood education; problems and issues in the organization of all aspects of childhood education curriculum; emphasis on the development of an interdisciplinary approach to teaching. Focus on self-reflective teaching and assessment; techniques of instruction, integration of instructional technology, classroom management, skills in fostering effective relationships and interactions to support all students, development of collaborative school-community relationships. Readings and discussions on significant education issues, including preventing child abduction, substance abuse, safety education, and child abuse awareness. Attention is given to the particular needs and interests of students, including English language learners and students with special needs. Student teaching is 14 weeks in length, full-time, in an educational setting, and in alignment with the daily schedule and annual calendar of that educational setting. An application process is required for student teaching. Completed application must be submitted and accepted a semester prior to the beginning of your student teaching placement. Only accepted students will be given permission to register for student teaching. Fingerprint clearance required.

CBSE 7359X Identification, Assessment & Intervention for Bilingual and Second Language Learners
45 hours (plus conference or independent work); 3 credits
Cultural, linguistic and clinical competencies for assessment and intervention; application of evidence-based research; non-biased assessment; distinguishing differences from disorders; working with individuals and families from diverse backgrounds; culturally and linguistically appropriate practice. This course is the same as CASD 7536X.

Prerequisite: CASD 7535X

CBSE 7360X Bilingual and Second Language Acquisition
45 hours (plus conference or independent work); 3 credits
Sociocultural, psycholinguistic, sociolinguistic, cognitive, and developmental perspectives on bilingual and second language acquisition; contemporary theories of bilingual and second language acquisition; evidence-based research; differentiation of differences from disorders; cultural and linguistic competence; bilingual and multicultural education perspectives. This course is the same as CASD 7535X.

Prerequisite: a course in normal language acquisition or permission of the deputy chairperson.

CBSE 7361T Seminar: Independent Research Project in Second Language Learning
45 hours; 3 credits
Principles and methods in research in TESOL with emphasis on research in English language learning classroom settings. Development of observation and recording methodologies emphasizing the role of teacher as researcher. Scope and variety of educational research; principles and characteristics of qualitative and quantitative research; structure and organization of a research project. Review of research literature related to

current themes and issues in education.

Prerequisite: Childhood and Special Education 7360X.

CBSE 7380T Introduction to Literacy Research and Technology
45 hours plus conference; 3 credits
Educational research in literacy instruction. Use of educational research technology to analyze and assess literacy in urban schools including children with special needs and English language learners.

Corequisite: Childhood and Special Education 7001T.

CBSE 7381T Seminar in Applied Theory and Research in Literacy I
45 hours plus conference; 3 credits
Advanced concepts of educational research, including design of research proposals and data collection. Application of techniques of research using materials relevant to literacy. Consultation and application in appropriate field settings. Design and implementation of an original research project. It must be continued and completed in 7382T.

CBSE 7382T Seminar in Applied Theory and Research in Literacy II
45 hours plus conference; 3 credits
Continuation of CBSE 7381T [702.12T].

CBSE 7383T Methods and Practicum in Literacy, Kindergarten to Grade 2
30 hours, 30 hours supervised field; 3 credits
Development, application, and implementation of literacy strategies with children of diverse abilities. Development of curriculum materials based on the theories and research findings discussed in the area of literacy from birth to grade 2. Presentation of supervised cases study in formal setting.

CBSE 7384T Methods and Practicum in Literacy, Grades 3 to 6
30 hours, 30 hours supervised field; 3 credits
Development, application, and implementation of literacy strategies with children of diverse abilities. Development of curriculum materials based on the theories and research findings discussed in the area of literacy from grades 3 to 6. Presentation of supervised case study in formal setting.

CBSE 7385T Topics in Literacy Education Current Literacy Issues
45 hours lecture; 3 credits
Relationships of selected factors within family, school, and society as they influence the learner's growth in literacy. Developing the teacher's ability to respond to the talents, needs, and abilities of the learner by structuring appropriate literacy environments from birth to grade 6. Study of recent literacy research including English language learning and children with special needs.

CBSE 7386T Literacy Education: Communication
45 hours lecture; 3 credits
Analysis of recent research findings in language acquisition and in the development and use of verbal and nonverbal communication skills from birth to grade 6. The influence of group membership and cultural pluralism on the development of these skills with special attention to the bi-dialectal child and the English language learner. Analysis of the implications for literacy education, wtih emphasis on media literacy and new literacies.

CBSE 7387T Literacy Skills, Instructional Strategies, and Assessment
45 hours; 3 credits
Approaches to assess and improve students' literacy abilities through the use of records, interviews, observations, portfolios, and formal and informal assessments. Procedures for the selection, administration, and evaluation of test materials. Study of illustrative case studies including English language learners and students with special needs.

CBSE 7388T Administration of Literacy Programs
45 hours; 3 credits
Theory and practice of the leadership role of literacy/reading specialists in school and community literacy programs. Techniques for successful exercise of leadership in developing goals, providing professional development, working with families and communities, and implementing literacy programs.

CBSE 7400T Childhood Mathematics Education: Advanced Methodology and Practice
45 hours plus conference; 3 credits
Development, application, and implementation of methodology and materials, and related research and theoretical perspectives. Principles and standards for mathematics curriculum, instruction, and assessment. Emphasis on teaching and learning in the number, operations, and algebra strands of the 1-6 curriculum. Organization for instruction. Literacy and mathematics. Thematic instruction. Use of technology in teaching and learning mathematics.

Prerequisite: two of the following mathematics courses: 7141T, 7142T, 7143T, 7144T, [605.5T], [605.6T], or mathematics courses approved by the program adviser.

CBSE 7401T Middle Childhood Education: Advanced Methodology and and Interdisciplinary Approaches
45 hours plus conference; 3 credits
Continuation of CBSE 7400T [712.23T]. Emphasis on teaching and learning involving fractions, decimals, and percents, measurement/geometry, probability, and data interpretation. Interdisciplinary approaches involving mathematics and science, social studies, and literacy. Writing and assessment in mathematics. Diagnostic techniques, and adaptations of materials and methods for special needs learners. Introduction to research paradigms in mathematics education.

Prerequisite: Childhood and Special Education 7400T.

CBSE 7402T Seminar in Applied Theory and Research in Mathematics Education I
45 hours plus conference; 3 credits
Educational research as applied to the analysis of teaching and learning of mathematics. Qualitative and quantitative research. Use of educational research techniques to analyze teaching and learning of mathematics in urban schools. Mathematics vocabulary, reading, and writing in mathematics. Focus on children with special needs and English-language learners.

Nature and design of action research in mathematics education. Selection of a research topic and questions, review of related research.

Prerequisite: Childhood and Special Education 7401T.

CBSE 7403T Seminar in Applied Theory and Research in Mathematics Education II
45 hours plus conference; 3 credits
Continuation of Childhood and Special Education 7402T [701.23T]. Techniques for analyzing qualitative and quantitative data. Design, implementation, and reporting a research project. Current issues in mathematics education. Professional leadership in mathematics education.

Prerequisite: Childhood and Special Education 7402T.

CBSE 7405T Advanced Methods for Teaching Childhood Mathematics
45 hours plus conference; 3 credits.
Advanced study of learning and teaching mathematics in grades 1-6 for all children, including English language learners and children with special needs. Problem solving and inquiry as contexts for development of mathematical understanding and skills. National, state, and local standards and curriculum guidelines. Classroom learning environments, mathematical discourse. Models of teaching and adaptations for special student populations. Formal and informal assessments. Role of technology in teaching and learning mathematics.

Prerequisite: A course in teaching childhood mathematics, and 6 credits in mathematics.

CBSE 7440T Teaching Mathematics in Childhood Education
45 hours plus conference; 20 hours field experience; 3 credits
Problems and issues in the organization and teaching of subject matter. Techniques of instruction. Introduction to approaches for teaching mathematics to all children from preschool through grade 6, including English language learners and students with special needs. Overview of children's development of number and of geometric and spatial sense; informal mathematical knowledge of young children. National, state, and local standards and curriculum guidelines. Teaching mathematical concepts, computational skills, and higher order thinking processes; integration of mathematics with literacy and other subject areas; formal and informal assessment. Role of technology in teaching and learning mathematics.

Prerequisite: Mathematics *1401 or a mathematics course approved by the program adviser.

CBSE 7471T Childhood Education: Student Teaching in Grades 1 - 6
30 hours, 300 hours or 40 days supervised teaching practice; 3 credits
Supervised fieldwork in teaching childhood education; problems and issues in the organization of all aspects of childhood education curriculum; emphasis on the development of an interdisciplinary approach to teaching. Focus on self-reflective teaching and assessment; techniques of instruction, integration of instructional technology, classroom management, skills in fostering effective relationships and interactions to support all students, development of collaborative school-community relationships. Readings and discussions on significant education issues, including preventing child abduction, substance abuse, safety education, and child abuse awareness. Attention is given to the particular needs and interests of students, including English language learners and students with special needs. Student teaching is 14 weeks in length, full-time, in an educational setting, and in alignment with the daily schedule and annual calendar of that educational setting.

Prerequisite: Childhood and Special Education 7205T, 7216X, 7440T, 7213T or permission of the program head.
An application process is required for student teaching. Completed application must be submitted and accepted a semester prior to the beginning of your student teaching placement. Only accepted students will be given permission to register for student teaching. Fingerprint clearance required.

CBSE 7501X Analysis of Classroom Interaction and Curriculum
45 hours seminar, 20 hours field work; 3 credits
Improving teaching methods through techniques of self-analysis and analysis of classroom interactions. Analysis of the instructional settings and instructional strategies with focus on students with special needs and English language learners. Analysis of learning processes and modes of communication in the classroom. Examination of the specialized discourses of the subject disciplines in adolescent, middle, and childhood curricula. Analysis of uses of technology in the classroom.

CBSE 7503X Teaching Writing across the Curriculum
30 hours plus conference; 3 credits
Examination of the writing process as it may be used in subject areas. Study and application of recent research to classroom practice. Analysis of the relationship between writing, critical thinking, and learning and teaching in the subject area. Same as SEED 7503X.

CBSE 7518T Seminar II in Pedagogy and Curriculum: Health and Nutrition Sciences
45 hours; 2 credits
Advanced theories and methods of teaching health and nutrition sciences at grade levels appropriate for New York State certification requirements; focus on developing reflective practitioners and research based instruction; analysis of New York State Learning Standards in health; teaching health and nutrition sciences to all students, including students with special needs and English language learners; integrating technology into the classroom; developing, implementing, and evaluating the health and nutrition sciences curriculum in urban classrooms. Students enroll in workshops in identifying, reporting, and responding to child abuse and in substance abuse, fire and arson prevention and safety education.

Prerequisite: 7500X [742X], 7501X [792.1X], and permission of the chairperson of the major department and the head of Adolescence Education and Special Subjects.
Prerequisite or corequisite: 7536T [763.16T] and 7542T [764.5 T].
Corequisite: 7543T [764.51T].

CBSE 7549X Theater in the Classroom
30 hours plus field experience; 3 credits
Theater work in classroom settings. Existing models of theater arts in education. Using theater, improvisation and creative drama to explore specialized subject areas and pedagogy. Practical studio work. The classroom as theater. Collaboration of education and theater students on theater in education projects, including workshops in focus schools. Mainstage and

outside productions. Visits to area public schools. Creation of age-appropriate theater study guides. (This course is the same as Theater 7141X.)

CBSE 7551T Critical Issues in Education: Social Values and Individual Needs: Health and Nutrition
30 hours lecture, 30 hours laboratory; 3 credits
Systematic study of the teacher's role, focusing on interactions of people and environments in an educational setting. Topics in educational foundations provide concepts for examining teacher and student diversity and teacher role. Exploratory research techniques.

CBSE 7652T Teaching Young Children with Special Needs
30 hours lecture, 30 hours laboratory; 3 credits
Development of competencies needed to teach young children with special needs; formal and informal assessment, goal setting, and integration of theories of learning, the expressive arts and research validated practice into curriculum across a variety of content areas. Field experience in a setting with young children who present difficulties in adjustment and cognition. Focus on reflective practice and on the development of nurturing and stimulating learning environments.

CBSE 7653T Collaborative Planning and Teaching in Urban Classrooms
30 hours lecture, 60 hours supervised field experience and conference; 3 credits
Development of collaborative teacher competencies needed to effectively teach school-aged students, including students with special needs and English language learners. Integration of theories of learning and development, classroom organization and management, and research validated practice into curriculum across a variety of content areas. Field experience in urban educational settings with students who present challenges in adjustment and cognition. Focus on historical, social and legal foundations of education, transition planning, family and community engagement, collaborative models for teaching, goal setting, and decision making in culturally appropriate contexts.

CBSE 7656T Seminar in Applied Theory and Research

45 hours seminar, plus conference; 3 credits
Continuation of the study of educational research and methodology and completion of an independent research project related to an area of special education.

Prerequisite: Childhood and Special Education 7680T.

CBSE 7657T Seminar in Applied Theory and Research

45 hours seminar, plus conference; 3 credits
Continuation of the study of educational research and methodology and completion of an independent research project related to an area of special education.

Prerequisite: Childhood and Special Education 7680T.

CBSE 7659T Instructional Strategies for Students with Special Needs
45 hours; 3 credits
Instructional strategies to teach middle school and high school aged students with special needs. Educational and assistive technology and research supporting its use. Understanding and using curriculum based assessment data for strategy selection and instruction. Focus on inquiry processes across content areas, including the expressive arts. Work in a setting with students with special needs.

CBSE 7662T Collaboration with Families

45 hours; 3 credits
Issues of disability as it affects the family unit; development of teacher competence in applying appropriate collaborative approaches and strategies, utilizing community resources, and improving communication in culturally and linguistically diverse contexts. Critical exploration of research.

CBSE 7663T Special Issues in Education: Communication and Young Children with Special Needs
30 hours lecture plus conference; 3 credits
Study of language acquisition, including childhood bilingualism, distinctions between language disorders in young children with special needs and language acquisition problems. Understanding of nonverbal behavior. Alternative strategies, including the unique aspects of artistic representation. Assistive technology for enhancing communication with young children with language difficulties and pronounced cognitive and adjustment issues. Implications for collaboration with other professionals, diverse families, and community organizations. Field experiences.

CBSE 7664T Special Issues in Education: Communication and School-aged Students with Special Needs
30 hours lecture plus conference; 3 credits
Study of language acquisition including childhood bilingualism and speech, hearing, and communication problems of students with disabilities. Understanding the distinction between language disorders and language acquisition problems. Techniques of nonverbal communication including the unique aspects of artistic representation. Assistive technology for enhancing communication and access to general education curriculum; influence of group membership and culture on development of communication skills. Implications for collaboration with professionals, diverse families, and community organizations. Field experiences.

CBSE 7665T Learning Environments for Young Children with Diverse Learning and Developmental Needs
45 hours lecture; 3 credits
Implementation of supportive and enriched learning environments that influence the development of the young child with special needs. Examination of positive behavior supports, crisis intervention and play on the development of young children, including English language learners as well as those with developmental delays or special needs from birth through early childhood. Role of family-based practices in creating learning environments at home and in educational settings.

CBSE 7666T Special Issues in Education: Classroom and School-wide Learning Environments for Students with Autism Spectrum Disorders
30 hours plus conference; 3 credits

Current issues in teaching students with autism spectrum disorders. Focus on emerging trends and research. Validated approaches in curriculum, instruction, life skills, functional behavioral assessment and positive behavioral supports. Examination of the politics of labeling, the constructs of disability, and the influence of school culture on inclusion, transenvironmental planning, and the development of least restrictive environments. Independent and small group study. This course is the same as CASD 7316X.

CBSE 7667T Education of Diverse Gifted Children and Youth
45 hours; 3 credits
Educational approaches for working with diverse gifted and talented children and youth; models and strategies for differentiating instruction. Focus on contemporary theories and research. Field experiences in schools and/or community settings.

CBSE 7668T Students with Special Needs: Gifted Education
30 hours plus conference; 3 credits
Investigation of the developmental nature, causes, and characteristics of diverse gifted and talented students. Implications for classroom teachers and other professionals in areas of interpersonal interactions, collaboration, and instruction. Focus on historical, social, and legal foundations of gifted education. Theories of learning and development. Influence of gender, class, language, race/ethnicity, disabilities, and sexuality on the construction of giftedness, as interpreted within and across cultures. 10 hours of field experience in a variety of schools and classroom settings.

CBSE 7669T Assessment of Diverse Gifted and Talented Students
30 hours plus conference; 3 credits
Critical review of formal and informal assessments of the cognitive, social, and affective characteristics of diverse gifted and talented students, including gifted and talented students with special needs. Cultural, linguistic, and societal factors involved in identification, placement, and the academic performance of diverse gifted and talented students. Implications for classroom settings, teaching, and collaboration with parents and other professionals. 10 hours of field experience in a variety of school and classroom settings.

CBSE 7670T Curriculum Design for Diverse Gifted and Talented Students
30 hours plus conference; 3 credits
Principles, rationale, and research-validated methods for differentiating curriculum and instruction for diverse gifted and talented students, including gifted and talented students with disabilities. Inquiry processes across all content areas. Use of technology for differentiation of instruction. Approaches to the design, management, and evaluation of learning environments across a variety of settings. Collaboration with other professionals. Focus on the New York State Learning Standards and educational experiences of students from diverse cultural and linguistic backgrounds. 20 hours of field experience in a variety of schools and classroom settings.

CBSE 7671X Children and Youth with Special Needs
45 hours, 25 hours field work; 3 credits
Characteristics of diverse student populations with a focus on English language learners and students with special needs, including the gifted. Clinical practice in the classroom environment regarding assessment, curriculum, management, integrations and positive supports, and interventions for English language learners and students with special needs, including the gifted in general education settings. Review of regulatory compliance. Focus on collaboration with other professionals including co-teaching, consultative and itinerant models. Engagement of family members in collaborative efforts. Clinical experiences (25 hours) in special education and/or inclusive classrooms required. This course is the same as SEED 7671X.

CBSE 7672T Teaching in Least Restrictive Environments
30 hours plus conference; 3 credits
Strategies to integrate and support students with special needs in least restrictive environments. System and organizational change theories and strategies for developing models of inclusive education. Focus on curriculum and collaborative processes with other professionals including co-teaching, consultative, and itinerant models. Engagement of family members in collaborative efforts. Students will implement a consultative/collaborative project. Field experiences in a variety of school and community settings.

CBSE 7674T Students with Special Needs
30 hours plus conference; 3 credits
Investigation of the developmental nature, causes, and characteristics of young children and students with special needs including giftedness. Implications for classroom teachers and other professionals in areas of interpersonal interactions, interagency collaboration, and instruction. Focus on historical, social and legal foundations of special education and the politics of special education. Theories of learning and development. Influence of gender, class, language, sexuality and race/ethnicity on the construction of disability, as interpreted within and across cultures. Field experiences in schools and a variety of community settings.

CBSE 7675T The Family and Community of Students with Special Needs
30 hours plus conference; 3 credits
Analysis of the issues for the family and the child with special needs within diverse family systems. Teacher-parent, parent-child, sibling-child relations, collaboration, and community resources for young children and school-aged students. Focus on life cycle from birth through adulthood. Emphasis on urban, linguistic, and cultural perspectives, resource access, and development of parent-community partnerships. Field experiences in school settings and a variety of community settings.

CBSE 7676T Learning Environments for Students with Special Needs
45 hours; 3 credits
Approaches to the design, management, and evaluation of optimal learning environments. Review of methods, including behavior management, crisis intervention, group process, positive social interaction skills, and peer mediation. Case studies in diverse settings as a basis for analysis, discussion, and interpretation of behavior within and across cultures.

Development of a reflective approach to teaching and problem solving.

CBSE 7677T Curriculum Modifications for Teaching Students with Special Needs
45 hours; 3 credits
Adaptation of general education curriculum for teaching students across the range of special needs, including giftedness and English language learners. Principles, rationale, and research-validated methods of instructing and assessing special populations in a variety of settings. Inquiry processes across all content areas and life skills, including literacy, mathematics, social science, and the expressive arts. Focus on the New York State Learning Standards and educational experiences of children and youth from diverse cultural and linguistic backgrounds. Field experiences in schools and a variety of community settings.

CBSE 7678T Educational Assessment of Young Children and Students with Special Needs
45 hours seminar plus conference; 3 credits
Critical review and use of formal and informal strategies for the assessment and evaluation of the cognitive, behavioral, social, and affective characteristics of young children and school-aged students with special needs including giftedness. Attention will be given to understanding cultural, linguistic, and societal factors involved in identification, placement and the academic and behavioral performance of students. Focus on curriculum-based assessment and collaboration with other professionals and parents. Field experiences in a variety of school and community settings.

CBSE 7679T Teaching Literacy to Students in Inclusive Classrooms
30 hours lecture, 30 hours field experience; 3 credits
Methods of teaching literacy to students in general and special education classrooms, including those who are English language learners. Literacy strategies and programs for reading and related communication skills, and use of literature in settings for students with diverse learning needs. Field experiences. Role of the family, community and culture in literacy development. Focus on instructional technology, current research validated strategies, and New York State Learning Standards.

CBSE 7680T Research Methods in Special Education
45 hours seminar, plus conference; 3 credits
Concepts in educational research and the critical analysis of research pertinent to teaching the student with special needs. Development of research skills and the role of teacher as researcher culminating in the formulation of individual research projects related to teaching students with special needs.

CBSE 7681T Seminar and Student Teaching: Students with Special Needs
15 hours seminar, 150 hours; 3 credits
Supervised instruction in teaching young children and school-aged children with special needs. Supervision provided by college faculty in appropriate special education settings the student's work setting. Discussion with school-based supervisors. Projects related to school and supervisory experiences; a minimum of four supervisory sessions per semester. This course is for students who have an Initial Certificate in one of the New York State approved teacher certification areas, but who do not have certification in teaching students with disabilities.

CBSE 7682T Seminar in Teaching Students with Autism Spectrum Disorders
30 hours plus conference; 3 credits
Analysis of theory and evidence-based practices related to the teaching of students with Autism Spectrum Disorders. Discussion of daily classroom and instructional management and implementation of instructional strategies, including literacy across the curriculum through the use of case studies. Exploration of teacher/student interactions and reflective practice in educational/therapeutic settings. This course is the same as CASD 7394X.

Prerequisite: Admission to Advanced Certificate Program in Autism Spectrum Disorders or permission of the program co-director.

CBSE 7683T Atypical Development in Infants, Toddlers, and Young Children
30 hours plus conference; 3 credits
Developmental processes, early identification and intervention, appropriate curriculum in home, child care, preschool, and early childhood settings. Implications for teacher-parent relations, and development of enriched and nurturing environments for infants, toddlers, and young children with atypical development. Focus on family, interagency, and professional collaboration across cultural, linguistic, and ethnic contexts. Field experiences.

CBSE 7684T Adolescence and Emotional Conflict
45 hours; 3 credits
Characteristics, needs, intervention techniques, and curricula. Educational settings, structure of middle school and high school programs for the adolescent experiencing emotional conflict, including the expressive arts and instruction to meet New York State Learning Standards. Preparation for life skills and transition planning.

CBSE 7685T Introduction to Autism Spectrum Disorders
45 hours (plus conference or independent work); 3 credits
Contemporary issues in autism spectrum disorders across the lifespan from an interdisciplinary and cross-paradigm perspectives; historical perspectives; core characteristics; co-morbid features; theoretical models; ASD culture and identity; working with families from diverse backgrounds. (This course is the same as CASD 7317X).

Prerequisite: any undergraduate or graduate course in child development, language acquisition or permission from the deputy chairperson and program coordinator.

CBSE 7686T Speech, Language, and Communication in Individuals on the Autism Spectrum
45 hours (plus conference or independent work); 3 credits
Contemporary issues in speech, language and communication in individuals on the autism spectrum; typical and atypical speech, language and communication development; early identification; evidence-based assessment and intervention from varied theoretical perspectives; interprofessional practice;

augmentative and alternative communication; culturally and linguistically appropriate practice. (This course is the same as CASD 7319X).

Prerequisite: CASD 7317X or CBSE 7685T or any undergraduate or graduate course in child development, language acquisition, or permission from the deputy chairperson and program coordinator.

CBSE 7688T Seminar and Practicum in Special Education: Students with Special Needs
15 hours seminar, at least 70 days of supervised student teaching/practicum; 6 credits
Seminar and supervised instruction in teaching students with special needs. Supervision provided by college faculty in appropriate special education settings. Focus on pedagogical core requirements, designed to address teaching skills knowledge and dispositions identified in the New York State Teaching Standards for special educators. This course will address issues in the organization of subject matter, techniques of instruction, classroom management, school-community relations. This course is for students who do not have an Initial Certificate in any certification area.

CBSE 7689T Seminar in Special Education: Students Experiencing Emotional Conflict
45 hours; 3 credits
Seminar concerning problems and issues in the organization of subject matter, techniques of instruction, classroom management, pupil adjustment, school-community relations. Attention is given to the particular needs and interests of students, with provision for individual and group study. (Not applicable to master's programs for teachers of the emotionally handicapped, mentally retarded, learning disabled.)

Corequisite: Childhood and Special Education 7214T or 7542T [764.5T], or employment as a teacher in a public or approved private school.

CBSE 7690T Seminar in Special Education: Developmental Disabilities
45 hours; 3 credits
Seminar concerning problems and issues in the organization of subject matter, techniques of instruction, classroom management, pupil adjustment, school-community relations. Attention is given to the particular needs and interests of students, with provision for individual and group study. (Not applicable to master's programs for teachers of the emotionally handicapped, mentally retarded, learning disabled.)

Corequisite: Childhood and Special Education 7214T or 7542T, or employment as a teacher in a public or approved private school.

CBSE 7691T Classroom Organization, Management and Curriculum Modifications for Teaching Students with Autism Spectrum Disorders
45 hours; 3 credits
Issues in the organization of subject matter, techniques of instruction, classroom management, school-community relations and adaptation of general education curriculum for teaching students with autism spectrum disorders. Attention is given to the Common Core State Standards and research-validated methods of instructing and assessing students with autism spectrum disorders. This course is the same as CASD 7320X.

CBSE 7692T Seminar in Special Education: Literacy and Communication
45 hours; 3 credits
Seminar concerning problems and issues in the organization of subject matter, techniques of instruction, classroom management, pupil adjustment, school-community relations. Attention is given to the particular needs and interests of students, with provision for individual and group study.

CBSE 7693T Seminar in Special Education: Mathematics and Students with Special Needs
45 hours; 3 credits
Seminar concerning problems and issues in the organization of subject matter, techniques of instruction, classroom management, pupil adjustment, school-community relations. Attention is given to the particular needs and interests of students, with provision for individual and group study. (Not applicable to master's programs for teachers of the emotionally handicapped, mentally retarded, learning disabled.)

Corequisite: Childhood and Special Education 7214T or 7542T, or employment as a teacher in a public or approved private school.

CBSE 7694T Seminar in Special Education: Learning Process and the Arts
45 hours; 3 credits
Seminar concerning problems and issues in the organization of subject matter, techniques of instruction, classroom management, pupil adjustment, school-community relations. Attention is given to the particular needs and interests of students, with provision for individual and group study. (Not applicable to master's programs for teachers of the emotionally handicapped, mentally retarded, learning disabled.)

Corequisite: Childhood and Special Education 7214T [764.2T] or 7542T [764.5T], or employment as a teacher in a public or approved private school.

CBSE 7695T Inclusive Teaching Practicum

10 hours seminar and 100 hours of supervised student teaching per course; 1 credit

Prerequisite: Matriculation in the M.S in Education: Teacher of students with disabilities.

CBSE 7696T Inclusive Teaching Practicum

10 hours seminar and 100 hours of supervised student teaching per course; 1 credit

CBSE 7697T Inclusive Teaching Practicum

10 hours seminar and 100 hours of supervised student teaching per course; 1 credit

Prerequisite: CBSE 7696T [764.7T]

CBSE 7698T Inclusive Teaching Practicum

10 hours seminar and 100 hours of supervised student teaching per course; 1 credit

Prerequisite: CBSE 7697T [764.8T]

CBSE 7699T Student Teaching Seminar and Practicum, Education of Middle Childhood and Adolescent Students with Special Needs
15 hours seminar, at least 70 days of supervised student teaching/practicum; 6 credits
Seminar and supervised instruction in teaching students with special needs in middle childhood and high school Supervision provided by college faculty in appropriate special education settings.Emphasis on the development of an interdisciplinary approach to teaching addressing the individual needs of students as per their IEPs, including their diverse backgrounds, multilingual learners. Focus on pedagogical core requirements, designed to address teaching skills knowledge and dispositions identified in the New York State Teaching Standards for special educators

CBSE 7820T Supervised Laboratory and Field Experience
30 hours seminar, 60 hours laboratory and directed independent activity; 4 credits
Consideration of specific aspects of human behavior in a variety of work or community settings. Observation and discussion of behavior. Preparation of materials.

CBSE 7821T Sources of Information

45 hours; 3 credits
Introduction to theories of information, appraisal, and diagnosis and to appraisal and measurement techniques. Role and function of guidance counseling. Introduction to group dynamics. Theoretical basis for strategies of planned intervention.

CBSE 7822T Cases in Planned Intervention

30 hours lecture, 30 hours laboratory; 3 credits
Selected cases. Helping students formulate and follow through on planned intervention strategies. Students are encouraged to analyze their work situations in terms of strengths and weaknesses and to develop strategies for improving the total program as well as their own functioning.

CBSE 7885T Human Development Birth to Young Adulthood
45 hours lecture; 20 hours field experience; 3 credits
Theories of emotional and intellectual development from birth through young adulthood. Introduction to the major theories of development including anthropological, developmental, cognitive, and social psychological perspectives. Emphasis on children and adolescents in urban, diverse and multicultural schools, including students with special needs and English language learners.

CBSE 7886T Advanced Human Development II

30 hours lecture, 60 hours laboratory and directed independent activity; 4 credits
Relation of theories of development to the function of the counselor on the job. Effect of institutions on individual development. Relationship of theories of career development and decision making to general theories of human development.

CBSE 7908X Cognitive and Intellectual Development

45 hours; 3 credits
Critical exposition, in light of recent research, of developments in the fields of cognitive and intellectual development. Examination of the psychological bases for such representative educational issues as readiness, grouping, learning to learn, curriculum structure, transfer and concept learning.

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

CBSE 6005T	**Issues and Strategies in Education**
CBSE 7020T	**Prevention, Diagnosis, and Remedial Treatment of Disabilities in the Language Arts**
CBSE 7025T	**Recent Research and Innovation in School Practice for Supervisors of Student Teachers**
CBSE 7036X	**Project Seminar in Computer Education**
CBSE 7536T	**Seminar I in Pedagogy and Curriculum:Health and Nutrition Sciences**
CBSE 7650T	**Teacher Function and Analysis of Teacher/Learner Behavioral Interactions**
CBSE 7673T	**Psychological and Sociological Problems of Adolescence**
CBSE 7894T	**Community Resources in Guidance**

Communication Arts, Sciences, and Disorders

Department office: 3439 Boylan Hall
Phone: 718.951.5225

Full-time Faculty

Professors: Haas, Levy, Lu, Marton
Associate Professors: Epstein, Fuse, Neave-DiToro, Thompson
Assistant Professors: Avivi -Reich, Frederiksen, Hazamy, Sharma, Yang
Lecturers: Beaumont-Bowman, Reisman, Sass-Brown

The Department of Communication Arts, Sciences, and Disorders has both a distinguished faculty and cutting-edge resources that provide students with a comprehensive range of studies in all aspects of human communication and related pathologies. With a combination of coursework, research, and clinical practicum, students gain a thorough grounding in the mechanics of speech and language, and learn to recognize, diagnose and treat communication disorders in adults and children, including those related to voice, language, learning disabilities, aphasia, swallowing fluency, and speech sound production. Graduates of our program go on to careers in both the public and private sectors. Additional information regarding student outcomes can be found at https://www.brooklyn.edu/academics/programs/speech-language-pathology-ms/

Doctoral (AuD) program in audiology
HEGIS code 1220; SED program code 29956

In June 2023, the CUNY Board of Trustees approved the transition of degree granting authority of the CUNY Audiology doctorate (AuD) degree from the Graduate Center to Brooklyn College. This is a consortial program with the Graduate Center, Hunter College and Brooklyn College and it is a four-year, lockstep program. The first cohort of the CUNY AuD program graduated in 2009. This is be the first doctoral program established at Brooklyn College.

AU.D. ADMISSIONS REQUIREMENTS:
1. GPA: Undergraduate degree with an overall cumulative GPA of at least 3.0.
2. Course Requirements: All courses applied to meet each of the required areas below must be completed with a grade of B or better (B- does not suffice) and remedial coursework cannot be used to meet any prerequisite.
Advanced Placement (AP) coursework can be applied to meet a required area if the college transcript shows 3+ credits for the AP coursework.
- Biological Sciences: Completion of at least one undergraduate or graduate course (3 credits) in biological sciences unrelated to speech or hearing sciences. Examples of acceptable courses: Principles of Biology I, Anatomy and Physiology, Developmental Biology, General Biology I, Genetics, Molecular Biology, Life Sciences or Botany.
- Mathematical Sciences: Completion of at least one undergraduate or graduate course (3 credits) in mathematical sciences. Examples of acceptable courses: College-level mathematics, statistics, probability, linear algebra. Computer programming courses do not satisfy the mathematical sciences requirement.
- Physical Science: Completion of at least one undergraduate or graduate course (3 credits) in physical sciences unrelated to speech or hearing sciences. Examples of acceptable courses: Study of Selected Phenomena and Basic Concepts of Physics, Basic Concepts of Astronomy, Geology, Physics 101, General Chemistry, Biochemistry, General Physics, Introduction to Modern Physics, GeoPhysics, Engineering, and Oceanography. Geography does not satisfy the physical sciences requirement.
- Psychology or Sociology: Completion of at least two undergraduate or graduate courses (equivalent to 6 or more semester credits) in Psychology or Sociology unrelated to speech or hearing sciences. Courses taken in education or special education department cannot be applied to meet the requirements in this area.
Examples of acceptable courses in Psychology: Introductory Psychology, Social Psychology, Introduction to Industrial & Organizational Psychology, Health Psychology, Introductory Psychology, Introductory Child Psychology, Psychology of Adolescence, Psychology of Aging, Cognitive Development, Social and Personality Development of Children, Psychology of the Family, Abnormal Psychology I, Abnormal Psychology II, Introduction to Personality, Mind, Brain and Behavior, Learning, Cognitive Psychology, Human Neuropsychology, Introduction to Physiological Psychology, Counseling.
Examples of acceptable courses in Sociology: Sociology of Mental Illness, Social Change, Social Issues and Institutions, Sociology of Immigration, Social Work, Urban Society, The Inner City, Sociology of Religion, Introduction to Sociology, Self and Society, Contemporary American Society, Social Theories, Multiculturalism, Sociology of Gender Studies.

Completion of at least one undergraduate or graduate writing-intensive course (3cr).
Potential applicants often inquire whether all prerequisite courses must be completed prior to applying to the AuD Program. Although completion of all prerequisite courses prior to applying is desirable, we recognize that applicants graduating in the spring prior to potential fall AuD admission may be completing 1-2 prerequisite courses in that spring semester (applications lacking more than 1-2 prerequisite courses are non-competitive). Should such an applicant be accepted into our AuD Program, the applicant is required to show proof of completion of the 1-2 missing prerequisites with the grade of B or better prior to registration for our AuD courses.

2. GRE: Acceptance scores on the general section of the GRE (this requirement cannot be waived). If you have taken the GRE before and it is no more than five years old, you may have ETS submit the scores. Graduate Center Code is 2113. Click here. We strongly recommend that the GREs be taken prior to the admissions deadline.

AU.D. PROGRAM REQUIREMENTS:
- 97 credit curriculum completed over a four-year period
- First Examination (written examination administered between first and second semesters of year 2)
- Internship practicum final examinations (three internship practicum across the three CUNY campus audiology clinics (Brooklyn College, Graduate Center, and Hunter College)
- Second Examination (oral evaluation administered during the spring semester of year 3)
- At least 1,820 clinical contact hours through at least 3 semesters of supervised internship (on-site) clinical practicum followed by 3 semesters of externship (off-site) clinical practicum followed by a full-time supervised 12-month Audiology residency (off-site)
- Completion of a Capstone Project including a written paper and a poster presentation of the project. Final projects can have a wide range (e.g., research-based investigation in clinical or basic science areas, systematic review, retrospective studies, survey research, development of a research-based clinical protocol, outcomes assessment, normative studies, evaluation of current practice patterns, and meta-analysis of data.) The Capstone project may or may not include human subjects.

Upon graduation, each degree candidate qualifies to apply for New York State licensure and national certification.

COURSES - This is a lockstep 4 year program:

AUDI 8000, AUDI 8010, AUDI 8030, AUDI 8050 (elective), AUDI 8090 , AUDI 8100, AUDI 8120, AUDI 8160 (elective), AUDI 8180, AUDI 8200, AUDI 8250, AUDI 8280, AUDI 8300, AUDI 8320 , AUDI 8330, , AUDI 8350, AUDI 8400 (Elective), AUDI 8420 , AUDI 8430, AUDI 8460, AUDI 8480, AUDI 8500 , AUDI 7600, AUDI 8630, AUDI 8640 , AUDI 8650 , AUDI 8670 (Elective), AUDI 8680, AUDI 8700, AUDI 8720, AUDI 8740, AUDI 8780 , AUDI 8800 (Elective), AUDI 8900, AUDI 8901, AUDI 8902, AUDI 8903, AUDI 8904, AUDI 8905, AUDI 8906, AUDI 8961, AUDI 8962, AUDI 8963, AUDI 8964, AUDI 8965, AUDI 8966, AUDI 8980, AUDI 8982, AUDI 8983, AUDI 8991, AUDI 8992*, AUDI 8993*

AUDI 8991 Audiology Residency I, AUDI 8992 Audiology Residency II, and AUDI 8993 Audiology Residency III needed to complete the clinical residency requirement.

* Students take these courses for 3 credits each except when advised by a Coordinator of Clinical Education in Audiology to do otherwise.

M.S. degree program in speech - language pathology
HEGIS code 1220; SED program code 77738

This master of science degree program prepares students for careers as speech-language pathologists in community speech, language, and hearing centers, hospitals, school settings, rehabilitative agencies, and private practice. Academic, clinical, and research opportunities covering the range of disorders that occur throughout the lifespan are provided in state-of-the-art classrooms, clinical suites, and laboratories.

Matriculation requirements

Applicants must offer at least 18 credits in speech-language pathology and audiology with grade point average of 3.00 or higher. The credits must include courses as follows: acoustics of speech, language and hearing, anatomy and physiology of the speech, language and hearing mechanism, speech and language acquisition, audiology, phonetics, nature of speech and language disorders. In accordance with ASHA requirements, students must offer coursework in statistics, biology, chemistry/physics, and social/behavioral Sciences. General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Degree requirements

There are two options within the master's program in speech-language pathology. Students entering the master's program can complete the master's degree in speech-language pathology, Option A (see below); or students can apply to complete a master's degree in speech-language pathology with a specialization in early intervention, Option B (see below).
59 - 78 credits depending upon completion of Option A or B

Option A - Master's Degree in Speech-Language Pathology

59 - 71 credits are required for the degree.

Students must pass a departmental comprehensive examination and must take and report their scores on the Praxis Examination in Speech-Language Pathology. Information about requirements for the comprehensive examination is in the section "Academic Regulations and Procedures." Courses in the Department of Communication Arts, Sciences, and Disorders offered toward the degree must be 7000-level courses. The program of study must be approved by an adviser in the student's major area of concentration. Students must also complete requirements in communication, arts, sciences, and disorders as follows: Communication Arts, Sciences, and Disorders 7107X, 7128X, 7211X, 7313X, 7321X, 7323X, 7325X, 7326X, 7327X, 7331X, 7333X, 7336X, 7337X, and U7441X; and not

more than 11 credits in clinical practicum, for a minimum of 400 clock hours. A maximum 11 credits in courses in clinical practicum (Communication Arts, Sciences, and Disorders 7395X, 7396X, 7397X, 7398X, 7399X and 7691X), and/or 14 credits with special problems (Communication Arts, Sciences, and Disorders 7296X), and courses taken on a tutorial basis may be counted toward the degree. The remaining credits required for the degree must be chosen in consultation with an adviser in the major area of concentration. Courses in speech, language, and hearing science may be incorporated on an elective basis.

Certification of clinical competency

Only students who complete the degree requirements, including the Praxis Examination in Speech-Language Pathology, are eligible for certification of clinical competency by the American Speech-Language-Hearing Association. Those students who intend to apply for New York State teacher certification as "Teachers of Students with Speech and Language Disabilities (TSSLD)," must present course work as described in option (b) or (c) of the matriculation requirements for the M.S. in education, teacher of students with speech and language disabilities, or must complete an additional 3 graduate credits in the School of Education as follows: SEED 7500X. Additionally, those students must complete: Communication Arts, Sciences, and Disorders 7551X and CBSE 7672T and 7677T. In order to be eligible for teacher certification, students must also pass exams and complete workshops as stipulated by the New York State Department of Education.

Option B - Master's Degree in Speech-Language Pathology with a Specialization in Early Intervention

66 - 78 credits are required for the master's degree in speech-language pathology with a specialization in early intervention

Completion of a master's degree in speech-language pathology with additional required coursework in the early intervention specialization. Year 1, ECAE 7675T, CASD 7442X; Year 2, CASD 7443X, 7445X, 7446X. In order to qualify for the specialization in early intervention, students are required to complete an application and an interview once accepted into the master's program. The program of study must be approved by the deputy chairperson.

Grading Policy

Students who earn a grade of B- or C+ in any course shall be required to complete a Performance Improvement Plan (PIP). If the student fails to satisfactorily complete the PIP on or before the date assigned by the instructor, the student will be required to re-take the course. If the student earns a grade of B- or below upon re-taking the course, the student will be dismissed from the program. Students are allowed a maximum of two PIPs. Students who earn two grades of C or below will be dismissed from the program.

Advanced certificate program in autism spectrum disorders
HEGIS code 0808; SED program code 31638

With the prevalence of autism increasing in recent years from 1 in 1000 to 1 in 54*, learning to work with children with autism spectrum disorders has become important to professionals in many fields, including:
Speech-language pathology
Psychology
Education
Occupational Therapy
Physical Therapy

Skills in working with individuals on the spectrum are critical not only to people already in these fields, but also to those seeking to enter these fields.

The Brooklyn College advanced certificate program in Autism Spectrum Disorders was the first program in New York that has a cross-paradigm perspective to working with individuals on the spectrum. Students enrolled in the program learn about the strengths and weaknesses of different approaches that are available for individuals on the spectrum and learn with those from different fields and disciplines.

Students with either bachelor's or master's degrees can apply to the 15-credit ASD certificate. The program can be completed in one year (with a fall, spring, and summer sequence), and can be applied towards continuing education credits and salary increments in the Department of Education. Classes are scheduled in the early evening for the convenience of working professionals.

The coursework and practicum opportunities will reflect a range of approaches available for children on the autistic spectrum, including applied behavioral analysis, both discrete trials and natural learning paradigms, and developmental social-pragmatic approaches. Students will participate in lecture, discussion, observation, and practice, incorporating a range of philosophical, educational, and clinical paradigms. Students from varying disciplines, including education, speech-language pathology, school psychology, and occupational and physical therapy will have the opportunity to train and work collaboratively with future colleagues.

*Centers for Disease Control and Prevention, 2021

Program description

Provides interdisciplinary foundational and advanced knowledge in the area of autism spectrum disorders incorporating a range of philosophical, educational, and clinical paradigms, including applied behavioral analysis, discrete trials and natural learning paradigms, and developmental social-pragmatic approaches.

Matriculation requirements

Applicants must have completed an undergraduate or graduate degree in special education, speech-language pathology, or a related field. Applicants must present coursework in language acquisition and child development. Additional coursework may be required to meet any matriculation deficiency.

An applicant must have earned a baccalaureate degree with a grade point average of at least 3.0 in the undergraduate major, and a minimum overall grade point average of 3.0.

General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Advanced certificate requirements (15 credits)

Fifteen credits of coursework completed with a grade point average of B or better are required for the advanced certificate. No more than one course with a grade below B may be offered toward the completion of the certificate requirements. Students must complete all of the following courses:
- CASD 7317X/CBSE 7685T: Introduction to Autism Spectrum Disorders
- CASD 7319X/CBSE 7686T: Speech, Language, and Communication in Individuals on the Autistic Spectrum
- CBSE 7666T/CASD 7316X: Special Issues in Education: Classroom and School-wide Learning Environments
- CBSE 7691T/CASD 7320X: Classroom Organization, Management, and Curriculum Modifications for Teaching Students with Autism Spectrum Disorders
- CBSE 7682T/CASD 7394: Seminar in Teaching Students on Autism Spectrum Disorders

CUNY Ph.D.

The City University of New York offers a doctoral program in speech, language, and hearing sciences. General information about CUNY Ph.D. programs is in the chapter “Support for Academic Success in Graduate School.” Speech Communication Arts and Sciences Department courses may be credited toward the CUNY doctoral degree with permission of the executive officer of the doctoral program.
: For information, students should consult the Program Director or chairperson of the Speech Communication Arts and Sciences Department and the executive officer of the doctoral program.

Courses

Unless a prerequisite is specific, students may apply graduate or undergraduate courses toward fulfillment of that prerequisite.

CASD 7106X Behavioral Analysis of Language, Speech, and Hearing Therapy
30 hours plus conference; 3 credits
Contemporary behavioral theory in diagnosis, clinical practice, and research. Study of individual and group behavior in educational settings. Student demonstration projects.

Prerequisite: a graduate course in clinical methods in speech-language pathology or aural rehabilitation.

CASD 7107X Language Acquisition

45 hours (plus conference or independent work); 3 credits
Study of typically developing children’s language systems; the nature of language and its components; historical and contemporary models and theories of language acquisition; neurological, biological, cognitive, and social-emotional foundations of language development; phonological, morphological, syntactic, semantic, and pragmatic development from infancy through adolescence; analysis of language samples; introduction to bilingual and second language acquisition; individual as well as cultural and linguistic variations in language development.

CASD 7114X Instrumentation in Speech and Hearing

30 hours lecture, 30 hours laboratory; 3 credits
Instruction in the use of instrumentation for diagnosis, therapy, and research as applied to clinical and educational environments. Projects to be selected from the student's area of interest.

Prerequisite: a course in the accoustics of speech and hearing.

CASD 7115X The Clinician - Client Therapeutic Relationship in Communication Disorders
30 hours (plus conference or independent work); 2 credits
Contemporary perspectives on clinician-client-family relationships across the lifespan; understanding self in relationship to clients and families; principles of counseling; culturally and linguistically appropriate best practice.

CASD 7116X Computer Applications in Clinical and Educational Practice in Speech-Language Pathology and Audiology
30 hours plus conference; 3 credits
The use of personal computers to examine the hardware and software tools available for the evaluation, treatment, and

clinical and instructional program management of individuals with varying disabilities; research on product applications and changing technological advances.

Prerequisite: a course in speech-language therapy methods or a course in educational methods.

CASD 7128X Neural Processes of Communication

45 hours (plus conference or independent work); 3 credits
Human neuroanatomy and physiology with an emphasis on communication, cognition, and swallowing; neurological disorders and their implications for normal communication and swallowing.

CASD 7139X Organization, Management, and Supervision of Speech and Hearing Programs
30 hours plus conference; 3 credits
Theory and practice of organization, management, supervision of speech-language and hearing programs in clinical and educational settings.

Prerequisite: a graduate course in speech pathology and a graduate course in audiology; or permission of the deputy chairperson.

CASD 7211X Research in Speech-Language Pathology and Audiology
45 hours (plus conference or independent work); 3 credits
Basic and applied research concepts and designs related to communication sciences and disorders; data organization and analysis; application of research principles to clinical practice; evidence-based practice; culturally, ethically and linguistically responsive research practice.

CASD 7296X Special Studies in Communication Sciences and Disorders
45 hours (plus conference or independent work); 3 credits
Directed study supervised by a faculty member. With prior written permission of the deputy chairperson, this course may be repeated once for credit.

Prerequisite: permission of the deputy chairperson.

CASD 7297X Proseminar in Speech-Language Pathology
45 hours; 3 credits
Intensive study of technical and theoretical problems. Independent laboratory or library research. Detailed reports.

Prerequisite: a graduate course in speech and language disorders.

CASD 7313X Dysphagia

45 hours (plus conference or independent work); 3 credits
Anatomy, physiology, and neural bases of normal swallowing; pathophysiology of swallowing disorders; interdisciplinary approaches to assessment and management; treatment of swallowing disorders; evidence-based practice; ethics; engaging individuals from diverse backgrounds; experiential learning component.

Prerequisite: CASD 7128X

CASD 7316X Special Issues in Education: Classroom and School-wide Learning Environments for Students with Autism Spectrum Disorders
30 hours plus conference, 3 credits
Current issues in teaching students with autism spectrum disorders. Focus on emerging trends and research. Validated approaches in curriculum, instruction, life skills, functional behavioral assessment and positive behavioral supports. Examination of the politics of labeling, the constructs of disability, and the influence of school culture on inclusion, transenvironmental planning, and the development of least restrictive environments. Independent and small group study. This course is the same as CBSE 7666T.

Prerequisite: Admission to Advanced Certificate Program in Autism Spectrum Disorders or permission of the program co-director.

CASD 7317X Introduction to Autism Spectrum Disorders
45 hours (plus conference or independent work); 3 credits
Contemporary issues in autism spectrum disorders across the lifespan from an interdisciplinary and cross-paradigm perspectives; historical perspectives; core characteristics; co-morbid features; theoretical models; ASD culture and identity; working with families from diverse backgrounds. (This course is the same as CBSE 7685T).

Prerequisite: any undergraduate or graduate course in child development, language acquisition or permission from the deputy chairperson and program coordinator.

CASD 7318X Early Intervention: Zero to Three

30 hours (plus conference or independent work); 2 credits
Contemporary approaches to the identification, assessment and intervention for infants, toddlers, young children and their families; the science of early childhood; developing and implementing individual family service plan (IFSP); collaboration across allied health disciplines; and use of evidence-based and culturally responsive family-centered practice.

CASD 7319X Speech, Language, and Communication in Individuals on the Autism Spectrum
45 hours (plus conference or independent work); 3 credits
Contemporary issues in speech, language and communication in individuals on the autism spectrum; typical and atypical speech, language and communication development; early identification; evidence-based assessment and intervention from varied theoretical perspectives; interprofessional practice; augmentative and alternative communication; culturally and linguistically appropriate practice. (This course is the same as CBSE 7686T).

Prerequisite: CASD 7317X or CBSE 7685T or any undergraduate or graduate course in child development, language acquisition, or permission from the deputy chairperson and program coordinator.

CASD 7320X Classroom Organization, Management and Curriculum Modifications for Teaching Students with Autism Spectrum Disorders
45 hours, 3 credits
Issues in the organization of subject matter, techniques of instruction, classroom management, school-community relations and adaptation of general education curriculum for teaching students with autism spectrum disorders. Attention is

given to the Common Core State Standards and research-validated methods of instructing and assessing students with autism spectrum disorders. This course is the same as CBSE 7691T.

CASD 7321X Language Disorders in Pre-School Children
45 hours (plus conference or independent work); 3 credits
Etiology, characteristics, and evidence-based assessment and intervention for language disorders in monolingual and bilingual preschool children; deficits in emergent literacy through complex language development; historical and contemporary models of language disorders and bilingual language impairment in preschool children; cultural-linguistic and individual variations; analysis of play and language sample; family-centered and interprofessional practice.

CASD 7323X Fluency Disorders

45 hours (plus conference or independent work); 3 credits
Etiologies and behavioral characteristics of fluency disorders; evidence-based practice; prevention, assessment, and intervention; counseling; working with culturally and linguistic diverse individuals across the lifespan and their families; interprofessional practice.

CASD 7324X Speech Disorders in Cerebral Palsy

30 hours plus conference; 3 credits
Historical, etiological, neurophysiological assessment and treatment related to cerebral palsy. Emphasis on associated communication disorders and their impact on academic and social skills.

Prerequisite: a course in speech disorders and a graduate course in the anatomy and physiology of the speech mechanism.

CASD 7325X Clinical Foundations in Speech-Language Pathology
45 hours (plus conference or independent work); 3 credits
Clinical problem-solving and decision-making in speech-language pathology; application of theoretical models to intervention; goal writing; telepractice; culturally and linguistically appropriate evidence-based practice; principles of counseling; inter-professional practice.

CASD 7326X Aphasia and Acquired Linguistic, Cognitive, and Communicative Disorders in Adults
45 hours (plus conference or independent work); 3 credits
Characteristics, etiologies, assessment, and intervention of speech, language, communication, and cognition related to acquired aphasia, and other communication disorders in adulthood; current cognitive, neurolinguistic and neuropsychological theories; family-centered practice; culturally and linguistically appropriate evidence-based practice including bilingual populations; interprofessional practice.

Prerequisite: CASD 7128X

CASD 7327X Voice Disorders

45 hours (plus conference or independent work); 3 credits
Anatomy and physiology of the respiratory, phonatory, and resonating systems; typical, disordered, and modified voice across the lifespan; physics of sound correlates; cultural and psychosocial factors; etiologies, assessment, intervention, management, and prevention of voice disorders; culturally and linguistically appropriate evidence-based practice.

Prerequisite: CASD 7128X

CASD 7330X Cleft Palate Speech

30 hours plus conference; 3 credits
Pathomorphology, clinical procedures, evaluation, and remedial management of individuals with cleft lip, cleft palate, and related disorders. Diagnostic and treatment procedures. Applications to clinical and educational settings.

Prerequisite: a course in speech disorders and a graduate course in the anatomy and physiology of the speech mechanism.

CASD 7331X Motor Speech Disorders

45 hours (plus conference or independent work); 3 credits
Classification, etiologies, characteristics, assessment, intervention, and management of communication disorders resulting from neurologic impairment; dysarthrias and apraxias of speech throughout the lifespan; culturally and linguistically appropriate evidence-based practice; inter-professional practice.

Prerequisite: CASD 7128X or permission of the deputy chairperson.

CASD 7333X Diagnostic Principles and Procedures in Speech-Language Pathology
45 hours (plus conference or independent work); 3 credits
Theoretical frameworks underlying evidence-based assessment; contemporary approaches to identification, assessment, and classification of speech, language and communication differences/disorders across the lifespan; administration and interpretation of standardized and non-standardized measures; psychometric principles; non-biased assessment; consideration of bilingualism and cultural-linguistic factors; professional report writing; inter-professional practice.

CASD 7334X Communication Disorders and Aging

30 hours (plus conference and independent work); 2 credits
Study of aspects of aging that impact communication processes, including changes in social, cognitive, sensory, and motor functions; culturally and linguistically appropriate evidence-based practice; the culture of aging; prevention, assessment and functional intervention approaches geared to the specific communication needs of adult geriatric populations; and counseling.

Prerequisite: CASD 7128X

CASD 7336X Literacy and Language-Based Learning Disabilities
45 hours (plus conference or independent work); 3 credits
Etiologies, characteristics, classification, and evidence-based assessment and intervention of language disorders and language-based learning disabilities in school-age children and adolescents; theoretical paradigms and literacy instruction applied to monolingual and bilingual children; interdependence of language, literacy, cognition, and academic achievement; culturally and linguistically appropriate practice; interprofessional practice.

CASD 7337X Speech Sound Development and Disorders
45 hours (plus conference or independent work); 3 credits
Phonological and phonetic theory and research of typical articulation and phonological patterns; perceptual and motor development; phonological processes; evidence-based assessment and intervention of monolingual and bilingual children; etiologies and characteristics of speech sound disorders; relationships to phonological awareness and literacy; differentiating between speech sound disorders and speech-language differences; culturally and linguistically appropriate practice; interprofessional practice.

CASD 7338X Augmentative and Alternative Communication
30 hours (plus conference or independent work); 2 credits
Introduction to, and working knowledge, of augmentative and alternative communication modes; examination of low, mid and high assistive technologies; etiologies and diagnoses of individuals using augmentative and alternative communication modes; multicultural considerations; evidence-based evaluation and intervention.

CASD 7361X Auditory Processing Disorders: Assessment and Treatment
30 hours plus conference; 3 credits
Neuroanatomy and physiology of the auditory pathways; behavioral and physiological assessment techniques and management procedures for school-age children and adults.

Prerequisite: CASD U7441X or permission of the deputy chairperson.

CASD 7381X Introduction to Assistive Technology
30 hours plus conference; 3 credits
Overview of the field of assistive technology. High and low technologies for communication, education, recreation, vocation, mobility, and independent living. Special input and output devices, access and proper seating and positioning. Issues in service delivery, key laws, and funding for assistive technologies. (Not open to students who completed Speech 7297X [797X], Fall 2002.)

CASD 7394X Seminar in Teaching Students with Autism Spectrum Disorders
30 hours plus conference; 3 credits
Analysis of theory and evidence-based practices related to the teaching of students with Autism Spectrum Disorders. Discussion of daily classroom and instructional management and implementation of instructional strategies, including literacy across the curriculum through the use of case studies. Exploration of teacher/student interactions and reflective practice in educational/therapeutic settings. This course is the same as CBSE 7682T.

Prerequisite: Admission to Advanced Certificate Program in Autism Spectrum Disorders or permission of the program co-director.

CASD 7395X Clinical Practicum and Seminar: Assessment in Speech-Language Pathology
30 hours (plus seminar and clinical practicum); 2 credits
Supervised clinical experiences completed on campus; identification and evidence-based assessment of individuals with speech, language, swallowing, communication differences/disorders across the lifespan; culturally and linguistically appropriate assessment; counseling; professional issues; ASHA code of ethics and scope of practice. Co-requisite with SPEC 7396X. Each clinic practicum course includes clinical experience and seminar.

Prerequisite: A grade of B or better in CASD 7333X or permission of deputy chairperson
Corequisite: CASD 7396X

CASD 7396X Clinical Practicum and Seminar: Intervention in Speech-Language Pathology
30 hours (plus seminar and clinical practicum); 2 credits
Supervised clinical experiences completed on campus; evidence-based intervention of individuals with speech, language, swallowing, and communication differences/disorders across the lifespan; culturally and linguistically appropriate intervention; counseling; professional issues; ASHA code of ethics and scope of practice. Each clinic practicum course includes clinical experience and seminar.

Prerequisite: A grade of B or better in CASD 7325X or permission of deputy chairperson.
Corequisite: CASD 7395X.

CASD 7397X Clinical Practicum and Seminar in Speech-Language: Assessment and Intervention I
30 hours (plus seminar and clinical practicum); 2 credits
Supervised clinical experiences completed at on-and/or off-campus sites; evidence-based identification, assessment and intervention of individuals with speech, language, swallowing, communication differences/disorders across the lifespan; culturally and linguistically appropriate identification, assessment and intervention; counseling; professional issues; ASHA code of ethics and scope of practice. Each clinic practicum course includes clinical experience and seminar. This practicum is for advanced, second year students.

Prerequisite: A grade of B or better in CASD 7395X and CASD 7396X

CASD 7398X Clinical Practicum and Seminar in Speech-Language Pathology: Assessment and Intervention II
30 hours (plus seminar and clinical practicum); 2 credits
Supervised clinical experiences completed at on- and/or off-campus sites; evidence-based identification, assessment and intervention of infant, child, and/or adolescent populations with speech, language, swallowing, and communication differences/disorders; culturally and linguistically appropriate identification, assessment and intervention; counseling; professional issues; ASHA code of ethics and scope of practice. Each clinic practicum course includes clinical experience and seminar. This clinical practicum typically precedes CASD 7399; however, the order of practicum may be reversed if deemed necessary by the graduate program.

Prerequisite: A grade of B or better in CASD 7397X.

CASD 7399X Clinical Practicum and Seminar in Speech-Language Pathology: Assessment and Intervention III
30 hours (plus seminar and clinical practicum); 2 credits
Supervised clinical experiences completed at off-campus sites; evidence-based identification, assessment and intervention of adults and/or geriatric populations. Individuals with speech, language, swallowing, communication differences/disorders; culturally and linguistically appropriate identification, assessment and intervention; counseling; professional issues.

Each clinic practicum course includes clinical experience and seminar. On occasion, CASD 7399 may precede CASD 7398 if deemed necessary by the graduate program.

Prerequisite: A grade of B or better in CASD 7398X or CASD 7399X, if completed.

CASD 7400X Special Topics in Communication Sciences and Disorders I: Infant/Child/Adolescent Populations
30 hours, 2 credits
Selected contemporary topics or current trends in the discipline of speech-language pathology. Topics vary from term to term. Students may take this course two times depending on the changing topic. Students may not repeat any topic.

CASD 7401X Special Topics in Communication Sciences and Disorders II: Adult/Geriatric Populations
30 hours, 2 credits
Selected contemporary topics or current trends in the discipline of speech-language pathology. Topics vary from term to term. Students may take this course two times depending on the changing topic. Students may not repeat any topic.

CASD U7441X Clinical Audiology

45 hours (plus conference or independent work); 3 credits
Evidence-based clinical aspects of audiologic identification, assessment, intervention, and prevention of hearing impairments relevant to the practice of speech-language pathology; strategies for working with individuals and their families across the lifespan; culturally and linguistically patient-centered practice; interprofessional practice/education.

CASD 7442X Medical Speech-Language Pathology

30 hours; 2 credits
Research and clinical practice; assessment and treatment of speech, language, cognitive, and swallowing disorders in health care or medical settings across the life span; inter-professional practice; culturally and linguistically appropriate clinical practice.

Prerequisite: CASD 7128X

CASD 7443X Pediatric Feeding and Swallowing Disorders
30 hours; 2 credits
Evidence-based research and clinical practice related to the identification, assessment and intervention of biological and sensory/behavioral feeding and swallowing disorders in young children birth to three years; application to home-based/natural environments; culturally appropriate family-centered practice.

Prerequisite: CASD 7128X

CASD 7444X Early Intervention I: Theory and Practice

30 hours (plus conference or independent work); 2 credits
History and philosophy of early intervention; contemporary models of early intervention in speech-language pathology; federal and state regulations and policies; foundations of infant mental health; social-emotional development of infants, toddlers, and young children; and the science of early brain development.

CASD 7445X Early Intervention II: Identification, Assessment, and Intervention
30 hours (plus conference or independent work); 2 credits
Contemporary evidence-based approaches to identification, assessment, and intervention of infants, toddlers and their families; the process of early intervention from referral through intervention; developing and implementing individual family service plan (IFSP); culturally responsive family-centered practice; and the use of natural environments.

Prerequisite: CASD 7444X.

CASD 7446X Clinical Practicum and Seminar in Early Intervention
30 hours (plus conference or independent work); 2 credits
Supervised clinical experiences completed at off-campus community- and/or home-based early intervention sites; evidence-based identification, assessment, and intervention of infants, toddlers, and young children; culturally and linguistically responsive family practice; counseling; professional issues; ASHA code of ethics and scope of practice. Each clinic practicum course includes clinical experience and seminar. This practicum is for advanced students enrolled in the early intervention specialization.

Prerequisite: CASD 7395X, 7396X, 7397X, 7398X, 7399X, 7442X, 7443X, 7444X, 7445X, ECAE 7675T or permission of deputy chairperson

CASD 7535X Bilingual and Second Language Acquisition
45 hours (plus conference or independent work); 3 credits
Sociocultural, psycholinguistic, sociolinguistic, cognitive, and developmental perspectives on bilingual and second language acquisition; contemporary theories of bilingual and second language acquisition; evidence-based research; differentiation of differences from disorders; cultural and linguistic competence; bilingual and multicultural education and perspectives. This course is the same as CBSE 7360X.

CASD 7536X Identification, Assessment & Intervention for Bilingual and Second Language Learners
45 hours (plus conference or independent work); 3 credits
Cultural, linguistic and clinical competencies for assessment and intervention; application of evidence-based research; non-biased assessment; distinguishing differences from disorders; working with individuals and families from diverse backgrounds; culturally and linguistically appropriate practice. This course is the same as CBSE 7359X.

Prerequisite: CASD 7535X

CASD 7537X Multicultural Competency in Speech-Language Pathology
30 hours (plus conference or independent work), 2 credits
Foundational knowledge related to various dimensions of diversity including racial, ethnic, cultural, linguistic, gender, sexual orientation, socioeconomic, religion, age, and disability in clinical practice in speech-language pathology. Designed to foster multicultural awareness, sensitivity, and competencies for provision of ethical and evidence-based practice to work with diverse clients and their families.

CASD 7551X Professional Practice of Speech-Language Pathology in Educational Settings

45 hours (plus conference or independent work); 3 credits
Roles and responsibilities of the speech-language pathologist; collaborative approaches; legislation related to service provision; service delivery models; developing and implementing Individualized Educational Program (IEP) goals; differentiation between disorders and differences in speech, language and communication; evidence-based approaches; augmentative and alternative communication systems; culturally and linguistically appropriate practice.

CASD 7600X Speech Science and Acoustic Phonetics

30 hours plus conference; 3 credits
Acoustic phonetic processes in the production and perception of speech; physiological correlates. Laboratory demonstrations.

Prerequisite: a course in each of the following: phonetics, anatomy of speech mechanisms, and acoustics of speech.

CASD 7612X Language and Speech of Hearing-impaired Children
30 hours plus conference; 3 credits
Development, diagnosis, and treatment of speech and language in children with hearing impairments. Applications to clinical and educational settings.

CASD 7613X Proseminar in Audiology

45 hours; 3 credits
Intensive study of technical and theoretical problems. Independent laboratory, clinical, library research. Detailed reports.

Prerequisite: CASD U7605X and U741X; or the equivalent of the courses.

CASD 7691X Clinical Practicum and Seminar in Audiology
15 hours (plus seminar and clinical practicum); 1 credit
Supervised clinical experience with individuals throughout the lifespan and of diverse cultural and linguistic backgrounds; interprofessional practice; identification, assessment, (re) habilitation and prevention of hearing impairment related to the practice of speech-language pathology; professional issues and case studies.

Prerequisite or corequisite: U7441X or permission of the deputy chairperson.

CASD 7701X The Nature of Stuttering

30 hours plus conference; 3 credits
Theories and research findings relating to the onset, development, persistence of stuttering.

Prerequisite: a course in speech and language disorders.

CASD 7801X Speech Communication and Group Dynamics
45 hours; 3 credits
Influence of group dynamics on speech communication effectiveness. Function of speech in formation of social groups. Current research in speech communication theories and group structure analysis.

Prerequisite: permission of the deputy chairperson.

CASD 7802X Public Address

45 hours; 3 credits
Historical and rhetorical analysis of representative American public speakers.

Prerequisite: permission of the deputy chairperson.

CASD 7803X Research in Rhetoric and Public Address

45 hours; 3 credits
Individual and group study of historical, descriptive, experimental research methods. Bibliographical resources and professional writing in rhetoric and public address.

Prerequisite: permission of the deputy chairperson.

CASD 7804X Speech Criticism

45 hours; 3 credits
Comparative study of various methods of rhetorical criticism: traditional (neo-Aristotelian and historical); experiential (eclectic, sociocultural-psychological); grammatical-semantical; dramatistic; others.

Prerequisite: permission of the deputy chairperson.

CASD 7805X Conflict Management: A Business Communication Perspective
45 hours; 3 credits
Current research findings, theories, and practices in conflict settings with respect to oral communication. Conflict resolution, negotiation, and mediation skills applied to the business environment. Simulated case studies and individual evaluations. Experience in developing the necessary conflict management skills.

Prerequisite: CASD 2719; and CASD 2623 or 33 or permission of the chairperson.

CASD 7821X Seminar in Rhetoric and Public Address

45 hours; 3 credits
Examination of the types of rhetorical and oratorical research. Independent research and reports. Students may repeat this course twice for credit.

Prerequisite: permission of the deputy chairperson.

CASD 7822G Thesis Research

Hours to be arranged; no credit
Research for master's thesis supervised by a faculty member. Students register for this course only once.

Prerequisite: permission of the deputy chairperson.

Audiology

AUDI 8000 Anatomy and Physiology of the Audio-Vestibular System
60 hours lecture (plus conference or independent work); 4 credits
Description: Investigation of the structure, and function of the auditory and vestibular systems and basic concepts in genetics.

AUDI 8010 Essentials of Biostatistics in Audiology

30 hours lecture (plus conference or independent work); 2 credits

Study and interpretation of biostatistics in Audiology and application of biostatistics to data. Biostatistics topics covered include descriptive statistics; estimating and comparing means using parametric and nonparametric methods; estimating and comparing proportions; relative risks and odds ratio; correlation and regression; hypothesis testing and power.

AUDI 8030 Acoustics and Psychoacoustics

30 hours lecture, 15 hours laboratory (plus conference or independent work); 3 credits
Exploration of the decibel, sound transmission, complex stimuli, psychoacoustic methods, signal detection theory, auditory sensitivity, masking, loudness, pitch, binaural hearing.

AUDI 8050 Speech-Language Sciences

45 hours lecture (plus conference or independent work); 3 credits
Exploration of phonological, lexical syntactic-morphological, and pragmatic aspects of human communication associated with speech, language, hearing, and related disorders, normal processes of speech and language comprehension and production over the life span.

AUDI 8090 Instrumentation in Audiology

15 hours lecture, 15 hours laboratory (plus conference or independent work); 2 credits
Measurement and calibration of the physical characteristics of acoustic, electric, and other non-acoustic stimuli; instrumentation, digital technology; bio-electrical hazards.

AUDI 8100 Diagnostic Audiology

45 hours lecture plus conference, 15 hours laboratory (plus conference or independent work); 4 credits
Study of audiological test procedures and interpretation in the assessment of peripheral and functional hearing impairment.

AUDI 8120 Speech-Language Pathology for Audiologists

60 hours lecture (plus conference or independent work); 4 credits
Exploration of the effects of communication disorders and differences on audiological testing, treatment (habilitation strategies for improving speech perception) and counseling; screening and prevention of communication disorders across the life span. Additionally, exploration of phonological, lexical, syntactic-morphological, and pragmatic
aspects of speech and language.

AUDI 8160 Physiological Acoustics

45 hours lecture (plus conference or independent work); 3 credits
Detailed study of the pneumatic/mechanical/hydraulic/electrical interfaces involved in the transduction of acoustic energy through the auditory system. In-depth investigation of the external ear biophysics, middle ear transfer function, cochlear hydrodynamics and hydromechanics, auditory biopotentials, cochlear non-linearity, neural transduction and neural coding in the peripheral and central auditory systems.

Prerequisites: AUDI 8030X Acoustics and Psychoacoustics; and AUDI 8000 Anatomy & Physiology of the Audio-Vestibular System

AUDI 8180 Introduction to Research Methods

45 hours lecture (plus conference or independent work); 3 credits
Exploration of issues and concepts in study design and analysis including types of research, controlling for confounding variables, measurement errors and their effects, statistical methods, and their applications to clinical populations.

AUDI 8200 Multicultural Issues for Audiologists

30 hours lecture (plus conference or independent work); 2 credits
Examination of multicultural influences on the prevalence of auditory, vestibular, and otologic disorders; dialectical considerations for suprathreshold speech-recognition assessment; multicultural influences on attitudes toward health care providers, health care, disability, and the deaf; ramifications of cultural diversity for professional practice; using culturally sensitive measures and protocols for assessment and management.

Prerequisite or co-requisite: AUDI 8100 Diagnostic Audiology

AUDI 8250 Noise-Induced Hearing Loss and Hearing Conservation

15 hours lecture (plus conference or independent work); 1 credit
Overview of the anatomical, physiological, and psychological effects of noise; regulations and laws related to noise; hearing conservation programs and the audiologist's role in noise measurement, noise control, and identification and prevention of hearing loss from noise exposure.

Prerequisite: AUDI 8100 Diagnostic Audiology

AUDI 8280 Professional Issues in Audiology

15 hours lecture (plus conference or independent work); 1 credit
Current local, regional, and national public policy and medico-legal issues that impact service delivery by the Audiologist and intra- and inter-professional relationships in the hearing healthcare delivery system.

AUDI 8300 Amplification I

30 hours lecture and 15 hours laboratory (plus conference or independent work); 3 credits
Examination of hearing-aid components, hearing aid candidacy, output limiting/compression, electroacoustic and real-ear measures, prescriptive procedures, amplification, earmolds and earmold acoustics, cerumen management, binaural issues including deprivation and acclimatization, approaches to hearing-aid evaluation.

Prerequisite or co-requisite: AUDI 8900 Introduction to Audiology Practicum; AUDI 8100 Diagnostic Audiology; and AUDI 8090 Instrumentation in Audiology

AUDI 8320 Hearing Aid Laboratory

15 hours lab (plus conference or independent work); 1 credit
Hands-on laboratory involving instrumentation and technology used for hearing aid fitting, testing and modification. This course complements the content in AUDI 73000 (Amplification I).

AUDI 8330 Management of Persons with Hearing Loss

45 hours lecture (plus conference or independent work); 3 credits
A comprehensive approach to rehabilitation of individuals with hearing impairment; assessment of communicative function including auditory/visual speech perception; and use of self- or parent-assessment using cochlear implants and other sensory aids.

Prerequisites: Audiology Practicum I and Diagnostic Audiology
Prerequisite or co-requisite: AUDI 8300 Amplification I

AUDI 8350 Acoustic Immittance and Otoacoustic Emissions
30 hours lecture and conference, 15 hours laboratory (plus conference or independent work); 3 credits
Advanced differential diagnosis of auditory disorders. Exploration of theoretical bases and clinical aspects of otoacoustic emissions and middle ear measurement.

Prerequisite or co-requisite: AUDI 8900 Introduction to Audiology Practicum; AUDI 8100 Diagnostic Audiology

AUDI 8400 Aural Habilitation

30 hours lecture (plus conference or independent work); 2 credits
Roles and responsibilities of the audiologist in clinical and educational settings. Assessment and management of communicative function in children with hearing impairment, including those with minimal hearing loss. Development of strategies for improving speech perception skills including usage of assistive technology.

Prerequisites: Audiology Practicum I and Speech-Language Sciences
Prerequisite or co-requisite: AUDI 8300 Amplification I

AUDI 8420 Early and Middle Latency Auditory Evoked Potentials
30 hours lecture, 15 hours laboratory (plus conference or independent work); 3 credits
Exploration of the theoretical bases and clinical applications of the auditory evoked potentials.

AUDI 8430 Long Latency Auditory Evoked Potentials

30 hours lecture and lab (plus conference or independent work), 2 credits
Exploration of the theoretical bases and clinical application of the long latency auditory evoked potentials.

AUDI 8460 Pediatric Audiology

45 hours lecture (plus conference or independent work); 3 credits
Exploration of the effects of hearing loss on child development, prevalence of hearing loss in childhood, embryology, genetic issues, development of auditory function, hearing and balance disorders in children, pediatric audiology assessment battery, pediatric considerations in amplification, assessment of special populations.

Prerequisites: AUDI 8300 Amplification I; AUDI 8901 Audiology Practicum I; and AUDI 8420 Early and Middle Latency Auditory Evoked Potentials

AUDI 8480 Amplification II

30 hours lecture and 15 hours laboratory (plus conference or independent work); 3 credits
Advanced signal processing, verification, validation/outcome measures, pediatric amplification fitting, noise-reduction strategies, multi-microphone/directional technology, troubleshooting/repair, hearing-aid orientation.

Prerequisite: AUDI 8300 Amplification I

AUDI 8500 Counseling

30 hours lecture (plus conference or independent work); 2 credits
Contemporary theories of counseling. Application of principles and methods to problems faced by individuals with communication, hearing, vestibular and tinnitus disorders, and their families. Counseling strategies to maximize the individual's ability to understand, adapt and cope with his/her disorder.

AUDI 8600 Medical Audiology

45 hours lecture (plus conference or independent work); 3 credits
Medical and audiological aspects of hearing and balance disorders, including issues in genetics, otologic assessment and treatment, and use of imaging studies.

Prerequisite or co-requisite: AUDI 8420 Early and Middle Latency Auditory Evoked Potentials

AUDI 8630 Vestibular Evaluation and Management

30 hours lecture 15 hours lab (plus conference or independent work); 3 credits
Investigation of balance tests including electronystagmography, posturography, and rotary chair; and vestibular rehabilitation.

Prerequisite: AUDI 8100 Diagnostic Audiology

AUDI 8640 Tinnitus Evaluation and Management

15 hours lecture (plus conference or independent work); 1 credit
Electrophysiologic and behavioral assessment of tinnitus and tinnitus management through sound therapies and behavioral/psychological techniques.

AUDI 8650 Audiologic Research Proposal

30 hours lecture (plus conference or independent work); 2 credits
Critiquing of research and the development of individual research proposals. Development of Institutional Review Board (IRB) application.

Prerequisite: AUDI 8180 Introduction to Research Methods

AUDI 8670 Amplification III

30 hours lecture and 15 hours laboratory (plus conference or independent work); 3 credits
Advanced programming. FM fitting and evaluation; special fittings; developing technologies; current research in amplification.

Prerequisite: AUDI 8480 Amplification II

AUDI 8680 Pediatric Amplification

15 hours lecture(plus conference or independent work), 1 credit
Contemporary, evidence-based practice for the selection and fitting of hearing aids to the pediatric population. Topics include: theoretical bases and procedures for non-electroacoustic and electroacoustic hearing selection, fitting and verification of hearing aid performance.

Prerequisite or co-requisite: AUDI 8300 Amplification I

AUDI 8700 Cochlear Implants and Other Sensory Aids

45 hours lecture (plus conference or independent work); 3 credits
Effects of electrical stimulation on the auditory system; exploration of candidacy, principles of signal processing, and audiologic management for children and adults who use cochlear implants and other sensory aids.

Prerequisite: AUDI 8300 Amplification I

AUDI 8720 Auditory Processing Disorders: Assessment and Treatment
45 hours lecture (plus conference or independent work); 3 credits
Relevant neuroanatomy and physiology of auditory pathways: behavioral and physiological assessment techniques and management procedures for children and adults with auditory processing disorders.

Prerequisite or co-requisite: AUDI 8460X Pediatric Audiology and AUDI 8120 Speech-Language Pathology for Audiologists

AUDI 8740 Hearing and Aging

45 hours lecture (plus conference or independent work); 3 credits
Examination of the biological, physiological and sociological changes accompanying the aging process; protocols for evaluating and treating older adults with hearing impairment.

Prerequisite: AUDI 8300 Amplification I

AUDI 8760 Seminar in Professional Practice – Business Practices
30 hours lecture (plus conference or independent work); 2 credits
Issues of a professional nature that impact on the practice of Audiology. Topics include licensure, accreditation/certification, quality assurance, reimbursement, establishing a private practice, professional liability, privacy/confidentiality, and ethics.

Prerequisite: AUDI 8300 Amplification I

AUDI 8780 Topics in Audiology

15-45 hours; 1-3 credits (variable)
This topics course allows for expanded coverage of topic(s) covered in other AUD courses and/or focus on emerging issues in audiologic practice or research. Courses are repeatable.

Prerequisite: AUDI 8100 Diagnostic Audiology

AUDI 8800 Audiologic Research

15 hours lecture (plus conference or independent work); 1 credit
Students, under the direction of their clinical research project committee, will carry out the proposal developed in Audiologic Research Proposal.

Prerequisite: AUDI 8650 Audiologic Research Proposal

AUDI 8900 Introductory Audiology Practicum

30 hours laboratory (plus conference or independent work); 2 credits
Laboratory in audiologic assessment and hearing-aid evaluation and introduction to practicum protocols and procedures, under the supervision of an ASHA certified and New York State licensed Audiologist.

Prerequisite or co-requisite: AUDI 8100 Diagnostic Audiology

AUDI 8901 Audiology Practicum I

15 hours Laboratory (plus conference or independent work); 1 credit
Clinical practicum in assessment and management of a wide variety of hearing disorders under the supervision of an ASHA certified and New York Licensed audiologist.

Prerequisite: AUDI 8900 Introductory Audiology Practicum

AUDI 8902 Audiology Practicum II

15 hours Laboratory (plus conference or independent work); 1 credit
Clinical Practicum in assessment and management of a wide variety of hearing disorders under the supervision of an ASHA certified and New York Licensed audiologist.

Prerequisite: AUDI 8901 Audiology Practicum I

AUDI 8903 Audiology Practicum III

15 hours Laboratory (plus conference or independent work); 1 credit
Clinical Practicum in assessment and management of a wide variety of hearing disorders under the supervision of an ASHA certified and New York Licensed audiologist.

Prerequisite: AUDI 8902 Audiology Practicum II

AUDI 8904 Audiology Practicum IV

15 hours Laboratory (plus conference or independent work); 1 credit
Clinical Practicum in assessment and management of a wide variety of hearing disorders under the supervision of an ASHA certified and New York Licensed audiologist.

Prerequisite: AUDI 8903 Audiology Practicum III

AUDI 8905 Audiology Practicum V

15 hours Laboratory (plus conference or independent work); 1 credit
Clinical Practicum in assessment and management of a wide variety of hearing disorders under the supervision of an ASHA certified and New York Licensed audiologist.

Prerequisite: AUDI 8904 Audiology Practicum IV

AUDI 8906 Audiology Practicum VI

15 hours Laboratory (plus conference or independent work); 1 credit
Clinical Practicum in assessment and management of a wide variety of hearing disorders under the supervision of an ASHA

certified and New York Licensed audiologist.

Prerequisite: AUDI 8905 Audiology Practicum V

AUDI 8961 Seminar in Audiology I

15 hours (plus conference or independent work); 1 credit
Examination of ethical issues, certification standards, center policies and procedures, infectious disease and infection control, history taking, report-writing, counseling, case studies, procedures, and protocols in various settings.

Co-requisite: AUDI 8901 Audiology Practicum I

AUDI 8962 Seminar in Audiology II

15 hours (plus conference or independent work); 1 credit
Examination of ethical issues,certification standards, center policies and procedures, infectious disease and infection control, history taking, report-writing, counseling, case studies, procedures, and protocols in various settings.

Co-requisite: AUDI 8902 Audiology Practicum II

AUDI 8963 Seminar in Audiology III

15 hours (plus conference or independent work); 1 credit
Examination of ethical issues, certification standards, center policies and procedures, infectious disease and infection control, history taking, report-writing, counseling, case studies, procedures, and protocols in various settings.

Co-requisite: AUDI 8903 Audiology Practicum III

AUDI 8964 Seminar in Audiology IV

15 hours (plus conference or independent work); 1 credit
Examination of ethical issues, certification standards, center policies and procedures, infectious disease and infection control, history taking, report-writing, counseling, case studies, procedures, and protocols in various settings.

Co-requisite: AUDI 8904 Audiology Practicum IV

AUDI 8965 Seminar in Audiology V

15 hours (plus conference or independent work); 1 credit
Examination of ethical issues, certification standards, center policies and procedures, infectious disease and infection control, history taking, report-writing, counseling, case studies, procedures, and protocols in various settings.

Co-requisite: AUDI 8905 Audiology Practicum V

AUDI 8966 Seminar in Audiology VI

15 hours (plus conference or independent work); 1 credit
Examination of ethical issues, certification standards, center policies and procedures, infectious disease and infection control, history taking, report-writing, counseling, case studies, procedures, and protocols in various settings.

Co-requisite: AUDI 8906 Audiology Practicum VI

AUDI 8980 Independent Study

Conference; 1-3 credits
Limited research review or research study to permit in-depth exploration of single area; with faculty supervision.

AUDI 8982 Independent Study II

30 hours Laboratory plus conference or independent work; 2 credits
Limited research review or research study to permit in-depth exploration of single area; with faculty supervision.

AUDI 8983 Independent Study III

45 hours Laboratory (plus conference or independent work); 3 credits
Limited research review or research study to permit in-depth exploration of single area; with faculty supervision.

AUDI 8991 Audiology Residency I

1 - 3 credits (Typically 3 credits)
Students will be placed and supervised in setting(s), which will meet CAA standards for the Certificate of Clinical Competence for the clinical residency year. Students must successfully complete AUDI 8991X Audiology Residency I, AUDI 8992X Audiology Residency II, and AUDI 8993X Audiology Residency III needed to complete their clinical residency requirement. Students take these courses for 3 credits each except when advised by a Coordinator of Clinical Education in Audiology to do otherwise.

Prerequisite: AUDI 8966 Seminar in Audiology VI

AUDI 8992 Audiology Residency II

1 - 3 credits (Typically 3 credits)
Students will be placed and supervised in setting(s), which will meet CAA standards for the Certificate of Clinical Competence for the clinical residency year. Students must successfully complete AUDI 8991X Audiology Residency I, AUDI 8992X Audiology Residency II, and AUDI 8993X Audiology Residency III needed to complete their clinical residency requirement. Students take these courses for 3 credits each except when advised by a Coordinator of Clinical Education in Audiology to do otherwise.

Prerequisite: AUDI 8991 Audiology Residency I

AUDI 8993 Audiology Residency III

1 - 3 credits (Typically 3 credits)
Students will be placed and supervised in setting(s), which will meet CAA standards for the Certificate of Clinical Competence for the clinical residency year. Students must successfully complete AUDI 8991X Audiology Residency I, AUDI 8992X Audiology Residency II, and AUDI 8993X Audiology Residency III needed to complete their clinical residency requirement.

Prerequisite: AUDI 8992 Audiology Residency II

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

CASD 7807X Studies in Argumentation and Debate

Computer and Information Science

Department office: 2109 Ingersoll Hall
Phone: 718.951.5657

Full-time Faculty

Professors: Arnow, Bar-Noy, Langsam, Parikh, Psarris, Rudowsky, Sokol, Weiss, Yanofsky, Yarmish, Zhou, Ziegler
Associate Professors: Cox, Kletenik, Levitan, Schnabolk, Thurm
Assistant Professors: Chen, Santhalingam, Wang
Lecturers: Briskman, Chuang, Samanta, Taylan, Xiang

The Department of Computer and Information Science (CIS) leads the City University of New York - as well as many other universities and colleges nationwide - in cutting-edge resources for teaching and learning about computer and information science. Our expert faculty members are always ahead of the digital-world curve. A graduate degree from our department is extremely well respected by organizations in all industries nationwide. With your Brooklyn College CIS graduate degree, you can obtain positions at all career levels or advance your current career.

M.S. degree program in computer science
HEGIS code 0701; SED program code 77202

Matriculation requirements

Applicants are expected to have the equivalent of at least 15 credits in computer and information science and related areas, including the following: knowledge of a high-level computer language (preferably C++ or Java), knowledge of assembly language and computer architecture, a course in discrete structures, a course in data structures, and a course in calculus. Students who do not have these requirements can be accepted with the condition that they complete these courses at the undergraduate level.

Students in the health informatics track must also have 18 credits in health or science related courses. Calculus can be waived for this concentration.

General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Degree requirements

Thirty credits are required for the degree. Students must maintain at least a B (3.00) average.
Students must complete 30 credits in courses numbered 7000 and above.

Up to 10 credits in courses in other departments may be substituted, with the permission of the graduate deputy chairperson. There are three tracks: Computation, Information Systems, and Health Informatics.

All students must complete each of the following core courses:

CISC 7540 Software Methodology,
CISC 7510 or CISC 7512 Database Systems or Advanced Database Systems,
CISC 7700 Intro to Data Science,
CISC 7302 Computer architecture

Students in the Computation track must complete

CISC 7200 Analysis of Algorithms,
CISC 7221 Theoretical Computer Science,

Students in the Information Systems track must complete:

CISC 7500 Introduction to Management Information Systems,
CISC 7530 IT Project Management

Students in the Health Informatics track must complete

CISC 7450X Computer Applications in Health Sciences
And three courses from Health & Nutrition Sciences

Additional electives courses in CISC 7000 level may be needed to complete the 30 credit requirement.

Courses should be selected in consultation with the program advisor.

As an exit requirement, all students must complete one of the following:

(a) CISC 7990G and a thesis acceptable to the department; no more than 6 credits in thesis research may be counted toward the degree

(b) Pass a written comprehensive examination

Health Informatics track students only may substitute:
(c) CISC 7980G Health Informatics Internship or a research project, with permission of the department chair or designee. The internship is the preferred option for the Health Informatics track.

As an exception to the general college rule, the comprehensive examination in the Department of Computer and Information Science may be taken in the term preceding the one in which the student will complete all course requirements for the degree. However, all other college regulations concerning the comprehensive examination still apply. Students are strongly advised to take advantage of this exception and to take the comprehensive examination in the earlier semester.

CUNY Ph.D.

The City University of New York offers a doctoral program in computer science. General information about CUNY Ph.D. programs is in the chapter “Support for Academic Success in Graduate School.” Computer and Information Science Department courses may be credited toward the CUNY doctoral degree with permission of the executive officer of the doctoral program. For information, students should consult the deputy chairperson of the Computer and Information Science Department and the executive officer of the doctoral program.

Courses

Unless a prerequisite is specific, a student may apply graduate or undergraduate courses toward fulfillment of that prerequisite.

*Students completing the requirements for the M.A. in computer science must complete at least three courses labeled with an asterisk, as stated under "Degree requirements."

CISC 7100X Foundations of System Programming

37½ hours plus conference and independent work; 3 credits
Programming with the basic resources of the operating system. Process, threads, and the inter-process/thread communication facilities, signals, pipes, sockets, semaphores, and shared memory. Allocation and protection of resources. Process and thread scheduling. Network programming.

Prerequisite: a course in data structures.

CISC *7120X Programming Languages and Compilers

37½ hours plus conference and independent work; 3 credits
Formal languages for language specification (regular expressions and context-free grammars), scanning and parsing, programming paradigms and their characteristics, imperative programming, object-oriented programming, functional programming, logic and constraint programming, scripting languages, concurrent programming, language implementation techniques, virtual machines, run-time systems and memory management.

Prerequisite: A course in data structures; and a course in discrete structures.

CISC *7124X Object-Oriented Programming

37½ hours plus conference and independent work; 3 credits
Object-oriented programming concepts and techniques: data abstraction and encapsulation, classes, inheritance, overloading, polymorphism, interfaces. Introduction to and use of one or more object-oriented languages such as C++ or Smalltalk. An introduction to object-oriented design.

Prerequisite: one of the following: Computer and Information Science 7110X [707X], 7120X [708X], 7122X [709X], 7310X [704X], or 7312X [705X],

CISC 7200X Analysis of Algorithms

37½ hours plus conference and independent work; 3 credits
Introduction to algorithms and their complexity, including models of computation. Review of data structures and techniques of efficient program design. Analysis of algorithms chosen from sorting and searching, graph theory, pattern matching, matrix operations, and combinatorial optimization. Algorithms will be analyzed for their space, time, and other resource requirements. NP-complete problems. Complexity classes. Not open to students who have completed an undergraduate course in analysis of algorithms.

Prerequisite: A course in data structures; and a course in discrete structures.

CISC *7212X Parallel Algorithms

37½ hours plus conference and independent work; 3 credits
Theoretical models for parallel computation. Parallel algorithms for the PRAM. Speedup and efficiency. Issues in the design of parallel algorithms for evolving real-world parallel architectures, including synchronization, overhead, and scalability.

Prerequisite: Computer and Information Science 7200X [714X]

or a course in analysis of algorithms.

CISC *7214X Algorithms and Complexity

37½ hours plus conference and independent work; 3 credits
Definitions of P, NP, and NP-complete complexity classes and the relationship between these classes. Approximation algorithms and their efficiency. Other complexity classes. Current models and paradigms of computation. The P? = NP question is discussed and explored. Advanced topics from contemporary research.

Prerequisite: Computer and Information Science 7200X [714X] or a
course in analysis of algorithms.

CISC 7220X Computability and Unsolvability

37½ hours plus conference and independent work; 3 credits
Formal systems, propositional and quantification logic, theorem proving, equivalent characterizations of effective computability. Turing machines, recursive functions, and sets. Other notions of Godel, Herbrand, Kleene, Church, Post, and Markov. Classification of unsolvable problems.

Prerequisite: Computer and Information Science 7221X or a course in theoretical computer science.

CISC 7221X Theoretical Computer Science

37½ hours plus conference and independent work; 3 credits
Overview of theoretical computer science. Finite automata and pushdown automata, grammars, Turing machines, the Halting Problem, unsolvable problems. Time complexity, space complexity, complexity classes, P, NP, NP-Complete, PSPACE, EXPTIME. Not open to students who have completed a course in theoretical computer science.

Prerequisite: a course in discrete structures. .

CISC 7224X Formal Languages and Automata Theory

37½ hours plus conference and independent work; 3 credits
Theory of grammars, regular grammars, context-free and context-sensitive grammars, recognizers. Models of computation, finite state machines, pushdown automata, random access stored program machines. Introduction to notions of category theory and its influences.

Prerequisite: Computer and Information Science 7221X or a course in theoretical computer science.

CISC *7226X Information and Computation

37½ hours plus conference and independent work; 3 credits
Introduction to Shannon's information theory. Data compression algorithms: Huffman, dictionary, and predictive approaches. Techniques for different data formats. Information theory and cryptology: theoretical limits. Basic concepts of cryptology. Classic cryptography and cryptanalysis. Modern cryptographic algorithms. Information and the information environment.

Prerequisite: Computer and Information Science 7200X [714X] or an undergraduate course in analysis of algorithms; and Mathematics 6652X [652X] or a course in probability.

CISC *7230X Cryptosystems

37½ hours plus conference and independent work; 3 credits
Theoretic tools useful in the study of cryptography: number theory, algebra, probability, computational complexity. Tests for primality. Pseudo-random number generators. Public-key cryptosystems. Arthur-Merlin games and minimum- knowledge protocols.

Prerequisite: Computer and Information Science 7200X [714] or an undergraduate course in analysis of algorithms.

CISC 7300X Computer Systems and Architecture

37½ hours plus conference and independent work; 3 credits
Essentials of computer hardware and systems software. Operating systems fundamentals. Computer hardware and architecture fundamentals. Processor technology. Input/output systems. File systems. Introduction to data and network communications. Distributed systems. Applications development cycle. Systems integration and performance. Introduction to procurement of hardware and software. Computing resource management. (Not open to students who have taken Computer and Information Science 7310X [704X].)

Prerequisite: A course in computer organization or architecture and a course in data structures.

CISC 7302X Computer Architecture

37½ hours plus conference and independent work; 3 credits
Digital circuits and logic design. Gates, registers, counters, bus transfer. The arithmetic unit and machine algorithms for high-speed arithmetic. The control unit. Memory design and the analysis of hierarchical memory systems and their management. Input-output and communication techniques. Microprogramming. Comparison of advanced systems including multiprocessors, stack machines, parallel and pipeline processors, associative computers.

Prerequisite: An undergraduate course in computer organization.

CISC 7310X Operating Systems I

37½ hours plus conference and independent work; 3 credits
Organization and programming of executive control systems. Batch processing, multiprogramming, multiprocessing, and time-sharing systems. File system organization and management. Access and protection control. Resource allocation. Control systems languages. Mathematical models of computer systems. This course requires a substantial amount of programming. (Not open to students who have completed CIS 7300X [703X] or a course in operating systems.)

Prerequisite: CISC 3130 or a course in data structures and CISC 3310 or an undergraduate course in computer organization.

CISC *7312X Operating Systems II

37½ hours plus conference and independent work; 3 credits
Study of the more advanced aspects of operating systems with emphasis on overall design and system structure. Asynchronous operation and interprocess communication. Network operating systems. Debugging and verification.

Prerequisite: Computer and Information Science 7310X [704X] or a course in operating systems.

CISC *7320X Computer Security

37½ hours plus conference and independent work; 3 credits
Basic concepts of computer security: Security related services: confidentiality, integrity, availability. Threats, security policies and security mechanisms. Cryptographic concepts and terminology. Secure design principles. Information flow and

the confinement problem. Life cycle of a secure and trusted system. System evaluation criteria. Trojan horses, worms and viruses. Vulnerability analysis. System auditing. Intrusion detection.

Prerequisite: Math 7280X or a course in calculus, Computer and Information Science 7310X [704].

CISC *7330X Teleprocessing Systems

37½ hours plus conference and independent work; 3 credits
Teleprocessing systems and concepts, communications terminology, types of networks, transmission properties, modems, types of terminals, codes, error-control procedures, multiplexing and concentration devices, access methods, network design and performance, security and reliability, backup and fault isolation, message routing, message queueing, message editing, intelligent nodes, virtual teleprocessing access methods.

Prerequisite: Computer and Information Science 7300X [703X] or 7310X [704X] or a course in operating systems; Computer and Information Science 7302X [742.1X] or a course in computer organization; and Mathematics 6652X [652X] or a course in probability and statistics.

CISC *7332X Local Area Networks

37½ hours plus conference and independent work; 3 credits
Local area network (LAN) technology. Topologies and transmission media. LAN protocols. The IEEE 802 standard. High speed LANs. Optical fiber LANs. The FDDI standard. Circuit-switched LANs. LAN performance measurements. The network interface. Internetworking. Network design issues. Commercial systems.

Prerequisite: Computer and Information Science 7300X [703X] or 7310X [704X] or a course in operating systems; Computer and Information Science 7302X [742.1X] or a course in computer organization; and Mathematics 6652X [652X] or a course in probability and statistics.

CISC *7334X Computer Communication Networks

37½ hours plus conference and independent work; 3 credits
Advanced concepts in computer organization and an introduction to the fundamental principles of computer communication networks. Network structure and architecture. The ISO Reference Model. Protocols and their software implementation. Point-to-point, satellite, radio, and local area networks. Routing, congestion, and flow control algorithms. Examples of current networks.

Prerequisite: Computer and Information Science 7300X [703X] or 7310X [704X] or a course in operating systems; Computer and Information Science 7302X [742.1X] or a course in computer organization; and Mathematics 6652X [652X] or a course in probability and statistics.

CISC *7340X Parallel and Distributed Systems

37½ hours plus conference and independent work; 3 credits
A survey of the applications and implementations of parallelism in existing and proposed computing systems. Flynn's classification of computers. Multiprocessor systems, array processors, vector machines, computer clusters and web-computing. Languages for parallel and distributed systems. Operating system issues. Notations expressing concurrency. The semantics of concurrency. Verification rules. Standard problems.

Prerequisite: Computer and Information Science 7100X [701X] and either 7310X [704X] or a course in operating systems.

CISC *7350X Distributed System Administration

37½ hours plus conference and independent work; 3 credits
Installation, configuration, and maintenance of an operating system. Configuration of routers, networks, and subnetworks. 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 7310X [704X] or a course in operating systems or permission of the chairperson.

CISC 7410X Artificial Intelligence I

37½ hours plus conference and independent work; 3 credits
Techniques for making machines 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. This course requires a substantial amount of programming. (Not open to students who have taken an undergraduate course in artificial intelligence.)

Prerequisite: CISC 3310 or a course in data structures.

CISC *7412X Artificial Intelligence II

37½ hours plus conference and independent work; 3 credits
A second-level course in artificial intelligence. Topics discussed will be taken from the areas of knowledge representation, logic and logic programming, pattern-directed inference, reasoning with uncertain or unreliable knowledge, natural language processing, computer vision, machine architecture, and programming languages for artificial intelligence.

Prerequisite: Computer and Information Science 7410X [716X] or a course in artificial intelligence.

CISC *7440X Pattern Recognition and Neural Networks

37½ hours plus conference and independent work; 3 credits
Introduction to fundamental concepts and methods in pattern recognition. Statistical decision-theoretic techniques, cluster analysis, feature selection, and recognizing patterns with nonnumeric features. The generalized perceptron, feedforward multilayer neural networks, network associative memories, self-organizing neural networks for pattern recognition.

Prerequisite: Mathematics 7280X [607X] or one year of elementary calculus; Mathematics 6652X [652X] or a course in probability theory; and Computer and Information Science 7410X [716X] or a course in artificial intelligence.

CISC *7450X Computer Applications in Health Sciences

45 hours; 3 credits
Use of computers in health-related fields. Understanding unique theoretical and practical applications to health science research, education, and clinical practice. Course includes projects tailored to the interests of individual students. This course is the same as Health and Nutrition Sciences 7161X.

Prerequisite: one 7000-level course in health and nutrition sciences and one 7000-level course in computer and information science.

CISC 7500X Introduction to Management Information Systems
37½ hours plus conference and independent work; 3 credits
The role of people, computers, and communications in management information systems. Feasibility studies. Analysis of information and processing requirements, processing methods, data management, and implementation strategies for on-line, database, and integrated systems and for control of operations. Models of decision making. Economics of information, methods of evaluating alternative courses of action.

Prerequisite: CIS 3110 [15] or a course in advanced programming techniques.

CISC 7510X Database Systems

37½ hours plus conference and independent work; 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. This course requires a substantial amount of programming. (Not open to students who are enrolled in or have completed Computer and Information Science 3810 [45].)

Prerequisite: CISC 1050 or CISC 3810 or an equivalent undergraduate course.

CISC *7512X Advanced Database Systems

37½ hours plus conference and independent work; 3 credits
Advanced aspects of database systems. Topics are chosen from such advanced topics as dimensional modeling, data warehouse design, data mining, XML integration, geographic information systems, and spatial and temporal data types

Prerequisite: Computer and Information Science 7510X [717.1 X] or its equivalent.

CISC 7520X Requirements Modeling for Information Systems
37½ plus conference and independent work; 3 credits
Analyzing and managing business requirements for information systems. Translating business requirements into industry-standard documents. Documentation, analysis and improvement of business processes using Unified Modeling Language (UML). Managing and tracing software requirements throughout the project lifecycle.

Prerequisite: A course in data structures.

CISC 7522X Systems Analysis and Design

37½ hours plus conference and independent work; 3 credits
Fundamental concepts of systems, principles of modeling, use of feedback, hierarchical structures, systems complexity and simplification. Database systems concepts, database design, analytical and experimental methods for computer systems analysis, system performance evaluation, throughput determination.

Prerequisite: CISC 3130 or a course in data structures.

CISC *7530X IT Project Management

37½ hours plus conference and independent work; 3 credits
The project and the role of the project manager. Project life cycle and phases of a project. The project management plan, obtaining stakeholder buy-in, integrating business and IT expertise into the design. Managing an ongoing project, change control and scope-creep management. Time management scheduling using time management software -- Gantt charts, Critical Path Method (CPM) and Program Evaluation and Review Technique (PERT). Cost estimation, project budgeting and cost control. Quality control tools and techniques. Building, managing and motivating a project team. Monitoring and managing risk. Bringing a project to closure.

Prerequisite: Computer and Information Science 7500X [757X]

CISC 7532X Information Systems Management

37½ hours plus conference and independent work; 3 credits
Management of the systems development, maintenance/enhancement, technical support, telecommunications, and operational functions of I/S, including project planning and control, make:buy analysis, and other methods of evaluating alternative courses of action; information systems portfolio assessment. Emphasis on the tactical (short-term) aspects of I/S.

Prerequisite: Computer and Information Science 7500X [757X].

CISC 7534X Information Systems Planning and Policy

37½ hours plus conference and independent work; 3 credits
The information system (I/S) unit and function as a component of the overall organization. The use of I/S by organizations to gain competitive advantage. Alternative methods for positioning, structuring, and controlling information systems for effectiveness and efficiency. I/S planning strategies and methodologies; roles for steering committees. Emphasis on the strategic (or long-term) aspects of the I/S function, within the organization, in its dealing with suppliers, competitors, and customers/clients, and in its impact on society.

Prerequisite: Computer and Information Science 7500X [757X].

CISC *7540X Software Methodology

37½ hours plus conference and independent work; 3 credits
Techniques for the design, implementation, maintenance, and management of very large software systems. The relation between size and complexity. Goals and measurements. Design and implementation strategies. Testing, validation, and proofs of correctness. Language aspects. Design and implementation tools. Asynchronous and real-time systems. Project management.

Prerequisite: Computer and Information Science 7510X [717.1 X] and two courses chosen from among Computer and Information Science 7522X [765X], 7532X [759X] and 7534X [758X] .

CISC 7560X Ethics in Computing

45 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.

CISC *7610X Multimedia Databases

37½ hours plus conference and independent work; 3 credits
Multimedia data types and formats. Multimedia database design issues. Indexing and 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 7510X [717.1 X] or a course in database systems.

CISC 7620X Computer Graphics: Software System Design

37½ hours plus conference and independent work; 3 credits
Design of languages and software systems for computer graphics. Elementary raster and vector graphics primitives. Device independent graphics. Geometrical concepts. Internal representation. Transformations. Modeling. Three-dimensional considerations. Pictorial realism. Hierarchical program structure. Alternative approaches.

Prerequisite: CISC 3130 or a course in data structures.

CISC *7650X Digital Signal Processing

37½ hours plus conference and independent work; 3 credits
An introduction to discrete time signals and their spectral representation. The concept of sampling and the relationship between continuous signals and their representation on a digital computer. The design of computer algorithms using techniques of digital signal processing for application in digital filter design, digital picture processing, and speech recognition and synthesis.

Prerequisite: Mathematics 7280X [607X] or two terms of calculus; and Computer and Information Science 7200X [714X] or a course in analysis of algorithms.

CISC 7700X Introduction to Data Science

45 hours; 3 credits
Data Science is an interdisciplinary field concerned primarily with extracting information from data. It incorporates aspects of computer science, statistics, analytics, and mathematics. This introductory course focuses on providing a broad overview of key concepts, such as data management, data preparation, analysis, machine learning, performance measures, and working with large data sets.

Prerequisite: CISC 7510X

CISC 7702X - Data Visualization

45 hours; 3 credits
Exploration and analysis of large and complex data sets through visualization. Targeting audiences with effective storytelling and illustration. Developing effective dashboards and infographics to facilitate data-driven decision making. Developing proficiency with industry-standard visualization tools. Essential design principles and cognitive theories. Course entails hands-on applications and projects. Surveys contemporary challenges, issues, research, technology trends, and industry best practices. This course is the same as BUSN 7282X. (Not open to students who have completed BUSN 7282.)

Prerequisites: one undergraduate or graduate course in statistics and permission of the chair.

CISC 7704X Data Mining and Applied Machine Learning for Business Analytics I

45 hours; 3 credits
An introduction to data mining and applied machine learning for business analytics. The course introduces students to industry standard tools and techniques for analysis such as Python and essential Python libraries such as Numpy, Scipy, Matplotlib, Pandas, and scikit-learn. Students learn to wrangle, explore, and visualize data. They learn techniques for data reduction. The course introduces students to prediction and classification methods such as multiple linear regression, logistic regression, discriminant analysis, k-Nearest Neighbors, Bayes classifier, neural nets, and classification trees. Contemporary challenges and issues for managers are presented. This course is the same as BUSN 7283. (Not open to students who have completed BUSN 7283.)

Prerequisites: BUSN 7278X, BUSN 7280X (Data Analysis I & II)

CISC 7900X Research Project I

Minimum of 135 hours of independent work each term; 3 credits
Development of computer systems supervised by a staff member. Students work individually or in groups and are expected to prepare a detailed report describing the project and its contributions. Achievement is measured by demonstrable attainment of the project's goals.

Prerequisite: permission of the chairperson.

CISC 7902X Research Project II

Minimum of 135 hours of independent work each term; 3 credits
Development of computer systems supervised by a staff member. Students work individually or in groups and are expected to prepare a detailed report describing the project and its contributions. Achievement is measured by demonstrable attainment of the project's goals.

Prerequisite: Computer and Information Science 7900X [790X].

CISC 7940X Seminar in Computer Science I

37½ hours plus independent work; 3 credits
Readings, discussions, and reports on topics in computer science.

CISC 7950X Advanced Seminar in Computer Science I

37½ hours plus independent work; 3 credits
Readings, discussions, and reports on advanced topics in computer science.

CISC 7980G Health Informatics Internship

150 hours conference and independent work; 3 credits
An off-campus internship jointly supervised by a health center sponsor and by a faculty member. The course requires the student to participate in computer science-related activities in a health-related setting. The student will be required to write periodic reports on activities and a final paper.

Prerequisite: Completion of at least 21 credits of required graduate courses.

CISC 7990G Thesis Research

Hours to be arranged; 3 credits

Research for the master's thesis supervised by a faculty member. No more than 6 credits may be counted toward the degree. Credit is not earned until the thesis is accepted.

Prerequisite: permission of the chairperson.

CISC 7992G Thesis Research

Hours to be arranged; 3 credits
Research for the master's thesis supervised by a faculty member. No more than 6 credits may be counted toward the degree. Credit is not earned until the thesis is accepted.

Prerequisite: CISC 7990G and permission of the chairperson.

CISC 7994G Thesis Research

Hours to be arranged; 2 credits
Research for the master's thesis supervised by a faculty member. No more than 6 credits may be counted toward the degree. Credit is not earned until the thesis is accepted.

Prerequisite: CIS 7992 and permission of the chairperson.

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

CISC *7122X Programming Language Design

CISC *7210X Graph and Network Algorithms

CISC *7228X Quantum Computing

CISC *7342X Programming Parallel Processors

CISC *7352X Performance Evaluation of Computer Systems

CISC *7354X Topics in Systems Simulation

CISC *7414X Expert Systems

CISC *7420X Logic in Computer Science

CISC *7442X Robot Vision

CISC *7622X Algorithms for Computer Graphics

CISC *7630X Multimedia Computer Systems

CISC 7110X Compiler Construction

CISC 7240X Numerical Methods

CISC 7360X Microprocessors

CISC 7362X Advanced Microcomputer Applications

CISC 7400X Foundations of Cognitive Science

CISC 7422X Game Theory and Social Choice

CISC 7430X Natural-Language Processing

CISC 7640X Multimedia Presentations

CISC 7642G Advanced Digital Art

CISC 7942X Seminar in Computer Science II

CISC 7952X Advanced Seminar in Computer Science II

Early Childhood Education/Art Education

Department office: 2309 James Hall
Phone: 718.951.5205

Full-time Faculty

Associate Professors: DeBey, Ferholt, Jiesamfoek, Lauterbach, Li, McFadden, Miles, Shannon, Song

M.A. degree program in education: art teacher (all grades)
HEGIS code 0831; SED program code 26751

Program Description
The art education program at Brooklyn College is committed to preparing quality art teachers (PK-12) who are skilled makers of art, insightful observers of contemporary developments in the arts, and articulate advocates for art education in public and independent schools. For students who hold a bachelor's degree from an accredited institution in either art or art education, we offer two paths to a master of arts degrees in art education. For students who already hold a master's degree in art or related discipline, we offer an Advanced Certificate in teaching art (See Brooklyn College Bulletin). The curriculum consists of education courses, field experiences, and arts courses that are scheduled to accommodate students who have family and/or professional responsibilities. Most students complete the program in two years, however individuals are free to set their own pace for progressing through the program.

The courses required by the program in art education vary depending on the entry qualifications of students. The profession of teacher education is licensed by the New York State Education Department. Therefore, program requirements are subject to change. All students should consult with the program coordinator of art education for current degree requirements.

Matriculation requirements:
Applicants must offer at least 30 credits in art and design courses, both two-dimensional and three-dimensional, and other advanced arts courses acceptable to the program in art education.

Applicants must offer (a) or (b):

(a) New York State Initial Certification in teaching art for all grades;

(b) an undergraduate degree with a major in art or appropriate course work in art. Applicants must have a minimum undergraduate scholastic index of 3.00.
A minimum average of 3.00 in graduate courses is required to maintain matriculation.

Applicants who have not completed all the specific course requirements are given individual consideration and may be admitted with conditions, with the approval of the program coordinator of art education and the chairperson of the Early Childhood and Art Education Department.

Applicants are required to demonstrate written proficiency in English. International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of at least 575 on the paper- based test or 233 on the computer-based test or 79 on the internet-based test, before being considered for admission.

Applicants must submit a digital portfolio of their art work.

Applicants must consult matriculation requirements for the program in art education in the School of Education section of the Bulletin, and should see the program coordinator for art education for counseling.

General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Degree requirements
33-45 credits are required for the degree.
Students take different art and education courses depending on their previous course work, artistic experience, and the certificates they hold. The department Chair may allow substitutions for one or more of these requirements consistent with the educational goals of the program.
Art

Art
Students must complete 15 credits in content area (art) courses in consultation with their program advisor. 9 of these credits are mandatory in ARTD studio courses, of which 3 credits could be completed in art history. The remaining 6 content area credits (electives)

can be completed in any of the following ARTD or ECAE courses, museum education courses, cross- and/or interdisciplinary arts courses, and/or media arts courses: ART 7003G, 7007G, 7011G, 7015G, 7019G, 7023G, 7026G, 7033G, 7036G, 7039G, 7043G, 7051G, 7056G, 7061G, 7064G, 7068G, 7072G, 7082G, 7086G , 7091G, 7097G, 7100G, 7135G, 7138G, 7142G, 7146G, 7150G, 7151G, 7154G, 7076G, 7078G, 7156G, 7157G, 7158G, 7159G, 7160G, 7165G, 7170G, 7175G, 7180G. 7183G, 7185G, 7190G, 7193G, 7194G, 7196G, 7198G, 7199G, 7210X, 7220X, 7250T, 7310X, 7311X, 7410, 7420X, 7421X, 7510T, 7520X. 7521X, 7550T, 7560X, 7610X, 7611X , 7710T, 7720X, 7730X, 7740X, 7810G, 7820G, 7821G. 7905G, 7970X, 6210T, ECAE 7540T, 7546X, 7539T, or another content area course selected in consultation with their advisor.

Education
Students must complete 18-30 credits in education courses in one of the options below.

Option A (18 credits)

Students who possess Initial Certification in teaching art must complete
Early Childhood Education and Art Education 7506X, 7507T, 7526T, 7530T, 7533T, and one of the following: Childhood, Bilingual and Special Education 7671X, Secondary Education 7671X, 7527T, 7503X, 7549X,/Theater 7141X, Early Childhood and Art Education 7100T, 7101T, 7102T, 7104T, 7105T, 7106T, 7652T, 6002T, or another course selected in consultation with their advisor .

Option B (30 credits)

Students who wish to pursue teaching credentials but do not possess Initial Certification in teaching art or equivalent course work and teaching experience or who are teaching but do not possess Initial Certification in teaching art must have the appropriate course work and credits in the subject area and must complete Early Childhood Education and Art Education 7506X, 7507T, 7520T, 7526T, 7530T, 7533T, 7538T, 7542T, 7543T, Secondary Education 7503X, Teaching Writing Across the Curriculum; Childhood, Bilingual and Special Education 7671X, Children and Youth with Special Needs, or Secondary Education 7671X, Children and Youth with Special Needs, or Early Childhood Education and Art Education 7104T, Environments for Infants, Toddlers and Young Children with Special Developmental and Learning Needs, or Early Childhood Education and Art Education 7652T, Teaching Young Children with Special Needs through the Arts.

Students who already have a master's degree but wish Initial or Professional Certification in teaching art must take appropriate courses for the Advanced Certificate in Art Education as described in the Graduate Bulletin.

Students must obtain fingerprinting clearance. Fieldwork or student-teaching in an early childhood setting requires students to be fingerprinted by New York City Department of Investigation or Department of Health. Fieldwork/student-teaching in a public school requires students to be fingerprinted by the New York City Department of Education (NYC DOE); See SOE website for more information.

Maintain matriculated status. Students must have passed the following
NYS exams at the specified transition points:
1. CST-Visual Art section: prior to student teaching;
2. The Educating All Students (EAS) exam: prior to student-teaching or completing the degree program.
3.Throughout student-teaching, students complete the Art Education program-specific performance assessment which involves submitting video clips of teaching, and lesson plans along with commentaries on planning, instruction, and assessment.

A student must complete student-teaching with a B or higher, students who receive a grade lower than a B must apply to the ECAE chairperson for permission to reregister to repeat student teaching. Students will be allowed to repeat an ECAE course (including student-teaching) only once.

Note. Students not seeking certification must schedule a meeting with the Graduate Art Education Program Coordinator to set up an alternative transition point plan during their initial semester.

M.S. in Education degree program: early childhood education teacher (birth through grade 2) HEGIS code 0823; SED program code 26736

The M.S. in early childhood education prepares reflective teachers of children from birth through grade 2. Courses taken within the degree program, may lead toward additional extensions and certifications (Bilingual Education in EC, Gifted Education in EC, EC Special Education), and an Advanced Certificate in Early Intervention and Parenting. See specific course requirements noted below.

Our Early Childhood Program considers child development (typical and atypical) within the contexts of culturally, linguistically, and socially diverse families, communities, and early learning settings, including dual language programs. Our graduates are keen observers of young children who document, successfully teach, and build on children's strengths, using and advocating for inclusive developmentally responsive and culturally sensitive practices based on a family-centered and relationship-based philosophy.

Fundamental to the program's philosophy, we believe children learn through their engagement in play and emphasize the development of anti-bias curriculum that is linguistically and culturally inclusive. With an emphasis on careful curriculum and environmental design, students develop curricula that ensure an equitable education and positive outcomes for all young children with and without disabilities and emergent bilingual/multilingual learners.

Based on the continual expansion of knowledge, our curriculum is vibrant and addresses emerging issues in the field. This includes bridging students' fieldwork and clinical experiences with current theories and research in child development, infant mental health, and

early childhood education. Our coursework integrates the latest research in infancy and early relational health, neuropsychology, social and emotional development, parenting and family systems, trauma-informed care and reflective practice/supervision, curriculum design, authentic assessment, emergent bilingual language development, reading science, number development, science inquiry, and technology.

Students are encouraged to push the boundaries of what is known about child development and early childhood education. We prepare our students to teach in under-resourced communities through strong relationships with neighborhood early childhood programs and schools and our partnership with JumpStart, a non-profit organization that recruits and trains college students to provide a rich literacy-based curriculum to preschool children and their parents as well as the Reading Rescue Initiative, an evidence-based literacy intervention that students in our Early Childhood literacy courses are trained in and use to support a striving reader in the DOE.

EC Faculty are actively engaged in designing and implementing research that supports under-resourced communities to address inequities in ways that translate into better academic, social-emotional, and physical outcomes for all children and families. Also, faculty and students are currently involved in international partnerships and research in India, Sweden, and China.

Students will enroll in the appropriate course of studies listed below (Option A or B or C) based upon teaching experience, previous course work, and the teaching certificates they hold.

The course seminars/lectures for the program are online; courses may require in-person fieldwork/student-teaching in early childhood settings.

Option (A): 30 credits

The following program applies to students who hold a New York State Initial Certificate in Early Childhood Education (birth through grade 2) or its equivalent. This program leads to a New York State Professional Certificate in Early Childhood Education (birth through grade 2).

Matriculation requirements

Applicants must hold a New York State Initial Certificate in Early Childhood Education (birth through grade 2) or its equivalent.

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate education courses is required to maintain matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a minimum score of 575 on the paper-based test or 233 on the computer-based test or 79 on the internet-based test, to be considered for admission. Applicants are interviewed and may be required to demonstrate written proficiency in English.

Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures" of the Brooklyn College Bulletin of Graduate Programs.

Degree requirements

Students must complete 30 credits in the following courses.
Early Childhood and Art Education 7101T or 7683T; 7102T, 7114T or 7360T; 7107T; 7678T or 7359T; 7103T; 7110T; and four courses from the following: Early Childhood and Art Education 7013T, 7100T, 7104T, 7113T, 7111T, 7115T, 7116T, 7108T, 7105T, 7106T, 7104T, 7109T, 7359T, 7360T, 7361T, 7382T, 7383T, 7387T, 7540T, 7551T, 7562G, 7563G, 7564G, 7568G, 7652T, 7663T, 7667T, 7668T, 7669T, 7670T, 7675T, 7682T, 7683T, 7695T, 7820T, 7885T, 7886T, 6002T, 7001T, 7002T or Puerto Rican and Latino Studies 7145X.

During the first semester, students must file a program of study approved by the Graduate Early Childhood Education program coordinator. All courses in the early childhood degree sequence require departmental permission for registration.

Early Childhood and Art Education 7103T and 7110T are taken consecutively the last two semesters of the student's program of study.

The department Chair may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

Students must obtain fingerprinting clearance and create a NY.gov TEACH Account (http://www.highered.nysed.gov/tcert/teach/). Fieldwork/student-teaching in an early childhood setting requires students to be fingerprinted by New York City Department of Education and/or Department of Health Mental Hygiene's Department of Investigation depending on the school/center requirement. Fieldwork/student-teaching in a DOE public school requires students to be fingerprinted by the New York City Department of Education (NYC DOE); See SOE website for more information.

Option (B): 33 credits

The following program applies to students who hold a New York State Initial Certificate in Childhood Education (grades 1-6) or its equivalent or a New York State Initial Certificate in Special Subjects (all grades) or its equivalent. This program leads to a New York State Professional Certificate in Early Childhood Education (birth through grade 2).

Matriculation requirements

Applicants must hold a New York State Initial Certificate in Childhood Education (grades 1-6) or its equivalent or a New York State Initial Certificate in Special Subjects (all grades) or its equivalent.

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate education courses is required to maintain matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a minimum score of 575 on the paper-based test or 233 on the computer-based test or 79 on the internet-based test, before being considered for admission.

Applicants are interviewed and may be required to demonstrate written proficiency in English.

Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures" of the Brooklyn College Bulletin of Graduate Programs.

Degree requirements

Students must complete 33 credits in the following courses.
Early Childhood and Art Education 7101T; 7102 or 7360T; 7675T, 7682T or 7013T; 7104T; 7107T; 7111T, 7115T, 7663T or 7383T; 7116T, 7108T, 7105T, 7106T, 7652T, 7109T, 7113T, 7678T, 7001T or 7002T; 7120T; 7103T; 7110T.

During the first semester, students must file a program of study approved by the program adviser. All courses in the early childhood degree sequence require departmental permission for registration.

Early Childhood and Art Education 7103T and 7110T are taken consecutively the last two semesters of the student's program of study.

The department Chair may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

Students must obtain fingerprinting clearance and create a NY.gov TEACH Account (http://www.highered.nysed.gov/tcert/teach/). Fieldwork/student-teaching in an early childhood setting requires students to be fingerprinted by New York City Department of Education and/or Department of Health Mental Hygiene's Department of Investigation depending on the school/center requirement. Fieldwork/student-teaching in a DOE public school requires students to be fingerprinted by the New York City Department of Education (NYC DOE); See SOE website for more information.

Throughout student-teaching, students complete and submit their department Teacher Performance Assessment (TPA), which involves submitting video clips of teaching, lesson plans, and other assessment material (see SOE website for additional information).

Note: A student must complete student teaching with a B or higher, students who receive a grade lower than a B must apply to the ECAE chairperson for permission to reregister to repeat student teaching. Students will be allowed to repeat an ECAE course (including student-teaching) only once.

Option C: 45 credits

The following program applies to students who do not hold a New York State Initial Certificate in Early Childhood Education or Childhood Education or Special Subjects or equivalent course work and teaching experience, or who are teaching but do not hold initial certification. This program leads to both New York State Initial and Professional Certificates in Early Childhood Education.

Matriculation requirements

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate education courses is required to maintain matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a minimum score of 575 on the paper-based test or 233 on the computer-based test or 79 on the internet-based test, before being considered for admission.

Applicants are interviewed and may be required to demonstrate written proficiency in English.

Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures" of the Brooklyn College Bulletin of Graduate Programs.

Degree requirements

Students must complete 45 credits in the following courses.

Early Childhood and Art Education 7675T, 7013T or 7862T; 7101T; 7102T or 7360T; 7103T; 7104T; 7105T, 7106T, 7652T, or 7540T; 7107T; 7108T; 7109T; 7110T; 7111T or 7663T; 7115T; 7116T; 7120T.

During the first semester, students must file a program of study approved by the Graduate Early Childhood Education program coordinator. All courses in the early childhood degree sequence require departmental permission for registration.

Early Childhood and Art Education 7103T and 7110T are taken consecutively the last two semesters of the student's program of study.

The department Chair may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

Students must obtain fingerprinting clearance and create a NY.gov TEACH Account (http://www.highered.nysed.gov/tcert/teach/). Fieldwork/student-teaching in an early childhood setting requires students to be fingerprinted by New York City Department of Education and/or Department of Health Mental Hygiene's Department of Investigation depending on the school/center requirements. Fieldwork/student-teaching in a DOE public school requires students to be fingerprinted by the New York City Department of Education (NYC DOE); See SOE website for more information.

Maintain matriculated status. Students must have taken and passed the following NYS exams at the specified transition points:
1) CST-EC Arts & Sciences section: prior to completing 18-credits;
2) The Educating All Students (EAS) exam: prior to completing 24-credits;
3) The CST-EC Literacy and Math sections: prior to student-teaching.
4) Throughout student-teaching, students complete the ECAE Department Teacher Performance Assessment (TPA), which involves submitting video clips of teaching, lesson plans, and other assessment material.

A student must complete student teaching with a B or higher, students who receive a grade lower than a B must apply to the ECAE chairperson for permission to reregister to repeat student teaching. Students will be allowed to repeat an ECAE course (including student-teaching) only once.

ECAE students with a Transitional B certification or Internship License may need to take an additional 1-credit course, ECAE 7001T and/or ECAE 7002T.

Note. Students not working toward certification must schedule a meeting with the Graduate Early Childhood Program Coordinate to set up an alternative transition point plan during their initial semester.

Requirements for the Extension in Bilingual Early Childhood Education
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The New York State Education Department Extension in Bilingual Education may be added to the base of an early childhood teaching certificate by meeting New York State Education Department criteria for the Bilingual Extension. New York State requirements for the Early Childhood Bilingual Extension includes the following coursework: Early Childhood and Art Education 7100T, 7116T, 7359T, and 7361T; and 7360T or Puerto Rican and Latino Studies 7145X. Permission from the Graduate Early Childhood Education program coordinator is required.

Nonmatriculated students

Students with a New York State Initial Certificate in Early Childhood Education and/or a New York State Professional Certificate in Early Childhood Education or their equivalents who wish to complete an Extension in Bilingual without completing a master's degree in Early Childhood Education, may do so as a nonmatriculated student. The Bilingual Extension in Early Childhood Education consists of 15 credits. The required courses, which may be taken in any order include: ECAE 7100T, 7116T, 7359T, and 7361T; and 7360T or Puerto Rican and Latino Studies 7145X. Permission from the Graduate Early Childhood Education program coordinator is required.

Requirements for the Extension in Gifted Education Early Childhood Education
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The New York State Education Department Extension in Gifted Education may be added to the base of an early childhood teaching certificate by meeting New York State Education Department criteria that includes the following 12 credits of coursework: Early Childhood and Art Education 7667T, 7668T, 7669T, and 7670T. Permission from the Graduate Early Childhood Education program coordinator is required.

Requirements for the Extension in Students with Disabilities (SWD) in Early Childhood Education

The New York State Education Department Extension in Students with Disabilities may be added to the base of an early childhood teaching certificate by meeting New York State Education Department requirements that include 15 credits of coursework:
Early Childhood and Art Education 7101T, 7102T, 7104T, 7113T, and 7678T.
Permission from the Graduate Early Childhood Education program coordinator is required.

During the first semester, students must file a program of study approved by the Early Childhood Education program coordinator. All courses in the early childhood degree sequence, the early childhood bilingual extension, the early childhood gifted extension, and the early childhood students with disabilities extension require departmental permission for registration.

Advanced certificate in art education
HEGIS code 0831; SED program code 36856

Department Requirements (24 credits)

The Advanced Certificate in Art Education (24-credits) is a path leading to an initial or professional teaching certificate for students who already hold a Master's degree in art or an appropriate discipline, or an MFA. The curriculum consists of education courses, field experiences, to accommodate students who have family and/or professional responsibilities. Most students complete the program in two years; however, individuals are free to set their own pace for progressing through the program. This program is open to both Masters and MFA students.
By completing this Advanced Certificate program, students will learn about integrating multiple perspectives of teaching art by understanding human functioning and development across art education (PK-12) domains, and culture.

Matriculation requirements:

Entrance requirements for acceptance include an earned graduate degree with a grade point average of at least 3.0. Applicants must have completed a graduate degree in art or related field. Additional courses may be required prior to admission to remedy any deficiency in a prospective student's ability to meet matriculation requirements. Applicants must have a minimum undergraduate scholastic index of 3.00. A minimum average of 3.00 in graduate courses is required to maintain matriculation.

Applicants who have not completed all the specific course requirements are given individual consideration and may be admitted with conditions, with the approval of the program coordinator of art education and the chairperson of the Early Childhood and Art Education Department.

Applicants are required to demonstrate written proficiency in English. International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of at least 575 on the paper- based test or 233 on the computer-based test or 79 on the internet-based test, before being considered for admission.

Applicants must submit a digital portfolio of their art work.

General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Program Requirements:

The 24-credit Advanced Certificate requires nine sequential courses:
ECAE 7506X Projects in Creative Art for the Classroom, 3 credits
ECAE 7530T Diverse Classrooms in a Visual Culture, 3 credits
ECAE 7507T Critical Issues in Education--Social Values and Individual Needs, 3 credits
ECAE 7533T Advanced Seminar in Pedagogy and Curriculum, Middle Childhood and Adolescence Education: Art, 3 credits
ECAE 7538T Seminar I in Pedagogy and Curriculum: Art, 3 credits
ECAE 7542T Art Education Student Teaching Practicum 1, 1.5 credits
ECAE 7520T Teaching Seminar II in Pedagogy and Curriculum, 3 credits
ECAE 7543T Art Education Student Teaching Practicum II, 1.5 credits
CBSE 7671X or SEED 7671X Children and Youth with Special Needs, or ECAE 7104T Environment for Infants, Toddlers, and Young Children with Special Needs; 3 credits

The department Chair may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

Students must obtain fingerprinting clearance. Fieldwork or student-teaching in an early childhood setting requires students to be fingerprinted by New York City Department of Investigation or Department of Health. Fieldwork/student-teaching in a public school requires students to be fingerprinted by the New York City Department of Education (NYC DOE); See SOE website for more information.

Maintain matriculated status. Students must have passed the following NYS exams at the specified transition points:
1. CST-Visual Art section: prior to student teaching;
2. The Educating All Students (EAS) exam: prior to student-teaching or completing the degree program.

Throughout student-teaching, students complete the Art Education program-specific performance assessment, which involves submitting video clips of teaching and lesson plans along with commentaries on planning and instruction.

A student must complete student teaching with a B or higher, students who receive a grade lower than a B must apply to the ECAE chairperson for permission to reregister to repeat student teaching. Students will be allowed to repeat an ECAE course (including student-teaching) only once.

NOTE: Students not seeking certification must schedule a meeting with the Graduate Art Education Program Coordinator to set up an alternative transition point plan during their initial semester.

Advanced certificate in early intervention and parenting
HEGIS code 0823.00; SED program code 36844

The Advanced Certificate in Early Intervention and Parenting program (18-credits) is clinically rich, with an emphasis on relationship-based and evidence-based, family-centered practices, the parent-infant dyad and infant mental health, typical and atypical development, and a trans-disciplinary approach to working in partnership with culturally diverse families with infants and toddlers with disabilities (or at-risk for developmental delays).

This program is open to both master's students and post-master's professionals including early childhood educators, early childhood special instructors, mental health professionals, speech and language pathologists, occupational therapists, and physical therapists currently working in Early Intervention (EI) and in other early childhood and family settings. For graduate students across disciplines, this unique program aims to support the next generation of EI professionals to develop expertise in early childhood development and effective family-centered, best practices. For early childhood professionals, already competent and working in the field, to integrate their professional knowledge and skills with family-centered, best practices that will enhance the parent-child relationship, support children's development, and help prevent long-term developmental delays.

By completing this Advance Certificate program, both students and skilled professionals will learn about integrating multiple perspectives by understanding children's functioning and development across domains as well as working with caregivers and their children within the context of the families' concerns, priorities, and culture.

Note: To qualify as a Special Instructor for the Early Intervention Program (EIP), a certification in students with disabilities (SWD; Birth - Grade 2) is required. To obtain additional certification in SWD, Birth - Grade 2, students are required to complete the following ECAE courses: ECAE 7101, 7102, 7104, 7113 and 7678 and pass the required CST-Students with disabilities exam. Completion of the EI Advanced Certificate prepares professionals to work with infants and toddlers with disabilities and their families in their homes. Students are advised to meet with EC Graduate program coordinator for guidance.

This program can be completed online.

Matriculation requirements:

Entrance requirements for acceptance include an earned baccalaureate degree with a grade point average of at least 3.0 in the undergraduate major, and a minimum overall grade point average of 3.0.
Applicants must have completed an undergraduate or graduate degree in early childhood special education, occupational therapy or related field. Applicants must present coursework or equivalent work experience in knowledge of child development and foundations in special education. Additional courses may be required prior to admission to remedy any deficiency in a prospective student's ability to meet matriculation requirements.

Degree Requirements:

The 18-credit Advanced Certificate is a masters or post-masters and requires six sequential courses:

ECAE 7663T Communication Development and Assessment of Young Multilingual Children with and without Special Needs, 3 credits
ECAE 7675T Supporting Diverse Families and Parent-Child Relationships, 3 credits
ECAE 7678T Developmental and Educational Assessment of Infants and Young Children with Special Needs, 3 credits
ECAE 7683T Typical and Atypical Physical Development in Infants, Toddlers and Young Children: Prevention and Early Intervention, 3 credits
ECAE 7885T Advanced Psychosocial Development I: Caregiver-Child Interactions with Emphasis on the First year of Life, 3 credits
ECAE 7886T Advanced Psychosocial Development II: Caregiver-Child Interactions and Reflective Supervision, 3 credits

The department Chair may allow substitutions for one or more of these requirements consistent with the educational goals of the program.

This certificate requires 280 hours of supervised clinical fieldwork (and reflective supervision) in families' homes as well as center-based programs and hospitals. It is designed to be completed in one year (summer, fall, spring, summer).

Note: Students must obtain fingerprinting clearance. See School of Education Web site for more information.

Courses

College-verified fingerprint clearance may be required for some School of Education courses. Refer to the School of Education website, Fingerprint Verification instructions at https://www.brooklyn.edu/soe/certification/fingerprints/

ECAE 7001T Supervised Practicum in Teaching and Reflective Supervision
15 weeks supervised teaching: 1 credit
College supervised internship in teaching and reflective supervision for full time Art Educators, Early Childhood Educators or Early Interventionists with Transitional B certification or Internship License to teach in the DOE, private schools, early childhood programs, or hospital-based settings. Informal and formal observations of teaching practice. Alignment of teacher practices with the New York State Teaching Standards. May be repeated for up to 6 credits.

Prerequisite: Full time employment in teaching and departmental permission.

ECAE 7002T Teaching Strategies and Supervision in Education or Early
15 hours; 1 credit
Seminar on current issues, strategies, and techniques of evidence-based professional practices in teaching as well as reflective supervision. Course content varies from term to term. This course is creditable toward the degrees or programs in education or related field.

Prerequisite: Only open to ECAE graduate students.

ECAE 7013T Developmental, Temperamental, Sensory, and Emotional Challenges in Young Children
45 hours plus conference; 3 credits
This course focuses on dynamic aspects of biopsychosocial development in early childhood, including temperamental, sensory, and emotional functioning and the mismatch between child and caregiver. The emphasis will be on the impact of these variables on children's behavior in the home, school, and community environment. Clinical methods in assessing, diagnosing, and intervening with young children with emotional, behavioral or developmental challenges through classroom discussion and case studies and materials; and help students to develop and use reflective skills to address issues that arise in typical and atypical young children and their families.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7100T Seminar in Principles, Practices and Environments in Early Childhood Settings, including Dual Language and Special Education
45 hours; 3 credits
Analysis of case studies, research, classroom interactions, and environments as related to early childhood teacher practice with culturally diverse young children, including emergent bilingual and multilingual learners and children with special needs. The development of an integrated curriculum (math, science, literacy, social studies and the use of technology) in English and the home language; emphasizing enduring understandings and standards within developmentally appropriate practices context. Selected current issues in classroom organization and design for early childhood, early childhood dual language and early childhood special education classrooms. Development of a reflective approach to teaching; individualized instruction, organizing for effective support, and guidance of learning.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7101T Infant and Child Development in Family, Community and Educational Contexts: Typical and Atypical
30 hours plus conference; 3 credits
Advanced seminar that focuses on observing, assessing, and understanding typical and atypical child development from birth through grade two, as well as prenatal development. Childrearing and early education in diverse family and cultural contexts, with a focus on urban settings. Theoretical approaches to understanding child development, including English language learners and an examination of the developmental nature, causes, and characteristics of young children with special needs, including children with autism; parental ethnotheories; the interactive relationship between the child and the social context. Culture and early childhood education practice from a comparative perspective; teacher-child and peer relationships; including children with special needs; developmentally appropriate curriculum in home, and early childhood settings; early intervention/educational policies.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7102T Foundations of Early Childhood, Early Childhood Bilingual and Early Childhood Special Education
45 hours; 3 credits
Interdisciplinary analysis of the foundations of early childhood education, multicultural
and bilingual education, and special education; impact of political, economic, social,
cultural, and technological changes in the fields of early childhood education, including
bilingual and special education. We will examine changing views in curricular,
pedagogic, and policy implications for teaching linguistically and culturally diverse young
children with and without special needs, including children with autism; comparative
studies of early childhood education in a global context, with special emphasis on urban
settings, integrated co-teaching and collaboration with peers, families and communities.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7103T Introduction to Research in Early Childhood Education
45 hours plus conference; 3 credits
Principles and methods and problems in the development of formal and informal research in early childhood education with emphasis on research in classroom settings. Development of observation and recording methodologies emphasizing the role of teacher as researcher. Scope and variety of educational research; principles and characteristics of qualitative and quantitative research; structure and organization of a research project. Review of research literature related to current themes and issues in education.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education - 601 program must have completed at least 12 credits; 603 program must have completed at least 27 credits, and permission of the graduate deputy.

ECAE 7104T Environments for Infants, Toddlers and Young Children with Special Developmental and Learning Needs
45 hours recitation, 15 hour supervised field experience; 3 credits
An examination of developmental disabilities in young children, their identification and developmentally appropriate and effective remediation. Implications for adapting the environment, individualizing programs and instruction in diverse early childhood settings, co-teaching and cooperative models and methods. Development of positive behavioral supports for all young children, including English language learners. Role of families and educators in creating learning environments at home and in educational settings.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7105T Imagination, the Arts, and Multidisciplinary Learning
45 hours; 3 credits
Multidisciplinary curriculum through the creative arts. The creative process; experiential approach to the study of works of art in music, dance, theater, and the visual arts. Integrating the arts with other curriculum areas for all children, including English language learners and children with special needs. A global perspective that draws upon diverse cultures. Based on the collaborative work between the Lincoln Center Institute for the Arts in Education and the School of Education. Lincoln Center Institute for the Arts in Education practice and other approaches to aesthetic education and learning. Guest teachers/artists.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7106T Visual Arts in Early Childhood Education

30 hours plus conference; 3 credits
Pedagogical approaches to integrating the visual arts in early childhood curriculum. Analysis and application of theory and research to the teaching of the visual arts for all young children, birth through grade two, including culturally and linguistically diverse children, as well as children with special needs. Philosophies and goals of visual arts education, particularly as they apply to diverse, urban communities. Artistic development in early childhood within varied social, cultural, and environmental contexts. Role of materials and experience as they apply to artistic learning in young children. Work with a variety of artistic forms and media, field trips.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7107T Play in Cross-cultural Contexts

30 hours plus conference; 3 credits
Theories and research findings on young children's play in culturally and linguistically diverse early childhood, family, and community settings. Implications of play for the intellectual, social, emotional, and physical development of all children, including children with special needs, from infancy through the early childhood years. Play in the early childhood curriculum; role of the teacher in facilitating children's play.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7108T Mathematics in Early Childhood

30 hours, 30 hours supervised field experience; 3 credits
Study of early childhood curriculum and instruction in mathematics for all young children, including English language learners and children with special needs. Topics include mathematical content; development of cognitive processes; selection and use of instructional resources; interdisciplinary and thematic teaching; family involvement; assessment options and the appropriate use of technological tools. Students who possess a New York State Initial Certificate in Early Childhood Education or its equivalent may complete the field experience in their own early childhood classrooms; students who do not possess a New York State Initial Certificate in Early Childhood Education or its equivalent will complete the field experience under the direct supervision of a certified teacher.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7109T Scientific Inquiry in Early Childhood Education
30 hours, 30 hours supervised field experience; 3 credits
Approaches to nurturing curiosity in children, from infancy through the early childhood years. Development of educational environments to promote scientific curiosity and playful exploration in young children, including English language learners and children with special needs. Integration of science in the early childhood curriculum; exploration of natural environments; creative representation of science learning. Family involvement in science education; familiarity with technologies and community resources. Students who possess a New York State Initial Certificate in Early Childhood Education or its equivalent may complete the field experience in their own early childhood classrooms; students who do not possess a New York State Initial Certificate or its equivalent will complete the field experience under the direct supervision of a certified teacher.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7110T Independent Project and Research Seminar
45 hours plus conference; 3 credits
A study of research methods, data analysis and the dissemination of results. Development and completion of an independent project related to an area of early childhood education. The submission of a bound copy of the study is required.

Prerequisite: Early Childhood and Art Education 7103T.

ECAE 7111T Language Learning and Development in Young Children
45 hours; 3 credits
The structure, acquisition, and development of language and oral and written communication in young children, including English language learners and children with special needs. Language and communication development within the context of children's development; role of family, community and culture. Study of linguistic structures, including phonological, syntactic and semantic development. Creating language- and text-rich environments for young children.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7113T Curriculum Modifications for Infants, Toddlers, and Young Children with Special Needs
45 hours; 3 credits
Special programs, modification of curriculum across cognitive, social-emotional, language, and physical domains as well as across content areas. Teaching strategies and approaches designed to meet the individual and group needs of children and create an inclusive classroom community. Differentiated instruction for culturally and linguistically diverse young children with special needs including giftedness, and delays and disabilities across the developmental spectrum in early education settings. Focus on family, community, and interagency partnerships; appropriate use of technology, including assistive technology; multiple assessment strategies. Field experiences in a variety of schools and community settings.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7114T Administration and Supervision of Early Childhood Education Programs
45 hours; 3 credits
Approaches to administration and supervision of early childhood settings for children birth through grade two, including children with special needs and children who are English language learners. Culturally and developmentally appropriate practice in programs for young children; curriculum development; program development and evaluation. Public policies and regulations; organizational theory; development and supervision of personnel; management of facilities; finances. Informal and formal assessment of children; communication with and involvement of families and caregivers; community relations; interagency collaboration.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7115T Literacy Curriculum in Early Childhood
30 hours plus conference, 30 hours supervised field experience; 3 credits
Theoretical and methodological approaches to fostering literacy in young children, including English language learners and children with special needs. Study of relationships between speaking, reading, and writing. Research on teaching literacy. Development of literacy through literature and the arts. Role of family, community, and culture in young children's literacy learning. Formal and informal assessment. Students who possess a New York State Initial Certificate in Early Childhood Education or its equivalent may complete the field experience in their own early childhood classrooms; students who do not possess a New York State Initial Certificate in Early Childhood Education or its equivalent will complete the field experience under the direct supervision of a certified teacher.

Prerequisite: Early Childhood and Art Education 7111T or ECAE 7663T or permission from the graduate deputy.

ECAE 7116T Culturally and Linguistically Diverse Families, and Communities, and the Teaching of Social Studies in Early Childhood Education
30 hours; 30 hours supervised field experience; 3 credits
A study of teaching young children about the social world, including culture, language, and the role of the community through culturally responsive practices. The use of social studies as a framework for an integrated curriculum including math, science and English and home language arts in single language, bilingual and dual language programs. Approaches to integrating parents and families into culturally and linguistically diverse early childhood educational environments. Study of social, educational, political and historical frameworks that affect early childhood education.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7120T Seminar and Comprehensive Student Teaching: Early Childhood Education
60 hours recitation, weekly supervised teaching (at least 300 hours); 6 credits
Student teaching in one or more of the following age levels: infants and toddlers, preschool, kindergarten, grades 1 and 2. Student teaching emphasizes the design of inclusive developmentally appropriate environments, providing effective curricula and pedagogy across all developmental domains, authentic assessments of young children, developing partnerships with families in culturally and linguistically diverse settings, working and a reflection on practice. Open only to students who have completed all program courses with a grade point average of 3.00 or higher. A student who received a grade lower than a B in student-teaching must apply to the ECAE chairperson for permission to reregister for student teaching. teaching.

Prerequisite: Early Childhood and Art Education 7101T; 7102T; 7104T; 7111T or 7663T; 7115T; 7116T; 7108T; 7105T or 7106T or 7652T; 7107T; 7109T and a cumulative graduate education index of 3.0 or higher.

ECAE 7359T Assessment and Intervention of Early Childhood Emergent Bilingual and Multilingual Learners
30 hours plus conference; 25 hours supervised field experience; 3 credits
Assessment and interventions of early childhood emergent bilingual and multilingual learners, including those with special needs. Emphasis on qualitative and quantitative procedures. Examination of formal language instruments for young children and the study of proficiency levels, development of formal and informal assessment techniques, the linking of assessment to developmentally appropriate instruction. Consideration of linguistic, cultural, and socioeconomic background in modifying and adapting testing and instructional procedures. The relationship between bilingual instructional approaches and the Head Start Early Learning Outcomes Framework, the Pre-Kindergarten Foundations of the Common Core State Standards and the NY State Next Generation Standards as well as the New Language Arts Progressions (NLAP) and Home Language Arts Progressions (HLAP) for every NYS Common Core Learning Standard (CCLS) in every grade.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7360T Introduction to Early Childhood Bilingual and Multicultural Education
45 hours; 25 hours supervised field experience; 3 credits
This course examines characteristics and theories of emergent bilingual and multilingual development as well as the development of educational models and methods for emergent bilingual and multilingual learners within multicultural and global contexts and perspectives. It provides a review of research associated with the socio- and psycho-linguistic, cognitive and

socio-cultural dimensions including the cultural, linguistic, and social contexts of young children learning more than one language. It guides students' exploration of developmentally appropriate practices in the context of changing views, methods of teaching, and public policy with linguistically and culturally diverse young children with and without special needs. Discussions also focus on quality inclusive early childhood dual language and bilingual programs and engagement of families.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7361T Methods and Research in Teaching English and Home Language Arts to Young Emergent Bilingual and Multilingual Learners including Young Children with Special Needs
45 hours, 25 hours supervised field experience; 3 credits
The development and implementation of integrated developmentally appropriate programs for emergent bilingual and multilingual learners. Research based methods of teaching English language arts and the home language arts to English language learners including teaching those with special needs. Strategies for teaching the English and home languages throughout all content areas and throughout all centers within the classroom, including family-involvement, family-centered and team-oriented approaches.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7381T Seminar and Applied Research in Literacy

45 hours plus conference; 3 credits
Advanced concepts of educational research, including design of research proposals and data collection. Application of techniques of research using an integrative approach of quantitative methods supported by qualitative findings to study the acquisition of literacy. Consultation and application in field settings. Design and implementation of an original research project. This is the same course as CBSE 7026X.

Prerequisite: Permission of the graduate deputy.

ECAE 7383T Methods and Practicum in Literacy for Struggling Readers and Writers: Pre-Kindergarten to Grade 2
30 hours, 30 hours supervised field; 3 credits
Development, application, and implementation of literacy (reading and writing) strategies with young children of diverse abilities, particularly struggling readers and writers. Development of curriculum instruction and adaptation of materials and strategies based on the theories and research findings discussed in the area of literacy from birth to grade 2. Presentation of supervised cases study in formal setting.

Prerequisite: Permission of the graduate deputy.

ECAE 7387T Instructional Strategies and Assessment of Emergent Literacy Skills
45 hours; 3 credits
Approaches to teaching and assessing emergent literacy abilities through the use of criterion-referenced and norm-referenced assessments to inform instruction, including the use of Data-Based Individualization (DBI). Procedures for the selection, administration, and evaluation of test materials and meeting NYS English Language Arts performance standards. Study of illustrative case studies including English language learners and children with special needs.

Prerequisite: Permission of the graduate deputy.

ECAE 7506X Projects in Creative Art for the Classroom

45 hours lecture plus conference; 20 hours field experience; 3 credits
Initiation and development of projects in creative art in consultation with the instructor. Presentation of an evolving portfolio to both art and education faculty for evaluation. Must satisfy standards of originality and execution consistent with achievement of the advanced degree, and demonstrate and document how personal artistic knowledge translates into classroom practice. (This course is the same as Art 7250T)

Prerequisite: Matriculation for the M.A. in teaching art.

ECAE 7507T Critical Issues in Education--Social Values and Individual Needs: Art
45 lecture hours, plus conference; 3 credits
Systematic study of the teacher's role, focusing on interactions of people and environments in an educational setting. Topics in educational foundations provide concepts for examining teacher and student diversity and teacher role. Exploratory research techniques.

ECAE 7520T Seminar II in Pedagogy and Curriculum

45 hours plus conference, 3 credits
Advanced theories and methods of teaching art at grade levels appropriate for New York State certification requirements; focus on developing reflective practitioners and research based instruction; analysis of New York State Learning Standards in art; teaching art to all students, including students with special needs and English language learners; integrating technology into the classroom; developing, implementing, and evaluating the art curriculum in urban classrooms. Students enroll in workshops in identifying, reporting, and responding to child abuse and in substance abuse, fire and arson prevention and safety education.
Students who received a grade lower than a B in student-teaching must apply to the Art Education program coordinator and ECAE chairperson for permission to reregister for student teaching.

Prerequisite: Early Childhood and Art Education 7506T, 7507T, 7533T, 7530T, 7538T, and 7104 or SEED or CBSE 7671T, and a cumulative graduate education index of 3.0 or higher.
Corequisite: ECAE 7542T and 7543T

ECAE 7526T Seminar in Educational Research: Art

45 hours seminar, plus conference; 3 credits
Advanced concepts of educational research compared and contrasted with modes of inquiry in the disciplines; emphasis on qualitative and quantitative research methods and possible uses of research. Analysis of research relevant to teaching art. Formulation, development, and realization of an original research project relevant to teaching and learning art.

Prerequisite: ECAE 7506X, 7533T, and 7507T.

ECAE 7530T Diverse Classrooms in a Visual Culture

45 hours plus 20 hours of field experience; 3 credits
Critical examination of the needs of contemporary students in a society dominated by visual images. Pedagogical strategies for analyzing visual messages in terms of diversity, plurality, and the impact of visual culture on curriculum and teaching. Discussion of the impact of images and artifacts from a variety of visual traditions on classroom interactions, personal identity

formation, and learning.

Prerequisite: matriculation in the M.A. degree program, Art Teacher.

ECAE 7533T Advanced Seminar in Pedagogy and Curriculum, Middle Childhood and Adolescence Education: Art
45 hours seminar, plus conference; 20 hours field experience; 3 credits
Expansion of the student's knowledge and skills in art to develop individual approaches to effective teaching in different classroom situations. Improving teaching methods through review of relevant research, reflection on self-as-teacher, analysis of classroom interactions, discourse, and effective teaching and learning environments. Introduction to methods of educational research. Analysis of modes of communication in the classroom. Examination of the specialized discourses of the discipline and implications for teaching.

Prerequisite: ECAE 7506T.

ECAE 7538T Seminar I in Pedagogy and Curriculum

45 hours seminar plus conference, 50 hours of fieldwork, 3 credits
Theoretical and practical teaching methods, strategies, organization, and project-based teaching of art at all grade levels (PK to 12) appropriate for New York State certification requirements in accordance with changes in NYSED regulations. Focus on self-reflective teaching styles and assessment procedures; analysis of New York State Learning Standards in art; teaching art that addresses the learning needs of a diverse student population, students with special needs, and English language learners. Preparation in literacy and language acquisition. Attention given to particular needs and interests of students, designing developmentally effective learning environments, and methods of integrating technology into the PK to 12 classroom. Role of materials and resources applied to teaching art at grade levels appropriate for state certification requirements. Open only to students who have completed all program courses with a grade point average of 3.00 or higher.

Prerequisite: ECAE 7506T and 7533T.

ECAE 7539T Special Topics in Art Education

45 hours; 3 credits
Selected topics or recent advances in PK-12 art education that reflect current research and practice. Course content varies from term to term. May be taken more than once but student may not repeat the same topic.

Prerequisite: Matriculation in the MA degree program in art education: art teacher (all grades) or the Advanced Certificate in art education (PK-12). Additional prerequisites may apply or be required for a specific topic.

ECAE 7540T Ways of Knowing in the Contemporary Arts Education Classroom: Searching and Identifying Artistic Interpretations and Relationships in the Visual and Performing arts.
60 hours (45 hours plus conference), 3 credits
Analysis of engaged searching for new visual and kinesthetic ways of expressing, motivating, and supporting artistic and other kinds of learning while examining issues of diversity and artistic plurality. Critical examination of changing contemporary arts education needs. Practical application and theoretical discussion of various visual and performing arts media and arts education practices with an emphasis on critical evaluation of educational, pedagogical, and philosophical theories of dance, visual arts, and related artistic domains. Discussion of the arts from a variety of visual arts, dance, and kinesthetic perspectives and traditions related to classroom interactions, diversity, artistic identity formation, and learning.

Prerequisites: Matriculation in the MA or Non-degree Certificate Program in Teaching Art.
Co-Enrollment in one of the following studio courses 2-D: ARTD 7310/7311(Drawing 1&2), ARTD 7420/7421 (Painting 1&2); 3-D: ARTD 7520/7521 (Sculpture 1&2, ARTD 7560: Ceramics); ARTD 7610/7611(Printmaking 1&2) ; PIMA 7010G (Performance, New Media, Technology), or any other studio course with permission of the Program Head.

ECAE 7542T Art Education: Student Teaching Practicum I
30 hours supervised teaching (7-weeks), 1.5 creditsredits
Seven-week course in student practice teaching. Opportunity to engage in extensive and intensive participation in teaching and school activities that are in alignment with the New York State Teaching Standards. Hours to be full time and in alignment with the daily school schedule and annual school calendar. Observing, developing, and studying curriculum in light of teaching experiences and observations.

Prerequisite: ECAE 7506X, 7533T, 7507T, and 7538T.
Corequisites: ECAE 7520T and 7543T. Or with permission from the appropriate art education program coordinator or department chair.

ECAE 7543T Art Education: Student Teaching Practicum II
30 hours of supervised student-teaching (7-weeks), 1.5 credits
7-week advanced course in student practice teaching. Opportunity to engage in extensive and intensive participation in teaching and school activities that are in alignment with the New York State Teaching Standards. Hours to be full time, and in alignment with the daily school schedule and annual school calendar. Daily supervised student teaching in grades and subject areas appropriate for New York State certification requirements. Observing, developing, and studying curriculum in light of teaching experiences and observations..

Prerequisite: ECAE 7506X, 7533T, and 7538T
Corequisite: ECAE 7520T and 7542T. Or with permission from the appropriate art education program coordinator or department chair.

ECAE 7546T Human Tracks in the Urban Landscape: A practicum in art, technology and the environment
45 hours; 3 credits
Exploration of the visual arts and the natural sciences as complementary forms of active inquiry. Investigation of representational codes, epistemologies, and habits of mind common to the artistic and scientific endeavors. Construction of site-specific, artistic installations and digital imagery as strategies for observation, documentation, and reflection upon contemporary environmental and aesthetic issues. Introduction to designing interdisciplinary curriculum, instruction, and evaluation of learning across visual art and environmental science content areas. Pedagogical focus on Pre-K-12 students from diverse cultural and linguistic backgrounds; including gifted and talented and students with disabilities. Topics include affordances of natural and man-made materials, tools, and resources; digital image technology; place-based

instruction, theories and research-validated pedagogical methodology. Studio and on-site field work required.

Prerequisites and/or corequisites: Matriculation in the MA or Advanced Certificate Program in Teaching Art (PK-12); the MS in Childhood Education Teacher of Science and Environmental Education (1-6); the M.A.T in Adolescence Science Education (grades 7-12), or post-graduate, in-service teachers of Art or Science.

ECAE 7562G Parent-Child Dyad Relational Health

45 hours; 3 credits
Foundation of mental health as it relates to the parent-child dyad, beginning prenatally through the first year of life. Consideration given to stress and familial, environmental, and cultural factors that may put the parent-child dyad at risk both in terms of mental and physical health. Same as PSYC 7562G

Prerequisites: Permission of Graduate Deputy

ECAE 7563G Biopsychosocial Aspects of the Perinatal Period
45 hours; 3 credits
Topics related to biological, psychological, and social theories and variables related to pre-pregnancy and perinatal periods. Factors affecting the well-being of mothers and families during the childbearing period and the nature and quality of this stage of life (with an emphasis on relationships, culture, diversity issues, socioeconomic status, and trauma). Same as PSYC 7563G.

Prerequisites: Permission of Graduate Deputy

ECAE 7652T Teaching Young Children, including Children with Special Needs and English Language Learners through the Arts
30 hours lecture, 30 hours laboratory; 3 credits
Development of competencies needed to teach young children, including children with special needs and English language learners with an emphasis on integrating the visual and performing arts; formal and informal assessment, goal setting, and integration of theories of learning, the expressive arts, improvisation and research validated practice into curriculum across a variety of content areas. We will examine philosophies and methods for integrating the storytelling, theater improvisation, puppetry, creative drama and the visual arts within early childhood settings, with emphasis on their use to support children with special needs and English language learners. Field experience in inclusive early childhood settings. Focus on reflective practice and on the development of nurturing and stimulating learning environments inclusive of children with special needs.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7663T Communication Development and Assessment of Young Multilingual Children with and without Special Needs
30 hours lecture plus conference; 3 credits
Study of language acquisition, focusing on the development and assessment of multi-lingual infants and young children. Examination of theories, research, models and methods regarding multi- language learning. including nonverbal behavior and communication. Language disorders in young children and language acquisition problems. Assistive technology and augmentative communication devices for enhancing communication with young children. Focus on family-centered practice, evidence-based practice, and collaborations with other professionals, diverse families, early intervention programs, and community organizations. Field experiences in a variety of settings including hospitals, home- and center-based early intervention programs, early childhood centers, and inclusive early childhood special education classrooms.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or Advanced Certificate in Early Intervention and Parenting or permission of the graduate deputy.

ECAE 7675T Supporting Diverse Families and Parent-Child Relationships
45 hours plus conference; 3 credits
Study of families developing relationships with their infants and young children with and without special needs beginning at the transition to parenting. Focus on helping parents/parent-figures to reflect on and understand their infant/young child's behavior and temperament, their engagement in responsive and sensitive behaviors, and developmental guidance; assessment of the parent/parent-figure relationship with child; infant mental health; co-parenting relationship, and parents' own family history. Emphasis on urban, linguistic, and cultural perspectives, resource access, and development of parent-community partnerships. Students will develop skills to support positive parenting and to work collaboratively with parents and professionals including mental health providers. Students will begin to develop and engage in reflective practice to support diverse caregiver-child relationships and families.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or Advanced Certificate in Early Intervention and Parenting or permission of the graduate deputy.

ECAE 7678T Developmental and Educational Assessment of Infants and Young Children with Special Needs
45 hours seminar plus conference; 3 credits
Formal and informal developmental and educational assessment tools for children birth through second grade with special needs and English language learners will be reviewed, including screening tools, standardized tests, and curriculum-based assessments. Attention will be given to understanding cultural, linguistic and societal factors in identification of young children with special needs and adapting assessment procedures; uses and limitations of assessment tools; collaboration with related service professionals and parents; initial training in one screening and one assessment tool, which includes administration, interpretation, and recommendations for developmental and educational goals. Field experiences in a variety of settings including hospitals, home and center based early intervention programs, early childhood centers and inclusive early childhood special education classrooms.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or Advanced Certificate in Early Intervention and Parenting or permission of the graduate deputy..

ECAE 7682T Seminar in Teaching Young Children Experiencing Emotional and Behavioral Problems
30 hours plus conference; 3 credits
Analysis of theory and research-validated practices related to the teaching of young children experiencing emotional, social and/or behavior problems. Discussion of daily classroom and instructional management and implementation and effectiveness of instructional strategies. Exploration of teacher/student interactions and teacher reflective practice.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7683T Typical and Atypical Physical Development in Infants, Toddlers and Young Children: Prevention and Early Intervention
30 hours plus conference; 3 credits
In-depth knowledge of typical and atypical physical development in infancy, and toddlerhood, and early childhood, including sensory, motor, and neurological developmental processes and overall health and chronic health conditions; early identification and effective interventions; and appropriate positioning techniques and curriculum in home, child care, preschool, and early intervention settings. Implications and development of enriched and nurturing home and classroom environments for infants, toddlers and young children with atypical development. Focus on family-centered practice, evidence-based practice, and multidisciplinary professional collaborations across cultural, linguistic, and ethnic contexts. Field experiences in a variety of settings including hospitals, home- and center-based early intervention programs, early childhood centers, and inclusive early childhood special education classrooms.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or Advanced Certificate in Early Intervention and Parenting or permission of the graduate deputy..

ECAE 7820T Applied Field Experience in Child Development and Education: Locally and Internationally
30 hours seminar, 60 hours laboratory and directed independent activity; 4 credits
Consideration of current issues and applied child development and education in a variety of international, community and center-based settings. Observation and discussion of child development, education, the arts, play and technology.

Prerequisite: Matriculation for the M.S.Ed. in Early Childhood Education or permission of the graduate deputy.

ECAE 7885T Advanced Psychosocial Development I: Caregiver-Child Interactions with Emphasis on the First Year of Life
30 hours lecture plus conference; 3 credits
Theories of social and emotional development from birth through kindergarten. Introduction to developmental, psychoanalytic, and social psychological theories. Family-centered practice, the role of relationships in development and effects of socialization experiences and culture. Observations of infants, toddlers, and caregiver-child interactions. Requires 60 hours of field experiences in a variety of settings including hospitals, home- and center-based early intervention programs, early childhood centers, and inclusive early childhood special education classrooms, which are done in consultation with the instructor.

Prerequisite: Early Childhood and Art Education 7675T or permission of the graduate deputy.

ECAE 7886T Advanced Psychosocial Development II: Caregiver-Child Interactions and Reflective Supervision
30 hours lecture plus conference; 3 credits
Theories of social and emotional development from birth through kindergarten. Moving from theory to practice: Relation of theories of development to the function and assessment of the caregiver-child relationship, which includes case presentations and the principles of reflective supervision. Emphasis is placed on family-centered practice, sensitive listening, providing emotional support, and developmental guidance to child and caregivers as well as reflective supervision with Early Childhood (EC) and/or Early Intervention (EI) providers. Requires 120 hours of field experiences in a variety of settings including hospitals, home- and center-based early intervention programs, early childhood centers, and inclusive early childhood special education classrooms, which are done in consultation with the instructor. This course can also be used for advanced candidates/EI providers across disciplines who are supervisors in EI or EC centers allowing providers to use their work placements toward their fieldwork hours.

Prerequisite: Early Childhood and Art Education 7675T and 7885T or permission of the graduate deputy.

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

ECAE 6002T	**Current Issues and Evidence-based Practices in Education**
ECAE 7008T	**Learning Theories and Early Education**
ECAE 7024X	**Soviet Education**
ECAE 7037T	**Teaching Vocabulary across the Curriculum in Early Childhood Classroom**
ECAE 7117T	**Theories and Practices in the Study of the Young Child's Progress**
ECAE 7119T	**Workshop in Early Childhood Education**
ECAE 7121T	**Seminar and Student Teaching Practicum I in Early Childhood Education**
ECAE 7122T	**Seminar and Student Teaching Practicum II in Early Childhood Education**
ECAE 7208T	**The Teaching of English to Language-Hanicapped Children in the Primary School**
ECAE 7382T	**Seminar in Designing and Evaluating Programs and Applied Research in Early Childhood Education**
ECAE 7386T	**Literacy Education: Diagnosis in Communication and Reading Difficulties**
ECAE 7551T	**Critical Issues in Education: Teacher-Child Interactions**
ECAE 7667T	**Education of Diverse Gifted Young Children**
ECAE 7668T	**Young Children with Special Needs: Gifted Education**
ECAE 7669T	**Assessment of Diverse Gifted and Talented Young Children**
ECAE 7670T	**Curriculum Design for Diverse Gifted and Talented Young Children**
ECAE 7692T	**Seminar in Early Childhood Special Education**
ECAE 7695T	**Student-teaching in an Inclusive Teaching Practicum**
ECAE 7908X	**Cognition and Information Processing**

Earth and Environmental Sciences

Department office: 3137 Ingersoll Hall
Phone: 718.951.5416

Full-time Faculty

Professors: Boger, Cheng, Cherrier, Cranganu, Groffman, Powell, Seidemann
Associate Professors: Branco, Sethi
Lecturer: Garb

M.A. degree program in earth and environmental sciences
HEGIS code 1914; SED program code 02091

The M.A. program in earth and environmental sciences offers advanced instruction in a wide array of subjects in earth and environmental sciences. Depending on the interests of the student, the degree program can include lectures, laboratory work, field work, and seminars. The M.A. degree prepares students for employment in municipal, state and federal agencies, NGOS, and consulting in the environmental, geological and urban planning sectors, as well as university-based laboratories. It also provides masters-level training for earth science teachers.

Matriculation requirements

Applicants must offer an undergraduate major in geology, environmental science, or a related field, completed with a grade point average of 3.00 (B) or higher. General matriculation and admission requirements of Graduate Studies are in the Bulletin section "Admission."

Degree requirements

Thirty credits in courses in Earth and Environmental Sciences are required for the M.A. degree, including the required courses EESC 7151G, 7155G, either 7521 or 7522, 7771G, 7902G, and the capstone course 7910G. Pertinent courses in other disciplines may be included in the 30 credits with permission of the Graduate Deputy. Courses in the Earth and Environmental Sciences Department offered toward the degree must be numbered 7100 or above. The program of study must be approved by the graduate deputy.

M.S. degree program in earth and environmental sciences
HEGIS code 1914; SED program code 36028

The M.S. degree program in earth and environmental sciences has two tracks. The Research in Earth and Environmental Science Concentration of the M.S. degree in Earth and Environmental Sciences is a thesis-based degree emphasizing research and independent work.This track prepares students to pursue a doctoral degree at the Graduate Center of the City University of New York or at another university of their choice, and to conduct research at the college and university level, or in industrial, governmental and survey agencies. Alternatively, the Urban Environmental Sciences Concentration of the M.S. degree in Earth and Environmental Sciences offers advanced instruction that addresses skills and knowledge areas required for careers in the environmental sciences. Depending on the interests of the student, the degree program can include lectures, laboratory work, field work, and seminars. This track prepares students for employment in municipal, state and federal agencies, nongovernmental organizations, and consulting in the environmental, geological and urban planning sectors, as well as university-based laboratories.

Matriculation requirements

Applicants must offer an undergraduate major in geology, environmental science or a related field, completed with a grade point average of 3.00 (B) or higher. General matriculation and admission requirements of Graduate Studies are in the Bulletin section "Admission."

Degree requirements

Thirty credits in courses in Earth and Environmental Sciences are required for the M.S. degree, in one of two concentrations: Research in Earth and Environmental Science, or Urban Environmental Science. Courses in the Earth and Environmental Sciences Department offered toward the MS degree must be numbered 7100 or above.

Research in Earth and Environmental Science Concentration

Required courses: EESC 7150G, 7151G, 7155G, one course numbered 7521 or 7522 (or other GIS-based course approved by the Graduate Deputy), 7771G (or other quantitative/analytical course approved by the Graduate Deputy), 7902G, and 3 to 6 credits of Thesis Research (EESC 7951G, 7952G, or 7953G). Pertinent courses in other disciplines may be included in the 30 credits with permission of the Graduate Deputy and their thesis advisor. Students with advanced preparation may substitute other courses for required courses with the permission of the Graduate Deputy.
Students must complete EESC 7150G with a grade of B+ or higher, and defend their thesis proposal to a Thesis Committee consisting of

three members, the thesis advisor and one other faculty member from the Department of Earth and environmental Science, and a third PhD-holding member of open affiliation. The membership of the Thesis Committee must be approved by the Graduate Deputy. Students may only enroll in Thesis Research credits after the thesis proposal is defended and approved.
Information about requirements for the thesis is in the Bulletin section "Academic Regulations and Procedures."

Urban Environmental Science Concentration

Required skill-focused courses EESC 7151G, 7155G, either EESC 7521G or EESC 7522G (or other GIS-based course approved by the Graduate Deputy), and EESC 7771G (or other quantitative/analytical course approved by the Graduate Deputy), the required science content courses EESC 7500G, 7680G, 7911G, and a two-semester sequence of the capstone course EESC 7916G. Pertinent courses in other disciplines may be included in the 30 credits with permission of the Graduate Deputy. Students with advanced preparation may substitute other courses for required courses with the permission of the Graduate Deputy.

M.A.T. degree program: earth science teacher (grades 7-12)
HEGIS code 1917.01; SED program code 33640 (Concentration A); 33641 (Concentration B)

The Department of Earth and Environmental Sciences in conjunction with the Department of Secondary Education, offers a Master of Arts in Teaching Earth Science, and New York State Teaching Certificate in Adolescent Science Education with a specialization in earth science in grades 7-12. Concentration A is designed for in-service teachers of any subject who wish to obtain certification in Earth science. Concentration B is designed for teacher candidates with a background in Earth science seeking initial certification.

This master of arts in teaching program provides students with courses linking content and pedagogy across the content areas in Earth science required to teach the New York State Earth science curriculum. The program places a special emphasis on place-based instruction using the cultural and natural resources of New York City and State.

Applicants should consult matriculation requirements for adolescence education and special subjects in the Department of Secondary Education section of the Bulletin, and should contact the Program Coordinator for advisement.

Students deficient in science credits may be accepted on condition that they complete additional coursework as recommended by the program coordinator of science education.

Matriculation requirements

Each candidate will be evaluated individually. Based upon this evaluation and certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Program Head of middle school science education.

Applicants to Concentration A must have completed a minimum of six credits in earth and environmental science or in cognate sciences including chemistry and physics.
Applicants to Concentration B must have completed a minimum of 9 credits in earth science and six credits in cognate sciences including chemistry and physics. Students deficient in science credits may be accepted on condition that they complete additional coursework as recommended by the Program Head of middle school science education.

This program leads to a Master of Arts in Teaching Earth Science, and a New York State Professional Teaching Certificate in Adolescent Science Education with a specialization in earth science in grades 7-12.

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate courses is required to maintain matriculation.

International applicants whose first language is not English and who did not receive the equivalent of a four-year U.S. undergraduate education from an institution where English is the official language of instruction, must take the Test of English as a Foreign Language (TOEFL) and arrange to have official score reports sent to the Office of Admissions. See the section, "Additional admission requirements for students with international credentials," in the Graduate Bulletin or the program web page for more updated and complete information on minimum passing score requirements. At the discretion of the program, additional English courses may be required as a condition for admission.
General matriculation and admission requirements of Graduate Studies are in the "Admission" section.

Degree requirements

Thirty to thirty-seven credits are required for the degree depending on the applicants' previous coursework, teaching experience and the certificates the applicant holds.

Concentration (A): 30-34 credits (for in-service teachers)
This program leads to a New York State Professional Teaching Certificate in Adolescent Earth Science and General Science Education for inservice science teachers. Applicants must hold a New York State Initial Certification in classroom teaching and a minimum of six credits in earth and environmental science or in cognate sciences including chemistry and physics.
The following required courses:
Earth Science and Environmental Science 7013T, 7040T, 7044T, and either 7006T or 7042T.
Twelve additional credits in Earth Science and Environmental Science numbered 7000T or higher, or 7100 or higher with permission of

the chairperson, or GSCI 7014T, 7041T.
Other GSCI courses may include any GSCI 7040-49s, and/or Water (GSCI 7053T), and/or The Ocean System (GSCI 7054T), and/or Climate Change (GSCI 7059T), or other GSCI courses with permission of the Program Coordinator.
Secondary Education 7314X or 7324X, 7320T and 7321T.

Concentration (B): 30-37 credits (for pre-service teachers)
This option leads to both New York State Initial and Professional Teaching Certificates for pre-service science teachers. Applicants must have completed a minimum of 9 credits in Earth Science and six credits in cognate sciences including chemistry and physics.
Fifteen credits in Earth and Environmental Sciences numbered 7000T or higher, or 7100 or higher with permission of the chairperson, or GSCI 7014T, 7041T.
Other GSCI courses may include any GSCI 7040-49s, and/or Water (GSCI 7053T), and/or The Ocean System (GSCI 7054T), and/or Climate Change (GSCI 7059T), or other GSCI courses with permission of the Program Coordinator.
All of the following courses in education: Secondary Education 7314X or 7324X, 7315X, 7320T, 7380T and 7671X.

Other requirements that must be met include 100 hours of field experience, and 70 days of student teaching at appropriate grade levels including Secondary Education 7381T, 7383T, 7541X and 7542T and any additional New York State requirements. SEED 7542T and 7541X must be taken in the same semester.

Assistantships

Some assistantships in teaching and research are available to qualified students. Inquiry should be made of the chairperson.

CUNY Ph.D.

The City University of New York offers a doctoral program in earth and environmental sciences, in which the Earth and Environmental Sciences Department participates. General information about CUNY Ph.D. programs is in the chapter “Support for Academic Success in Graduate School.” Earth and Environmental Sciences Department courses may be credited toward the CUNY doctoral degree with permission of the executive officer of the doctoral program. For information, students should consult the deputy chairperson of the Earth and Environmental Sciences Department and the executive officer of the doctoral program.

Honor Society

Sigma Xi, the Scientific Research Society, encourages original investigation in the natural sciences, pure and applied. The fields of activity of the society include the physical sciences, the life sciences, the earth sciences, and mathematics. The Brooklyn College Chapter elects students to associate membership in the society on the basis of academic excellence and marked aptitude for research in one of the fields listed above.

Courses

Unless a prerequisite is specific, students may apply graduate or undergraduate courses toward fulfillment of that prerequisite.

EESC 7000T Meteorology

75 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. (Not open to students who have completed Geology 33 or 3900 [33.2] or the equivalent.)

Prerequisite: Geology or Earth and Environmental Sciences 7007T [607T].

EESC 7006T Geology of the National Parks

45 hours; 3 credits
Geologic landscape features of the national parks of the United States; geologic history and geological processes of landscape formation; role of parklands in modern society; national parks as recreation reserves, habitat preserves, and national geological laboratories. Areas covered in the course include parks such as Grand Canyon, Yellowstone, Yosemite, Glacier, Virgin Islands, Badlands, Shenandoah, Everglades, Acadia, and Voyageurs.

EESC 7011T The History of Life

45 hours; 3 credits
The history of life on earth as evidenced by fossils; origin and evolution of early life forms; the oxygen revolution; rise of animals and diversification of life; origin of vertebrates; conquest of land; dinosaurs and the reptile zenith; birds; origin and diversification of mammals; primates and human ancestry; mass extinction and the future.

EESC 7013T Earth Science and the New York City Urban Environment

45 hours lecture, 4 field trips; 3 credits
Investigation of five guiding questions regarding the connections between geology and New York City: On what is the city built? Of what is the city built? How has the New York City environment changed? Why did the metropolis develop here? What environmental hazards does New York City face? Mandatory weekend field trips within Manhattan and Brooklyn.

EESC 7040T Geology through Global Arts and Artifacts

22 ½ hours lecture, 45 hours lab; 3 credits

Inquiry approach to formation and properties of minerals, rocks, and metals. Investigation of real-world applications of earth materials including those at the Metropolitan Museum of Art and other institutions in the New York City area. Laboratory work will include a minimum of 3 weekend field trips to cultural institutions.

EESC 7041T New York City Water Sources and Cycles

22 ½ hours lecture, 45 hours lab; 3 credits
Principles of hydrology and hydrogeology with emphasis on the New York City region; history of NYC water supply; water quality; water treatment; water budgets and cycles; precipitation and storms; several weekend field trips required, including Prospect Park and Jamaica Bay.

EESC 7042T Geology of New York State

22 ½ hours lecture, 45 hours lab; 3 credits
Field-based approach to geological history of New York State; Grenville Orogeny, Lower Paleozoic strata and the Taconic Orogeny, Catskill delta and the Acadian Orogeny, Mesozoic rift basins; 6 days of field trips across New York State, including overnights.

Prerequisite: a minimum of 6 credits in Geology or Earth and Environmental Sciences.

EESC 7043T Oceanography

45 hours; 3 credits
Physics, chemistry, and biology of the ocean, including marine geology. How the ocean regulates earth climate, the nature of life in the ocean as illustrated by diversity and ecosystem structure; how biological processes influence ocean chemistry; interaction of geological forces with ocean dynamics, human impacts on the ocean; ocean science for teachers; one or more field trips.

EESC 7044T Global Catastrophes

22½ hours lecture, 45 hours lab; 3 credits
Exploration of Earth dynamism and evolution; case histories of major events that changed the course of earth history such as atmospheric oxygenation, snowball Earth, Cambrian radiation, Cretaceous-Tertiary mass extinction, Central American land-bridge, and anthropogenic catastrophes; several weekend field trips required, including the American Museum of Natural History and beaches of Coney Island and/or Jamaica Bay.

Prerequisites: 9 credits in Geology or Earth and Environmental Sciences.

EESC 7091T Research Experience for Teachers I: Immersion

75 hours seminar, 40 hours laboratory; 1.5 credits
Participation in faculty-led research team; field and lab components; reflection on transferability to pre-college classroom.

Prerequisite: 12 credits in earth and environmental sciences and permission of the instructor.

EESC 7092T Research Experience for Teachers II: Research Proposal

45 hours seminar; 1.5 credits
Seminar approach to development of research proposals; literature searches; literature reviews.

Prerequisite: EESC 7091 and permission of the instructor

EESC 7093T Research Experience for Teachers III: Independent Research

Minimum of 135 hours conference and independent work; 3 credits
Independent research within a faculty-supervised research team; public presentation of results required; reflection on transferability to pre-college classroom.

Prerequisite: EESC 7092 and permission of the instructor.

EESC 7150G Research Proposal

15 hours plus 2-hour lab, 2 credits
Development of independent research proposal; literature searches; literature reviews; development of hypotheses and methodologies.

Prerequisite: Permission of the instructor

EESC 7151G Communicating Earth and Environmental Science

15 hours lecture plus 30 hours lab, 2 credits
Principles and practices of presenting Earth and environmental science in a professional forum; concise technical writing of abstracts; graphics and data visualization (maps, graphs, photographs); Powerpoint presentation design; poster design.

Prerequisite: None

EESC 7155G Professional Portfolios for Earth and Environmental Scientists

15 hours plus 2-hour lab, 2 credits
Purpose of a professional portfolio; design and format; selecting material; reflection on education and career preparedness and planning

EESC 7156G Practicum in Earth and Environmental Science

45 hours lab or fieldwork; 1 credit
Short-term practical work in a laboratory and/or field-setting; formal report writing.

Prerequisite: Permission of graduate deputy or chair

EESC 7157G Internships in Earth and Environmental Science

120 hours fieldwork, 7.5 hours seminar; 3 credits
Supervised participation in professional activities with public, private or non-profit entity; on-campus seminar meetings; creating a work journal and professional portfolio; internship must be pre-approved by department prior to enrolling.

Prerequisite: Permission of graduate deputy or chair

EESC 7160G Earth Science Field Studies

15 hours lecture, 60 hours supervised field and laboratory work; 3 Credits
Approximately 10 days of supervised field work focused on geological topics, including, but not limited to, mapping, stratigraphic analysis, geochemical survey, geophysical survey. Travel and material expenses may be required. Students may take multiple sections of Earth and Environmental Sciences 7160G and 7061G with different topics up to a maximum of 6

credits.

Prerequisite: permission of instructor

EESC 7161G Environmental Science Field Studies

15 hours lecture, 60 hours supervised field and laboratory work; 3 Credits
Approximately 10 days of supervised field work focused on environmental topics, including, but not limited to, soils, ecology, contamination, urbanization, climate, hydrology, and vegetation. Travel and material expenses may be required. Students may take multiple sections of Earth and Environmental Sciences 7160G and 7161G with different topics up to a maximum of 6 credits.

Prerequisite: permission of instructor

EESC 7214G Geophysics

45 hours lecture or seminar; 3 credits
Principles of seismology: elastic constants, types of propagation of elastic waves. Exploration and earthquake seismology; gravity and magnetic fields of the earth. Development of a comprehensive earth model based on geophysical data and concepts.

EESC 7300G Paleontology of Invertebrates

30 hours lecture, 15 hours seminar, 30 hours laboratory; 4 credits
Advanced treatment of the functional morphology, systematics, evolutionary history, paleoecology of invertebrate animals through geologic time. Laboratory techniques in the use of fossils as primary data of organic evolution and as indicators of paleoenvironments. (This course is also open to qualified graduate students in biology.)

EESC 7335G Global Tectonics

45 hours lecture and two required field trips; 3 credits
Overview of plate tectonics settings; ocean ridges and transform faults, continental rifting margins, continental transforms, subductions zones, forearc and backarc basins and orogenic belts. Earthquakes and Earth internal structure, plate tectonic and magmatism, and measurements of plate motions. Prior courses knowledge of structural geology, petrology and stratigraphy are recommended.

EESC 7429G Stratigraphy

30 hours lecture, 30 hours laboratory; 3 credits
Principles of stratigraphy. Stratigraphic record and nomenclature. Faunal stratigraphy and correlation. Systematic stratigraphy of North America: Pre-Cambrian problems; geosynclinal, cratonal, nonmarine sedimentation of the Paleozoic era; Mesozoic and Cenozoic stratigraphy; paleontological aspects.

EESC 7470G Groundwater Hydrogeology

30 hours lecture, 60 hours laboratory; 4 credits
Physical, geochemical, and geologic aspects of groundwater hydrogeology; groundwater occurrence; resource management; groundwater contamination and environmental problems. Laboratory work includes field trips, computer models, and case studies.

EESC 7480G Contaminant Hydrogeology

37.5 hours, 15 laboratory; 3 credits
Principles of contaminant transport in groundwater; groundwater flow and mass transport modeling; site contaminant investigation and remediation; modern field techniques. Emphasis on case studies. Application of course content in term-long, site-based project. Two weekend field trips to sites in New York City area.

EESC 7500G Principles of Urban Water Dynamics

45 hours; 3 credits
Analysis of natural and built urban water systems and the connectivity of these systems to the landscape and each other; fundamental concepts in urban hydrology and reaction and transport processes; eutrophication and water pollution; water resource management approaches.

EESC 7510G Water Infrastructure and Stormwater Management in New York City

30 hours lecture; 30 hours lab; 3 credits
Water supply and wastewater treatment in a mega urban system; water quality in New York City's Harbor; combined sewer overflow; grey and green infrastructure to achieve sustainability of water quality initiatives; types of green infrastructure and basic design principles; performance monitoring and assessment; green infrastructure co-benefits; engage and enlist stakeholders in stormwater management.

EESC 7515G Watershed Analysis

30 hours lecture, 30 hours lab; 3 credits
Analysis of the hydrologic cycle from a watershed perspective using large datasets, basic computer programming, Geographic Information Systems (GIS), watershed modeling, and sensing.

Prerequisite: Earth and Environmental Sciences 7771G and 7521G, or permission of the instructor

EESC 7521G Lab and Field Techniques Using Geospatial Technologies

30 hours lecture, 30 hours Laboratory; 3 credits
Basics of ArcGIS, including vector and raster data models and analyses, integration of datasets, projections and datums, data editing, and map layouts; collection of geospatial data in the field using handheld GPS units with data dictionaries, total stations, and base stations; importing field data into ArcGIS to edit, analyze and merge with other data sets.

Prerequisite: none

EESC 7522G Advanced GIS and Remote Sensing

30 lecture, 30 lab; 3 credits
Advanced techniques and modeling applications of ArcGIS taught such as spatial analyst, 3D analyst, and advanced techniques in modeling; image processing including image enhancement and classification of satellite data using Idrisi and ArcGIS softwares.

Prerequisite: EESC 7525 or department chairperson approval.

EESC 7525G Advanced Geological Field Mapping

15 hours lecture, 60 hours supervised field and laboratory work;

3 credits
Approximately 10 days of supervised field and laboratory work in deformed sedimentary or metamorphic sequences. Field preparation of geologic maps and sections; data collection with Brunton compass and GPS units; map construction with GIS. Builds upon prior experience with geological mapping and mapping-related technology. Travel and material expenses.

Prerequisite: Permission of instructor

EESC 7600G Biogeochemistry

45 hours; 3 credits
Biogeochemistry is the study of the fluxes of energy, water, carbon, nutrients and other elements across the earth's surface. This integrative discipline is highly relevant to multiple aspects of Environmental Science including analysis of climate and land use change and air and water pollution. The course will begin with a discussion of the basic science of biogeochemical cycles at global, regional, landscape and ecosystem scales and then move towards application of biogeochemical principles to current topics of interest in Environmental Science.

EESC 7680G Soils in the Landscape

37.5 hours lecture; 15 hours lab; 3 credits
Knowledge about soils is useful in many areas; agriculture, land use planning, environmental quality, landscape architecture. Soil properties and management are important for the growth of plants, the fate and transport of pollutants, and land use planning. Soils are arranged in coherent, predictable patterns across the landscape, with relatively predictable properties. Soils can thus be studied using a "systems" or "landscape" approach such that one can reason, given a limited amount of information or field observation, the properties of a particular soil and make predictions and recommendations about its behavior in different situations. In this class, students will learn to "think" about soils so that they can apply soils information to real problems.

EESC 7690G Geochemistry of Soils

45 hours; 3 credits
An examination of the physical chemistry of soils including soil mineralogy (formation, relative stability, ion exchange properties) and surface chemistry.

EESC 7695G Seminar in clay minerals and nanoparticles

45 hours seminar; 3 credits
Principles of mineral behavior; structure of layer silicates; types of layer silicates; clay minerals groups; nanomaterials and nanoparticle minerals; clays in soils and sedimentary environments; burial diagenesis of clays; clays as paleoclimate indicators; electrochemical properties of clays; thermodynamic stability of clays; environmental uses of clays; bentonites and other industrial
clays; clay formation and alterations during ore mineralizations

EESC 7730G Low Temperature Geochemistry

45 hours; 3 credits
Chemical equilibria in aqueous systems and at low temperature. Natural processes controlling the composition of streams, lakes, the ocean, and near-surface groundwaters; impact of biological systems and human activities. Water in the geological cycle, applications to weathering, sedimentary processes, diagenesis, and ore formation.

Prerequisite: Geology or Earth and Environmental Sciences 7700G [770G] or permission of the chairperson.

EESC 7735G Isotope Geology

45 hours; 3 credits
Origin of the elements; age determination; implications of isotope ratio variations. Brief survey of some aspects of the chemistry of the atmosphere, hydrosphere, lithosphere.

EESC 7771G Geostatistics

30 hours lecture; 30 hours lab; 3 credits
This course will introduce students to the fundamentals of data exploration and applied inferential statistics within the context of datasets relevant for earth and environmental sciences. Major topics include statistical description of data; collection of data; probability; hypothesis testing; variance; correlation; spatial analysis; multivariate analysis; sampling considerations; graphical display of data; common distribution models; and regression. Course material related to statistical concepts will be complemented with hands-on training and data analysis using statistical programming software such as R, SPSS, Python, Matlab, or Excel.

EESC 7780G Analytical Methods in Environmental Geochemistry

22.5 hours lecture, 45 hours laboratory; 3 credits
Survey of the whole spectrum of analytical methods that can be applied to Earth and Environmental materials, together with a critical evaluation of their relative advantages and limitations. Basic principles of sampling, preservation, preparation, and method selection will also be discussed. Students gain extensive hands on experience with wet chemistry lab techniques, sample dissolution and digestion, colorimetric methods, quality control, as well as the use of modern sophisticated instruments such as ICP-MS, XRD, SEM-EDS, and TEM. In particular, EPA methods will be emphasized. This course is designed for students who wish to pursue a career in environmental or geological fields.

Prerequisite: Graduate standing, or with department chairperson approval.

EESC 7825G Ore Deposit Models

45 hours; 3 credits
Examination of models for the formation of metallic ore deposits with relation to their environment of formation and primary mineralization processes. Prior familiarity with igneous petrology and geochemistry is required.

EESC 7830G Seminar in Advanced Ore Deposit Geology

45 hours seminar; 3 credits
Examination of the current issues and priorities in ore geology; emphasis on current methodologies, controversies in ore genesis, and current exploration priorities.

Prerequisites: EESC 7825 or permission of instructor

EESC 7840G Introduction to Petroleum Geology

30 hours lecture, 30 hours lab; 3 credits

Application of geological principles to structural geology (for trapping oil and gas), depositional environment (to create petroleum reservoirs), and source and reservoir rock properties (for the origin and migration of petroleum). The fundamental geological requirements of a wide variety of disciplines in the petroleum industry are satisfied without requiring a technical background. Students gain perspective about the value of geological reasoning and its relationship to their jobs/roles.

Prerequisite: none.

EESC 7841G Petrophysics

30 hours lecture, 30 hours lab, 3 credits
Theory and practice of measuring reservoir rock and fluid transport properties; lithology, porosity, absolute, relative and effective permeability, fluid saturations, capillary pressure, rock-fluid interactions, heterogeneity and geostatistics.

EESC 7842G Digital Rocks, Big Data, Soft Computing, and Cognitive Systems in Petroleum Geosciences
30 hours lecture, 30 hours lab, 3 credits
Use of industry-level software (BasinMod®, PETRA®, PowerLog®, PetroMod®, and Petrel®) to deal, theoretically and practically, with digital rocks and other high- end technologies that enable people and computers to interact more naturally in solving various problems occurring in petroleum geosciences.

Prerequisite: none

EESC 7902G Earth and Environmental Colloquium

30 hours each term; 2 credits each term
Selected aspects of earth and environmental science. Areas not directly covered in regular courses. Use of original sources. Networking opportunities with external earth and environmental science professionals.

EESC 7903G Seminar

45 hours each term; 3 credits each term
Selected aspects of Earth and environmental science. Areas not directly covered in regular courses. Use of original sources. Students may take multiple sections of Earth and Environmental Sciences 7903G [790.3] with different topics up to a maximum of 6 credits.

EESC 7910G Issues in Earth and Environmental Sciences in NYC
45 hours; 3 credits
Overview of issues in earth and environmental science relevant to the historical and future development of the New York City region. Geological process that shaped the NYC area; current state of the environment and remediation initiatives; effect of climate change on NYC infrastructure; resource requirements of the city.

EESC 7911G Terrestrial and Aquatic Environmental System Dynamics
45 hours; 3 credits
Systems approach studies of energy flow, material exchange and ecosystem dynamics in terrestrial and aquatic environments; ecosystem feedback processes; biogeochemical cycles; human impacts and alteration of natural system functioning. Case studies of local, terrestrial and aquatic environments.

EESC 7912G Earth's Climate

45 hours; 3 credits
Overview of the cycles, processes, and history that govern the Earth's climate from both an earth science and environmental science perspective. Scientific investigation of: climate interactions with the biosphere, lithosphere, cryosphere, and hydrosphere; scales and processes of climate, weather, and teleconnections; global energy budget and climate change.

EESC 7913G Natural Resources, Management and Conservation
30 hours lecture; 30 hours lab/field trip; 3 credits
Principles and practices for sustainably managing natural resources (fossil fuels, alternative energy sources, base metals, strategic metals, soils, water); extraction methods; waste products and their environmental impact; approaches to remediation; approaches to minimizing environmental impact.

EESC 7914G Earth's Ocean

45 hours; 3 credits
The ocean and its interaction with the solid earth. The ocean in earth history; ocean morphology; origin of ocean chemistry; present day ocean circulation and its effects on ocean life; biogeochemical cycles; ocean productivity; anthropogenic influences on ocean chemistry and resources; interaction of ocean with Earth's climate; one or more field trips.

EESC 7916G Case Studies in Urban Systems

7.5 hours lecture 60 hours lab; 2.5 credits
Case studies of urban systems for long-term resiliency and sustainability; co-taught by Earth and Environmental Sciences faculty and New York City leaders (governmental, private, and NGO) working in Earth and environmental science fields; guest lecturer workshops; studio style case studies aligned with municipal challenges. Students may receive credit for a two-section fall-spring sequence of EESC 7916G for a total of 5 credits.

Prerequisite: 15 credits

EESC 7951G Thesis Research

Hours to be arranged; 1 credit
Research for master's thesis supervised by a faculty member. Students may take multiple sections of thesis research courses (EESC 7951, 7952, 7953) up to a maximum of 6 credits. Credit is not earned until the thesis is accepted.

Prerequisite: B+ or better in EESC 7150 and successful defense of thesis proposal

EESC 7952G Thesis Research

Hours to be arranged; 2 credits
Research for master's thesis supervised by a faculty member. Students may take multiple sections of thesis research courses (EESC 7951, 7952, 7953) up to a maximum of 6 credits. Credit is not earned until the thesis is accepted.

Prerequisite: B+ or better in EESC 7150 and successful defense of thesis proposal

EESC 7953G Thesis Research

Hours to be arranged; 3 credits
Research for master's thesis supervised by a faculty member. Students may take multiple sections of thesis research courses (EESC 7951, 7952, 7953) up to a maximum of 6 credits. Credit is not earned until the thesis is accepted

Prerequisite: B+ or better in EESC 7150 and successful defense of thesis proposal

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

EESC 7007T Earth Science I

EESC 7008T Earth Science II

EESC 7012T Earth Sciences: Planetology -- The Earth Perspective

EESC 7090T Seminars in Geology

EESC 7226G Metamorphic Petrology

EESC 7320G Paleoecology

EESC 7400G Sedimentology

Economics

Department office: 217 A Whitehead Hall
Phone: 718.951.5153

Full-time Faculty

Professors: Doytch, Klein, Uctum
Associate Professors: Fox, Goldberg, Wang

The department has a distinguished faculty whose members are committed to providing students with the intellectual tools, foundational knowledge, and skills they need to succeed in the workplace and to be lifelong learners.

M.S. degree program in business administration
HEGIS code 0517; SED program code 01895

The program offers seven options: Economic Analysis, Global Business, Accounting, General Business, Business Intelligence, Data Analysis, Marketing, and Producing in Cinematic Arts. Accounting is open only to students who have taken introductory accounting, managerial accounting, financial accounting, and income taxation or the equivalent. The program provides students with the knowledge and skills to successfully pursue a wide range of careers in management, marketing, business analytics, international business, and economic analysis.

The Master of Science in Business Administration at Brooklyn College provides students with the knowledge and skills to successfully pursue a wide range of careers in management, marketing, business analytics, international business, economic analysis, and producing in cinematic arts. Options 2, 3, 4, 5, and 6 of the program can be completed fully online.

All applicants must have undergraduate courses in macroeconomics, microeconomics, statistics, and calculus.

Please note that Option 3: Accounting is open only to students who have taken Accounting 2001, 3001, 3011, 3021, and 3101 (introductory accounting, managerial accounting, financial accounting, and income taxation) or the equivalent.

Applicants to option 7 are not required to have taken macroeconomics, microeconomics, statistics, and calculus.

Degree Requirements (30 - 36 credits)

Students must complete at least 24 credits in courses offered by the Business Management, Accounting, Finance, or Economics Departments. Consistent with college policy, transfer credits for graduate courses taken at other institutions may be accepted for some of these courses at the discretion of the chairperson or deputy chairperson.

Option 1: Economic Analysis (33 credits)

Required: 15 credits (5 courses): Economics 7000X, Economics 7010X, Economics 7020X, Economics 7021X, and Economics 7025X.

Major specific requirement: 18 credits (6 courses) from the following: Economics 7215X or Finance 7215X, Finance 7216X, Economics 7230X or Business 7230X, Economics 7309X, Economics 7027X, Economics 7028X, Economics 7030X, Economics 7040X, Economics 7045X, Economics 7050X, Economics 7055X, Economics 7060X or Health and Nutrition Sciences 7144X, Economics 7090X, Economics 7091G, and Economics 7095G.

Substitutions: With the permission of the chairperson or graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the 18 credit Major Specific requirement: Students who have taken Mathematics 2101 or equivalent may, with permission of the graduate deputy, waive Economics 7025X, and substitute an appropriate course in Economics or another department. Students who have taken Mathematics 2501 or Mathematics 3501 or equivalent may, with permission of the graduate deputy, waive Economics 7020X, and substitute an appropriate course in Economics or another department. Students that have taken Finance 7215X may not register for Economics 7215X.

Option 2: Global Business (30 credits)

Required: 12 credits (4 courses) from the following: Business 7204X or Business 7208X or Business 7279X or Economics 7021X;

Business 7206X or Economics 7000X; Business 7276X or Economics 7020X; and Business 7278X or Economics 7025X.

Major specific requirement: 12 credits (4 courses) from the following: Business 7210X, Business 7220X, Business 7257X, and Business 7260X.

Electives: 6 credits (2 courses): Any Business course with a Business prefix (BUSN). This can include Business courses that were not used to fulfill the Required courses requirement. Students may find the following courses of interest: Business 7280X, Business 7281X, Business 7282X, Business 7283X, and Business 7284X. Courses cross listed with Business courses such as Computer and Information Science 7702X, Computer and Information Science 7704X, Economics 7205X, Economics 7230X, Psychology 7246G, Psychology 7247G, and Television, Radio and Emerging Media 7727X may also be used to satisfy this requirement.

Substitutions: With the permission of the chairperson or graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the Electives requirement.

Option 3: Accounting (30 credits)

This option is only open to students who have taken Accounting 2001, 3001, 3011, 3021, and 3101 (introductory accounting, managerial accounting, financial accounting, and income taxation) or the equivalent.

Required: 12 credits (4 courses) from the following: Business 7204X or Business 7208X or Business 7279X or Economics 7021X; Business 7206X or Economics 7000X; Business 7276X or Economics 7020X; and Business 7278X or Economics 7025X.

Major Specific requirement: 12 credits (4 courses) from the following: Accounting 7108X, Accounting 7109X, and two additional courses with an Accounting prefix (ACCT). Courses cross listed with Accounting courses such as Business 7131X may also be used to satisfy this requirement.

Electives: 6 credits (2 courses): Any Business course with a Business prefix (BUSN). This can include Business courses that were not used to fulfill the Required courses requirement. Students may find the following courses of interest: Business 7280X, Business 7281X, Business 7282X, Business 7283X, and Business 7284X. Courses cross listed with Business courses such as Computer and Information Science 7702X, Computer and Information Science 7704X ,Economics 7205X, Economics 7230X, Psychology 7246G, Psychology 7247G, and Television, Radio and Emerging Media 7727X may also be used to satisfy this requirement.

Substitutions: With the permission of the chairperson or graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the Electives requirement.

Option 4: General Business (30 credits)

Required: 12 credits (4 courses) from the following: Business 7204X or Business 7208X or Business 7279X or Economics 7021X; Business 7206X or Economics 7000X; Business 7276X or Economics 7020X; and Business 7278X or Economics 7025X.

Major Specific requirement: 18 credits (6 courses) from the following: Any Business course with a Business prefix (BUSN). This can include Business courses that were not used to fulfill the Required courses requirement. Students may find the following courses of interest: Business 7280X, Business 7281X, Business 7282X, Business 7283X, and Business 7284X. Courses cross listed with Business courses such as Computer and Information Science 7702X, Computer and Information Science 7704X, Economics 7205X, Economics 7230X, Psychology 7246G, Psychology 7247G, and Television, Radio and Emerging Media 7727X may also be used to satisfy this requirement.

Substitutions: With the permission of the chairperson or graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the Major Specific requirement.

Option 5: Business Analytics (30 credits)

Required: 12 credits (4 courses) from the following: Economics 7000X or Business 7206X; Business 7276X; Economics 7020X; Economics 7021X or Business 7204X or Business 7208X or Business 7279X; and Economics 7025X or Economics 7230X or Business 7230X.
Major Specific requirement: 12 credits (4 courses) from the following: Business 7278X; Business 7280X or Business 7281X; Business 7282X; and Business 7281X or 7284X.

Electives: 6 credits (2 courses): Any Business course with a Business prefix (BUSN). This can include Business courses that were not used to fulfill the required courses requirement. Courses cross listed with Business courses such as Computer and Information Science 7702X, Computer and Information Science 7704X, Economics 7205X, Economics 7230X, Psychology 7246G, Psychology 7247G, and Television, Radio, and Emerging Media 7727X may also be used to satisfy this requirement.

Substitutions: Those who completed one year of calculus can substitute Economics 7025X with an additional third Elective class. With the permission of the chairperson or the graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the Electives requirement.

Option 6: Marketing (30 credits)

Required: 12 credits (4 courses) from the following: Business 7206X or Economics 7000X; Business 7276X or Economics 7020X; Business 7278X or Economics 7025X; Business 7279X or Business 7204X or Business 7257X or Economics 7021X or Economics 7230X or Business 7230X.

Major specific requirement: 12 credits (4 courses) from the following:
Business 7203X; Business 7208X; Business 7212X; and Business 7280X or Business 7281X or Business 7282X or Business 7284X.

Electives: 6 credits (2 courses): Any Business course with a Business prefix (BUSN). This can include Business courses that were not used to fulfill the Required courses requirement. Students may find the following courses of interest: Business 7280X, Business 7281X, Business 7282X, Business 7283X, and Business 7284X. Courses cross listed with Business courses such as Computer and Information Science 7702X, Computer and Information Science 7704X, Economics 7230X, Psychology 7246G, Psychology 7247G, and Television, Radio and Emerging Media 7727X may also be used to satisfy this requirement.

Substitutions: With the permission of the chairperson or graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the degree.

Option 7: Producing in Cinematic Arts (36 credits)

Required: 30 credits (10 courses) from the following: Accounting 7101X, Business 7200X, Business 7202X, Business 7203X, Business 7212X, Film 7016G, Film 7401G, Film 7411G, Film 7801G, and Film 7462G.

Electives: 6 credits (2 courses): Any Business course with a Business prefix (BUSN) or any Film course with a Film prefix (FILM). This can include Business and Film courses that were not used to fulfill the required courses requirement. Courses cross listed with Business courses such Computer and Information Science 7702X, Computer and Information Science 7704X, Economics 7205X, Economics 7230X, Psychology 7246G, Psychology 7247G.

Substitutions: With the permission of the chairperson or graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the degree.

CUNY Ph.D.

The City University of New York offers a doctoral program in economics. General information about CUNY Ph.D. programs is in the chapter “Support for Academic Success in Graduate School.” Economics Department courses may be credited toward the CUNY doctoral degree with permission of the executive officer of the doctoral program. For information, students should consult the deputy chairperson of the Economics Department and the executive officer of the doctoral program.

Courses

ECON 7000X Microeconomics

30 hours plus conference; 3 credits
Supply and demand analysis. Economics of households and firms. Determination of product and factor prices under different market structures. Capital theory and welfare economics. Spring term.

Prerequisite: Economics 7010X [710X] and 7025X [725.1X], or the equivalent.

ECON 7010X Macroeconomics

30 hours plus conference; 3 credits
Factors determining the level of national income, output, and employment. Consideration of business cycle theories and of public and private policies to stabilize employment and prices. Fall term.

ECON 7020X Econometrics

30 hours plus conference; 3 credits
Introduction to simple and multiple regression analysis, and analysis of variance. General linear model. Introduction to econometric modeling and techniques with an emphasis on applied econometrics. Applications to economics. Fall term.

Prerequisite: undergraduate courses in statistics

ECON 7021X Advanced Econometrics

30 hours plus conference; 3 credits
Advanced econometric model building. Econometric principles for cross-sectional, panel, and time-series data sets. Applications to economics. Spring term.

Prerequisite: Economics 7020X [720X] or the equivalent.

ECON 7025X Mathematical Methods in Economics I

30 hours plus conference; 3 credits
Intended for economics students with little or no preparation in calculus. Mathematical topics frequently used in economics selected from matrix algebra, differential calculus, and partial differentiation. Development of mathematical concepts in the context of economic models. Relation of mathematical methods to their application in economics. Fall term.

ECON 7027X International Trade

30 hours plus conference; 3 credits
Gains from trade, absolute and comparative advantage, and the determination of patterns of trade. The classical model, the endowment model, and the specific factor model. Imperfect competition and government policies as determinants of trade. Increasing returns to scale. Trade and factor movements in the international economy. Empirical tests of trade models. Tariffs, nontariff barriers, administered protection. Quotas, and other nontariff barriers. Effects of trade policies on employment, prices, income distribution, and national economic welfare. Case studies.

Prerequisite: one undergraduate course in macroeconomics and one undergraduate course in microeconomics.
Prerequisite or corequisite: Economics 7025X [725.1X].

ECON 7028X International Economics and Finance

30 hours plus conference; 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: one undergraduate course in macroeconomics and one undergraduate course in microeconomics.
Prerequisite or corequisite: Economics 7025X [725.1X].

ECON 7030X Public Finance and Public Policy

30 hours plus conference; 3 credits
The role of government in a market economy. Topics include market failures such as public goods, externalities, information asymmetries and uncertainty; government policies as a corrective device for market failures; collective decision making and public choice theory; principles of taxation; and analysis of public policy issues.

Prerequisite: one undergraduate course in macroeconomics and one undergraduate course in microeconomics.
Prerequisite or corequisite: Economics 7025X [725.1X].

Prerequisite or corequisite: Economics 7025X [725.1X].

ECON 7060X Health Economics

30 hours plus conference; 3 credits
Economic analysis of the structure, performance, and government policy in the health care sector of the economy. Demand and supply of health care services, the role of third party payers, and the public policy debate over government reform of the health care system. Microeconomic, econometric, and political philosophy concepts relevant to issues of justice in health care. This course is the same as Health and Nutrition Sciences 7144X.

ECON 7090X Special Topics

30 hours plus conference; 3 credits
Topics vary from term to term. Students may take this course two times, but may not repeat topics.

Prerequisite: permission of the graduate deputy chairperson.

ECON 7091G Independent Reading

Minimum of 135 hours of independent work and conference; 3 credits
Independent research, supervised by a member of the department. This course may be used as a stage in the preparation of a master's thesis.

Prerequisite: completion of Economics 7010X [710X], 7020X [720X], 7025X [725.1X], 7000X [700X], and 7021X [721X] with grades of A or B in all courses; and permission of the graduate deputy chairperson.

ECON 7095G Thesis Research

Hours to be arranged; 3 credits
Research for master's thesis supervised by a faculty member. Students register for this course only once.

Prerequisite: completion of Economics 7010X [710X], 7020X [720X], 7025X [725.1X], 7000X [700X], and 7021X [721X] with grades of A or B in all courses; and permission of the graduate deputy chairperson.

ECON 7205X Managerial Economics

30 hours plus conference; 3 credits
An introduction to microeconomic concepts - demand, cost, profit, pricing strategies, forecasting - with applications to managerial decision making. (Not open to students who have completed Economics 7000X [700X].) This course is the same as Business 7205X.

ECON 7215X Money and Capital Markets

30 hours plus conference; 3 credits
Sources and uses of funds in financial markets. Market structure of interest rates. Flow of funds analysis. This course is the same as [Business 7215X] and Finance 7215X,

Prerequisite: undergraduate course in macroeconomics.

ECON 7230X Operations Research and Decision Sciences

30 hours plus conference; 3 credits
Tools and techniques of operations research and decision sciences. Quantitative techniques used in business, accounting, and economics including project design and management, scheduling, forecasting, linear programming, inventory and queuing theory, applications of input-output methods. This course is the same as Business 7230X.

ECON 7309X Environmental Risk Management

30 hours plus conference; 3 credits

Economic aspects of pollution and resource conservation. Sources and environmental effects of common pollutants. Spatial aspects of pollution and resource depletion. Economics of recycling as a solution to problems of waste disposal and resource depletion. Applications of environmental and conservation economics to current problems in industrial location, city planning, population, and economic growth.

Prerequisite: Elementary Microeconomics and Economic Statistics or permission of the instructor.

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

ECON 7026X Mathematical Methods in Economics II

ECON 7040X Evolution of Modern Economic Thought

ECON 7045X Current Problems in Monetary and Fiscal Policy

ECON 7050X Analysis of Developed Areas

ECON 7055X Comparative Economics Systems

ECON 7301X Introduction to Marxian Economic Analysis

ECON 7303X Economics of Human Resources and Labor Markets

ECON 7306X Industrial Organization and Control

English

Department office: 2308 Boylan Hall
Phone: 718.951.5195

Full-time Faculty

Distinguished Professors: Alterman, Lerner
Professors: Agoos, Bayoumi, Davis, Entin, Harrison, Henkin, Kim, King, Masciandaro, Natov, Pollard, Rutkoski, Steel, Thien, Tremper
Associate Professors: Acosta, Burgess, Frydman, Lutzkanova-Vassileva, Nadell, Phillips
Assistant Professor: Moody
Lecturers: Bamert, Diehl, Minter, Nissenbaum, Thomas
Distinguished Lecturer: De La Torre

The Department of English is widely recognized for its distinguished faculty and large selection of courses that explore many important genres and subjects, from classic literature and aspects of the English language to various periods in drama and categories of literary theory. The richness of the curriculum provides virtually limitless opportunities to explore, appraise, and critique the works of the English language.

M.A. degree program in English
HEGIS code 1501; SED program code 02044

The master of arts in English program immerses students in literature dating from the Middle Ages through the present. Through the study and analysis of a variety of literary texts, critical and theoretical approaches (including, among others, new historicism, reader-response theory, deconstruction, feminist criticism, and post-colonial studies), and historical concepts, students are afforded the opportunity to develop individual interpretations of texts and to evaluate controversies surrounding the canon. Small-group tasks, oral presentations, short papers, and longer research papers complement lectures, discussions, and examinations. Travel and research grants are available to our students, several of whom have presented at graduate colloquia at Brooklyn College and at other universities throughout the country and abroad, or have had papers accepted for publication in journals.

Our graduates have found new employment or enhanced their present careers in diverse fields including education, publishing, writing for both for-profit and non-profit organizations. Others have been accepted into doctoral programs.

Matriculation requirements

Applicants must offer at least 15 credits in advanced courses in English literature.

Applicants must have a minimum undergraduate grade point average of 3.00.

Applicants must submit a sample of critical writing of about ten pages, and a two-page statement of academic purpose.

Foreign applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 650 on the paper-based test or 280 on the computer-based test, or 114 on the Internet-based test before being considered for admission.

General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Degree requirements

Thirty-three credits are required for the degree.

Courses in English and comparative literature are grouped in the following areas of study:

1. Literature before 1500: English 7101X, 7102X, 7103X, 7120X, CMLT 7130X.
2. Literature from 1500 to 1800: English 7201X, 7202X, 7203X, 7204X, 7205X, 7206X, 7207X, 7220X, CMLT 7230X.
3. Literature from 1800 to 1900: English 7301X, 7302X, 7303X, 7304X, 7305X, 7320X, CMLT 7330X.
4. Literature from 1900 to the present: English 7401X, 7402X, 7403X, 7404X, 7405X, 7406X, 7420X, CMLT 7430X.
5. Theory and criticism: English 7501X, 7502X, 7503X, 7504X, 7505X, 7506X, 7507X, 7508X, 7520X.
6. Language: English 7601X, 7602X, 7603X, 7604X, 7605X, 7620X.

The following courses are required: English 7501X; English 7800X; English 7810X; one course from five of the six areas of study; two

electives.

Students must complete English 7501X, which satisfies the area 5 requirement, by the end of their third semester. It is recommended that students take the course in their first or second semester.

Early in the first term, students must meet with the graduate deputy to plan their program of study for the degree. It is recommended that students thereafter consult with the graduate deputy at least once a semester to discuss and plan further their degree progress.

Students must identify one area in which to complete three courses in total for a specialization in consultation with the graduate deputy.

Students must submit a thesis acceptable to the department on a subject related to their areas of literary and critical interests.

A reading knowledge of a foreign language is strongly recommended. Students who intend to study toward a doctoral degree are advised to become proficient in college-level foreign language study.

Courses in the English Department offered toward the degree must be 7000-level courses.

M.F.A. degree program in creative writing
HEGIS code 1507; SED program code 02056

Our small, highly personal two-year program confers a master of fine arts degree in creative writing in fiction, poetry, or playwriting. The program offers single-discipline and inter-genre workshops, literature seminars, small-group reading tutorials, and one-on-one tutorials, which all emphasize relationships between eminent faculty members and students. Additionally, students have the opportunity to work on The Brooklyn Review and give public readings/performances in Brooklyn and Manhattan. The program offers some fellowships as well as prizes and a winter writing residency at the Espy Foundation in Oysterville, Washington. Students may also teach undergraduate courses for the English Department.

Our graduates have had their work published widely and have won competitions sponsored by the Iowa Review, the Colorado Review, the Mississippi Review, and Zoetrope. They have been included in The Best New Young Poets anthology and The Best American Short Stories. Our playwrights have won Obies, started theater companies, and had their plays produced here and abroad.

Students choose a concentration in one of the following: fiction, playwriting, or poetry.

Matriculation requirements

Applicants who have completed a bachelor's degree with a minimum GPA of 3.00 satisfy the undergraduate requirements of this program.

Fiction and Poetry: Thirty pages of original fiction or twenty pages of original poetry must be submitted for evaluation.

Playwriting: One original full-length play or two or more original one-act plays must be submitted for evaluation.

Applicants who did not major in English or creative writing as undergraduates but whose manuscripts show unusual talent are considered for admission. Manuscripts should be submitted with other application documents via the online application website at the time of application. Applications are not considered for spring semester admission.

Foreign applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 650 on the paper-based test or 280 on the computer-based test or 114 on the internet-based test before being considered for admission.

General matriculation and admission requirements of Graduate Studies are in the chapter "Admission."

Degree requirements

Thirty-six credits are required for the degree.

Students must complete one of the following concentrations. All three concentrations consist of 36 credits: 24 credits in the respective creative writing concentration, plus 12 credits in literature courses.

Fiction:
English 7910X to be taken in the first semester. English 7912X to be taken four times, but not more than once in any semester; English 7911X once in the second semester; English 7913X to be taken two times in the second year, but not more than once in any semester.

Poetry:
English 7922X to be taken four times, but not more than once in any semester; English 7923X to be taken four times, but not more than once in any semester.

Playwriting:
English 7932X to be taken four times, but not more than once in any semester; English 7933X to be taken four times, but not more than once in any semester.

Students in all concentrations must additionally complete 12 credits in four courses chosen from the 7000-level courses in the English Department (including courses in comparative literature).

Students may substitute for no more than two such courses any two 7000-level courses from the departments of Art, History, Modern Languages and Literatures, Philosophy, Speech, Television, Radio and Emerging Media, or Theater, or the Conservatory of Music, or another department with the approval of the deputy chairperson for graduate studies (these courses may also be taken through e-permits at other CUNY branches, including the Graduate Center, or through individual or small group tutorials). Students may substitute one writing workshop or tutorial outside of their major writing concentration for one literature course.

Permission to register for any of these substitute courses may be required from the graduate deputy chairperson of the appropriate department.

A substantial manuscript must be submitted and filed according to instructions available from the deputy chairperson. Students concentrating in fiction or poetry must submit original creative writing, in publishable form, such as a novel or collection of stories or poems. Students concentrating in playwriting must submit a full-length play or a number of one-act plays, in producible form, that would constitute a theatrical production. In cooperation with the Theater Department, efforts are made to produce the student's major work.

Recommendations

Students are urged to take one workshop, one tutorial, and one literature course each semester in order to complete the program in four semesters. A reading knowledge of a foreign language is strongly recommended.

M.A. degree program in education: English teacher (7-12)
HEGIS code 1501.01; SED program code 26811 (Options A and B); 26810 (Option C)

The M.A. programs in English education leading to Initial Certification and/or Professional Certification for English teachers grades 7-12 are designed for students who plan to teach or are currently teaching. The programs offer experienced and beginning teachers opportunities to develop their classroom practice and to expand their knowledge of English education and the field of education as a whole. Courses are taught by nationally known scholars, many of whom have had experience teaching at secondary levels. Our programs combine rigorous and rewarding study in literature and composition with intensive study of curriculum, pedagogy, and schools.

The profession of teacher education is licensed by the New York State Education Department. Therefore, program requirements are subject to change. All students should consult with the Department of Secondary Education for the current requirements.

Matriculation requirements

Applicants must offer at least 15 credits in advanced courses in English. Applicants must also offer (a) or (b) or (c):
(a) New York State Initial Certification in teaching English for grades 7-12; or courses in education that meet the New York State standards for the pedagogical core. These courses include study of the following: history of education and philosophy of education or principles of education or educational sociology; educational psychology or developmental psychology or psychology of adolescence or adolescent development; classroom management; teaching students with special needs and English language learners; 6 credits in literacy and language acquisition; curriculum development and methods of assessing student learning; uses of technology in the classroom; methods of teaching English at appropriate age levels; 100 hours of fieldwork; 300 hours or 40 full days of student teaching English at appropriate grade levels, or one year of full-time teaching English at appropriate grade levels, and passage of a New York State-approved Teacher Performance Assessment.

(b) an undergraduate degree with a major in English, or appropriate coursework in English;

(c) an undergraduate major in English, the Content Specialty Test CST, an approved 200 hours preparation program and a position at an approved public school through which students can accrue on-the-job training to substitute for student teaching.

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum average of 3.00 in graduate courses is required to maintain matriculation.

Applicants who have not completed all the specific course requirements are given individual consideration and may be admitted with conditions, with the approval of the head of the program in English education and the chair or graduate deputy of the English Department.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 650 on the paper-based test or 280 on the computer-based test or 114 on the internet-based test, before being considered for admission.

Students should note additional requirements found in the sections "Admission" and "Academic Regulations and Procedures" in the Graduate Bulletin.

Each student is evaluated individually based upon prior experiences. Based upon this evaluation and current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Program Coordinator.

Degree requirements

Option (A): 30 credits English (18 credits):
Students who possess Initial Certification in teaching English or its equivalent must complete the following courses in English: English 7010X and 7011X.

In addition, and with advisement from the chair or graduate deputy of the English department, students must complete courses in four of the six areas of study listed under the M.A. in English in the Bulletin. Each of the four courses must come from a different area.

Education (12 credits):
Students must also complete 12 credits in courses in Education as follows:.
Research in English Education: SEED 7602T; Literacy in English Education: SEED 7604T; Mindfulness: SEED 7504X; Development and SEL: SEED 7507X.

Option (B): 30-40 credits English (15 credits):
Students who do not possess Initial Certification in teaching English or its equivalent must complete the following courses in English: English 7010X, and English 7011X.

In addition, and with advisement from the chair or graduate deputy of the English department, students must complete courses in three of the six areas of study listed under the M.A. in English in the Bulletin.: Each of the three courses must come from a different area. .

Education Core (12 credits):
The following four education courses are required unless candidates have taken one or more as part of previous coursework.
Foundations: SEED 7500X; Literacy in English Education: SEED 7604T; Special Education: SEED 7671X; Development and SEL: SEED 7507X.

Student Teaching (4 credits):
The following student teaching courses are required unless candidates have a New York State waiver: SEED 7541X, SEED 7542T, and SEED 7543T. (SEED 7500X and SEED 7600T must be completed before student teaching). SEED 7543T is not required if the candidate is teaching English full-time at an appropriate grade level.

Students teaching with a New York State Internship Certificate must be enrolled in either SEED 7542T or SEED 7001T during every semester that they are teaching under the certificate.

English Education (9 credits):
The following English education courses, or English education courses approved by the program coordinator, are required unless candidates have taken one or more as part of previous coursework: SEED 7600T, SEED 7601T, SEED 7602T.

Option (C): 36 credits English (18 credits):
Students who are teaching or have secured a position teaching English and who hold an Alt B Certificate must complete the following courses in English: English 7010X, and English 7011X.

In addition, and with advisement from the chair or graduate deputy of the English department, students must complete courses in four of the six areas of study listed under the M.A. in English in the Bulletin, as follows: Each of the four courses must come from a different area.

Students pursuing an Alt B Certificate may substitute their teaching job for student teaching but upon consultation with their advisor must still register for SEED 6002T and must take SEED 7500X, SEED 7600T, SEED 7601T, SEED 7602T, SEED 7671X, and SEED 7507X.

All students must pass a written comprehensive examination administered by the English Department at the end of their program. Information about the comprehensive examination is in the section of the "Academic Regulations and Procedures."

Courses in the English Department and the School of Education offered toward the degree must be 7000-level courses.

Students pursuing an M.A. English Teacher must have taken or must take courses that meet the New York State and National Council of Teachers of English NCTE English standards. Transcript review will determine what appropriate course work students must take.

CUNY Ph.D.

The City University of New York offers a doctoral program in English. General information about CUNY Ph.D. programs is in the chapter “Support for Academic Success in Graduate School.” English Department courses may be credited toward the CUNY doctoral degree with permission of the executive officer of the doctoral program. For information, students should consult the deputy chairperson of the English Department and the executive officer of the doctoral program.

Courses

Unless a prerequisite is specific, students may apply graduate or undergraduate courses toward fulfillment of that prerequisite.

Candidates for a master's degree in another department may take courses in English on the 7000 level with permission of the deputy chairperson of the English Department.

Creative writing

ENGL 7910X The Art of Fiction

30 hours recitation, 30 hours lab; 3 credits
Aspects of the craft of writing the novel from the perspective of a writer of fiction; topics include voice, tone, time, structure, character development, plotting, and ending.

Prerequisite: matriculation in the creative writing program in fiction or permission of the deputy chairperson.

ENGL 7911X Reading Fiction

30 hours plus conference; 3 credits
Advanced textual analysis of selected literary works; creative writing related to these works. Weekly course meetings for first-year students in the M.F.A. Fiction program. This course may be taken two times in the first year but not more than once in any semester. Topic to be chosen by the instructor.

Prerequisite: matriculation in the creative writing program with a concentration in fiction or permission of the deputy chairperson.

ENGL 7912X Fiction Workshop

30 hours recitation, 30 hours lab; 3 credits
Detailed examination in seminars of stories or segments of novels written by class members. This course may be taken four times, but not more than once in any semester.

Prerequisite: matriculation in the creative writing program with a concentration in fiction or permission of the deputy chairperson.

ENGL 7913X The Craft of Fiction

Hours to be arranged; 3 credits
Intensive examination of the student's fiction. Advice on the preparation of a substantial manuscript in publishable form. The course may be taken two times, but not more than once in any semester.

Prerequisite: matriculation in the creative writing program with a concentration in fiction or permission of the deputy chairperson.

ENGL 7922X Poetry Workshop

30 hours recitation, 30 hours lab; 3 credits
Detailed examination in seminars of poems written by class members. This course may be taken four times, but not more than once in any semester.

Prerequisite: matriculation in the creative writing program with a concentration in poetry or permission of the deputy chairperson.

ENGL 7923X The Craft of Poetry

Hours to be arranged; 3 credits
Intensive examination of the student's poetry. Advice on the preparation of a substantial manuscript in publishable form. The course may be taken four times, but not more than once in any semester.

Prerequisite: matriculation in the creative writing program in poetry or permission of the deputy chairperson.

ENGL 7932X Playwriting Workshop

30 hours recitation, 30 hours lab; 3 credits
Detailed examination in seminars of scenes or plays written by class members and selections from contemporary dramatic literature. This course may be taken four times, but not more than once in any semester.

Prerequisite: matriculation in the creative writing program with a concentration in playwriting or permission of the deputy chairperson.

ENGL 7933X The Craft of Playwriting

Hours to be arranged; 3 credits
Intensive examination of the student's plays. Advice on the preparation of a substantial manuscript in producible and/or publishable form. The course may be taken four times, but not more than once in any semester.

Prerequisite: matriculation in the creative writing program in playwriting or permission of the deputy chairperson.

ENGL 7940X Group Literature Tutorial

30 hours plus conference; 3 credits
Advanced textual analysis of selected literary works and creative writing related to these works and to the M.F.A. project. The course will substitute for one of the four literature courses required for the M.F.A. degree. Weekly course meetings and individual tutoring. M.F.A. creative writing students may take the tutorial twice with different instructors, with each section individually credited as a substitution for the four-literature-course requirement.

ENGL 7942X Translation Workshop

30 hours recitation; 30 hours lab; 3 credits
Comparative analysis of seminal translation theory essays and a range of approaches to the craft and practice of translation from different languages into English, alongside the development of students' awareness of translation as a critical and artistic mode. Focus on advancing students' critical reading, analytical writing, and translation skills.

Publishing

ENGL 7850X The Future of Publishing

30 hours plus conference; 3 credits
Overview of the past, present, and possible future of the book publishing industry. Historical analysis is integrated with hands-on, collaborative training in the skills required to shepherd books from authors to readers.

ENGL 7860X The Editor in the 21st Century

30 hours plus conference; 3 credits
Aspects of the editor's responsibilities in the publishing process,

from acquisitions, to working with authors, to managing the publication, to developing a list. Editors as technicians and cultural gatekeepers. Topics include manuscript editing, writing copy, and developing marketing tools for internal and external use.

ENGL 7870X Publishing in the Digital Order

30 hours plus conference; 3 credits
Close examination of digital publishing models, analysis of case studies, and introduction to industry-standard software. Students create and maintain an online publication, develop a publicity and marketing campaign, and address the design and legal aspects of the emerging digital publishing environment.

ENGL 7880X Publishing Internship

30 hours plus conference; 3 credits
Work in a publishing company or literary agency in one of the following capacities: editorial, sales, marketing, publicity, legal, or literary agent. Students must take this course twice toward the degree requirements.

Prerequisite: ENGL 7850X.

Language and literature

ENGL 6000X Advanced Academic Writing for International Students
30 hours plus conference; 3 credits
Intensive study of and practice in writing English at the advanced level of ESL to increase students' abilities to write well-organized and well-developed essays, research papers, analyses, and/or theses in clear, fluent language. Includes individual and group work. The course may be repeated with the instructor's permission. Open to graduate students from all departments.

Prerequisite: open to non-native speakers

ENGL 7010X Children's and Adolescents' Literature

30 hours plus conference; 3 credits
Survey of literature written for children from preschool through adolescence; consideration of related issues such as developing approaches that will promote critical reading and thinking and selecting literature that is appropriate in our multicultural society.

ENGL 7011X Literary Texts and Critical Methods

30 hours plus conference; 3 credits
Introduction to practical criticism, bibliographical methods, and literary criticism as a genre. Reading and analysis of several genres of literature from several historical periods. Analysis of representative texts, literary periods and literary history, and critical approaches including structuralism, post-structuralism, feminism, post-colonialism, and new historicism.

ENGL 7101X The Canterbury Tales

30 hours plus conference; 3 credits
Literary and linguistic analysis of the stories in Chaucer's final work.

ENGL 7102X Chaucer's Work Exclusive of The Canterbury Tales
30 hours plus conference; 3 credits
Emphasis on The Book of the Duchess, The House of Fame, The Parliament of Fowls, Troilus and Criseyde, The Legend of Good Women.

ENGL 7103X Literature of the Middle Ages

30 hours plus conference; 3 credits
Selected literary works drawn primarily but not exclusively from British and other European literatures, 700-1500. (Not open to students who have completed English 718X.)

ENGL 7120X Seminar in Textual Analysis

30 hours plus conference; 3 credits each term
Intensive study in selected texts. Selection of authors varies from year to year at the discretion of the instructor. Seminars are offered as follows: 7120X [791X], area 1; 7220X [792X], area 2; 7320X [793X], area 3; 7420X [794X], area 4; 7520X [795X], area 5; 7620X [795.6X], area 6; 7720X [795.7X], area 7. With the permission of the graduate deputy, students may take a seminar in the same area twice if the topics are different.

ENGL 7201X Early Modern Literature

30 hours plus conference; 3 credits
Selected works in prose and verse drawn primarily but not exclusively from British and other European literatures of the sixteenth and seventeenth centuries.

ENGL 7202X Milton

30 hours plus conference; 3 credits
Critical study of Milton's lyric, epic, dramatic poems.

ENGL 7203X Early Modern Drama Exclusive of Shakespeare
30 hours plus conference; 3 credits
Selected works drawn primarily but not exclusively from British and other European dramas, 1450 to 1660. (Not open to students who have completed English 716X.)

ENGL 7204X Shakespeare

30 hours plus conference; 3 credits
Problems of interpretation in relation to selected comedies, histories, tragedies. (Not open to students who have completed English 736X.)

ENGL 7205X Literature of the Long Eighteenth Century

30 hours plus conference; 3 credits
Reading and analysis of major works, exclusive of the novel, drawn primarily but not exclusively from British and other European literatures produced 1660 to 1800.

ENGL 7206X The Novel in the Eighteenth Century

30 hours plus conference; 3 credits
Selected novels drawn primarily but not exclusively from British and other European literatures.

ENGL 7207X Drama of the Restoration and Eighteenth Century
30 hours plus conference; 3 credits
A study of theater from 1660 to 1820, covering aesthetic and thematic changes from the period. May include plays belonging to other European dramatic traditions.

ENGL 7220X Seminar in Textual Analysis

30 hours plus conference; 3 credits
Intensive study in selected texts. Selection of authors varies from year to year at the discretion of the instructor. Seminars are offered as follows: 7120X [791X], area 1; 7220X [792X], area 2; 7320X [793X], area 3; 7420X [794X], area 4; 7520X [795X], area 5; 7620X [795.6X], area 6; 7720X [795.7X], area 7. With the permission of the graduate deputy, students may take a seminar in the same area twice if the topics are different.

ENGL 7301X Nineteenth-Century Literature I

30 hours plus conference; 3 credits
Selected literary works of the first half of the nineteenth century drawn primarily but not exclusively from British and other European literatures.

ENGL 7302X Nineteenth-Century Literature II

30 hours plus conference; 3 credits
Selected literary works of the second half of the nineteenth century drawn primarily but not exclusively from British and other European literatures.

ENGL 7303X American Literature of the Nineteenth Century I
30 hours plus conference; 3 credits
Literature primarily but not exclusively of the United States, up to 1865. (Not open to students who have completed English 749X.)

ENGL 7304X American Literature of the Nineteenth Century II
30 hours plus conference; 3 credits
Literature primarily but not exclusively of the United States, after 1860. (Not open to students who have completed English 749X.)

ENGL 7305X The Novel in the Nineteenth Century

30 hours plus conference; 3 credits
Selected novels of the nineteenth century drawn primarily but not exclusively from British and other European literatures.

ENGL 7320X Seminar in Textual Analysis

30 hours plus conference; 3 credits
Intensive study in selected texts. Selection of authors varies from year to year at the discretion of the instructor. Seminars are offered as follows: 7120X [791X], area 1; 7220X [792X], area 2; 7320X [793X], area 3; 7420X [794X], area 4; 7520X [795X], area 5; 7620X [795.6X], area 6; 7720X [795.7X], area 7. With the permission of the graduate deputy, students may take a seminar in the same area twice if the topics are different.

ENGL 7401X American Poetry of the Twentieth Century

30 hours plus conference; 3 credits
Major tendencies of the period as exemplified in the poetry and criticism.

ENGL 7402X Poetry of the Twentieth Century

30 hours plus conference; 3 credits
Characteristic works of an expanded corpus of twentieth-century poetry drawn primarily but not exclusively from the literatures of Europe and the Americas.

ENGL 7403X Twentieth-Century American Fiction

30 hours plus conference; 3 credits
Selected short stories, novellas, and novels with focus primarily but not exclusively on fiction of the United States.

ENGL 7404X Twentieth-Century Fiction

30 hours plus conference; 3 credits
Selected short stories, novellas, and novels with focus primarily but not exclusively on fiction of Britain and other European countries.

ENGL 7405X Modern Irish Literature

30 hours plus conference; 3 credits
Major Irish writers from 1885 to the present, including Yeats, Synge, Joyce, O'Casey.

ENGL 7406X Twentieth-Century Drama

30 hours plus conference; 3 credits
Selected works primarily but not exclusively by modern and postmodern American and British and other European playwrights. (Not open to students who have completed English 758X.)

ENGL 7420X Seminar in Textual Analysis

30 hours plus conference; 3 credits
Intensive study in selected texts. Selection of authors varies from year to year at the discretion of the instructor. Seminars are offered as follows: 7120X [791X], area 1; 7220X [792X], area 2; 7320X [793X], area 3; 7420X [794X], area 4; 7520X [795X], area 5; 7620X [795.6X], area 6; 7720X [795.7X], area 7. With the permission of the graduate deputy, students may take a seminar in the same area twice if the topics are different.

ENGL 7501X Introduction to Critical Theory

30 hours plus conference; 3 credits
A general introduction to such major contemporary critical theories as structuralism, new criticism, Marxism, feminism, queer studies, poststructuralism, and postcolonialism.

ENGL 7502X Feminist Literary Theory

30 hours plus conference; 3 credits
The relations between women and literature; the development

of feminist thought and its impact on literature and literary theory; definitions of feminist literary theory by contemporary writers.

ENGL 7503X Literature and Society

30 hours plus conference; 3 credits
Social factors conditioning the composition and enjoyment of literature. The place of literature (oral or written) as an institution in several historical periods or cultures.

ENGL 7504X Literature and Psychoanalytic Criticism: Theory and Practice
30 hours plus conference; 3 credits
A survey of theories in psychoanalytic criticism and an application of such theories in detailed analyses of selected literary works. Freudian, Jungian, and other psychoanalytic orientations discussed.

ENGL 7505X Postcolonial Literature and Theory

30 hours plus conference; 3 credits
Literary and philosophical responses to European colonialism and its aftermath. Readings are drawn from around the world to suggest the global character of the postcolonial condition.

ENGL 7506X Practicum in Teaching College-level English Composition
30 hours plus conference; 3 credits
Theory and practice of teaching basic writing and English composition at the college level, and such related issues as evaluation, testing, invention, and rhetorical forms. Observation of and practice in teaching (planning lessons, evaluating and responding to student writing, discussion of readings, and tutoring) an undergraduate composition course (English 1010 [1] or 1012 [2]) as a tutor-intern for one class session (75 minutes per week) while mentored by an experienced composition teacher required.

ENGL 7507X Advanced Theories and Practice of Composition
30 hours plus conference; 3 credits
Theory and practice of teaching writing at the secondary level (grades 7-12), and such related issues as revision, evaluation, and teaching writing to English language learners. This course is the same as SEED 7603X [SEED 7548X].

ENGL 7508X Literature and Folklore

30 hours plus conference; 3 credits
Significant folk tale patterns and themes as they occur in diverse cultures and literatures.

ENGL 7520X Seminar in Textual Analysis

30 hours plus conference; 3 credits
Intensive study in selected texts. Selection of authors varies from year to year at the discretion of the instructor. Seminars are offered as follows: 7120X [791X], area 1; 7220X [792X], area 2; 7320X [793X], area 3; 7420X [794X], area 4; 7520X [795X], area 5; 7620X [795.6X], area 6; 7720X [795.7X], area 7. With the permission of the graduate deputy, students may take a seminar in the same area twice if the topics are different.

ENGL 7601X History of the English Language

30 hours plus conference; 3 credits
The origins of the English language. Its development to the present.

ENGL 7602X Structure of Modern English

30 hours plus conference; 3 credits
Description of modern English based on modern linguistic theory. Comparison of traditional grammar with more recent grammars. Relation of written language to spoken language. Usage. (Not open to students who have completed English 725X.)

ENGL 7603X Introduction to Linguistics

30 hours plus conference; 3 credits
Introduction to phonology, morphology, syntax, semantics. Current problems in linguistic theory and methodology. (Not open to students who have completed English 726X.)

ENGL 7604X Language, Culture, and Society

30 hours plus conference; 3 credits
Examination of the various formulations of the interconnections among language, culture, and society. Focus on the interplay of language, society, and power with particular attention to issues of linguistic diversity based on gender and race, and to issues of multilingualism in education. Readings from the fields of linguistics, linguistic anthropology, philosophy, and literary theory. This course is the same as Liberal Studies 7005X.

Prerequisite: none.

ENGL 7605X Applied Linguistics

30 hours plus conference; 3 credits
Applications of linguistic theories, methods, and findings to educational and social issues involving language, with a focus on adult second language learning, and college level language teaching and language assessment.

ENGL 7620X Seminar in Textual Analysis

30 hours plus conference; 3 credits each term
Intensive study in selected texts. Selection of authors varies from year to year at the discretion of the instructor. Seminars are offered as follows: 7120X [791X], area 1; 7220X [792X], area 2; 7320X [793X], area 3; 7420X [794X], area 4; 7520X [795X], area 5; 7620X [795.6X], area 6; 7720X [795.7X], area 7. With the permission of the graduate deputy, students may take a seminar in the same area twice if the topics are different.

Thesis and independent study

ENGL 7800X Thesis Research Methods

30 hours plus conference; 3 credits
Introduction to methods of research and scholarly procedure as preparation for the M.A. Thesis. Topics include: building a bibliography, using print and on-line research sources; incorporating secondary critical resources; and the varieties of criticism practiced in recent decades. The final assignment is to produce a thesis proposal.

ENGL 7810X Thesis Project

30 hours plus conference; 3 credits
An extensive research project normally based on the thesis proposal developed in English 7800X [700X], which is supervised by a member of the faculty, and which leads to submission of a master's thesis. Students may receive credit for this course only after approval of the completed thesis.

Prerequisite: completion of English 7800X [700X]; approval of the graduate deputy chairperson

ENGL 7811X Independent Study

Hours to be arranged; 1 credit
Independent study of selected readings approved by a faculty advisor. One or more written reports, or final examination.

Prerequisite: approval of the graduate deputy chairperson.

Comparative Literature

CMLT 7130X Comparative Literature of the Medieval Period

45 hours; 3 credits
Comparative analysis of materials of the Medieval period that were originally composed in languages other than English but are available in translation, or of materials of this period that were originally composed in English from different countries and literary traditions. Focus on developing students' critical reading and analytical writing skills.

CMLT 7230X Comparative Literature 1500-1800

45 hours; 3 credits
Comparative analysis of Renaissance, Early Modern, or Eighteenth Century materials originally composed in languages other than English but available in translation, or of materials of this period that were originally composed in English from different countries and literary traditions. Focus on developing students' critical reading and analytical writing skills.

CMLT 7330X Comparative Literature 1800-1900

45 hours; 3 credits
Comparative analysis of Nineteenth Century materials originally composed in languages other than English but available in translation, or of materials of this period that were originally composed in English from different countries and literary traditions. Focus on developing students' critical reading and analytical writing skills.

CMLT 7430X Comparative Literature 1900-present

45 hours; 3 credits
Comparative analysis of Twentieth- and Twenty-first Century materials originally composed in languages other than English but available in translation, or of materials of this period that were originally composed in English from different countries and literary traditions. Focus on developing students' critical reading and analytical writing skills.

Feirstein Graduate School of Cinema

Department office: 25 Washington Ave, Brooklyn NY, 11205
Phone: 718.237.3414

Full-time Faculty

Professor: Massood
Associate Professors: Haine, Hernandez Anzola, Lopez

M.A. degree program in screen studies
HEGIS code 1010; SED program code 36605

The Barry R. Feirstein Graduate School of Cinema offers a master of arts degree in screen studies. The two-year, 36-credit program provides a comprehensive education in cinema and screen history, theory, criticism, and aesthetics, encompassing the scholarly exploration of motion pictures as a form of art and a means of social communication. The program may be pursued on either a full-time in 2 years basis or a part-time basis. Because the degree program is housed in the same facility as the M.F.A. in Cinema Arts (the Steiner Studios at the Brooklyn Navy Yard), students are able to deepen their knowledge within the context of a larger community of filmmaker and cinema scholars. This program's interrelationship with the M.F.A. program is truly unique.

Matriculation Requirements

Applicants who have completed a bachelor's degree with a minimum GPA of 3.00 satisfy the undergraduate requirements of this program. General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Degree Requirements:
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36 credits are required for this degree

Students must complete: FILM 7001G, 7002G, 7003G, and one of the following: FILM 7801G, 7301G, or 7202G.

Students must also complete 21 credits from the following list of electives: FILM 7011G, 7012G, 7015G, 7021G, 7022G, 7031G, 7032G, 7033G, 7034G, 7035G, 7036G, 7037G, 7038G, 7141G, 7513G, 7901G, 7902G, 7903G, 7911G, 7912G, 7913G. Please Note: Topics for electives will change every semester so that students can take a particular course more than once.

Students must also complete the following course: FILM 7050G: Thesis Project.

M.F.A. degree program in cinema arts
HEGIS code 1010; SED program code 36817

The Barry R. Feirstein Graduate School of Cinema offers a master of fine arts degree in cinema arts with a concentration in one of the following areas Live Action Filmmaking or Digital Animation and Visual Effects. The three-year, 66-credit in Live Action Filmmaking or Digital Animation and Visual Effects prepares students for professional careers in filmmaking through a combination of practical and theoretical courses.

Matriculation Requirements

Applicants who have completed a bachelor's degree satisfy the undergraduate requirements of this program. General matriculation and admission requirements of the Division of Graduate Studies are in the section "Admission."

Degree Requirements: 66 credits

All Live Action Filmmaking students must take all of the following:
FGSC 7801G, 7271G, 7301G, 7121G, 7821G, 7272G, 7312G 7016G, 7831G, 7202G, 7101G, 7832G, 7322G, and one of the following: 7272G, 7275G, 7276G or 77278G.

In the third year students complete their thesis in one of several disciplines:

To complete a thesis as director students are required to take the following: 7964G, 7951G or Masters Supervision, 7961G or Masters Supervision and five elective courses

To complete a thesis as a cinematographer students are required to take the following: 7277G, 7964G, and 7953G or Masters Supervision and six elective courses

To complete a thesis as a screenwriter students are required to take the following: 7952G, 7962G and six elective courses

To complete a thesis as an editor students are required to take the following: 7278G, 7964G, 7953G or Masters Supervision and six elective courses

To complete a thesis as an producing students are required to take the following: 7274G, 7964G and 7953G or Masters Supervision and six elective courses

To complete a thesis as a VFX artist students are required to take the following: 7601G, 7611G, 7953G or Masters Supervision and any three VFX core courses or electives from the list of electives specified under "Digital Animation and Visual Effects" along with two additional electives

One of all students elective courses must be a screen studies course.

* Examples of Live Action Filmmaking Discipline Electives:
35mm cinematography
Adaptation
Film Finance
Entertainment Law
Writers Room Workshop
Stage Lighting
Color Grading
Avid Editing
Assistant Editors Workshop
Branded Content
Directing the Commercial
Directing the Music Video
Writing for New Media & Games
Process of Producing & the Business of Film
Social Justice Filmmaking
Global Screen Cultures
Genre Cinema
Filmmakers Symposium

Digital Animation and Visual Effects:

All of the following courses: Film 7523G, 7014G, 7601G, 7611G, 7612G, 7613G, 7614G, 7621G, 7622G, 7624G, 7634G, 7635G, 7957G 7943G, 7955G, 7965G, 7966G

and

Five elective courses*

* Examples of Digital Animation & Visual Effects Advanced Discipline Electives:
3D Character Animation 1
3D Character Animation 2
Typography, Design, and Motion Graphics
Motion Capture
Editing
Screenwriting
Directing Actors
Sound Editing and Design
Lighting Workshop
3D Computer Animation 4
Hybrid Animation
Experimental Animation
Theories of Animation & VFX

All MFA Cinema Arts students outside of the Digital Animation and Visual Effects (DAVE) Program
FGSC 7801G.....Collaborative Filmmaker Workshop 1 .....3 credits
FGSC 7271G.....Craft of Film 1.....3 credits
FGSC 7301G.....Screenwriting 1.....3 credits
FGSC 7121G.....Directing the Actor 1.....3 credits

FGSC 7821G.....Collaborative Filmmaker Workshop 2.....3 credits
FGSC 7272G.....Craft of Film 2.....3 credits
FGSC 7312G.....Screenwriting 2.....3 credits
FGSC 7016G.....History of Narrative Film.....3 credits
FGSC 7831G.....Narrative Pre-Production.....3 credits
FGSC 7202G.....Cinema Aesthetics.....3 credits
FGSC 7101G.....Directors Workshop.....3 credits
FGSC 7932G.....Narrative Post Production.....3 credits
FGSC 7322G.....Screenwriting 3.....3 credits

and one of
FGSC 7274G .....Craft of Fim 3: Production Management.....3 credits
FGSC 7275G .....Craft of Film 3: Production Design.....3 credits
FGSC 7277G .....Craft of Film 3: Cinematography..... 3 credits
FGSC 7278G .....Craft of Film 3: Post Production.....3 credits

TO COMPLETE A THESIS AS A DIRECTOR
FGSC 7964G.....Portfolio Development.....3 credits
FGSC 7951G.....Thesis Production.....3 credits
FGSC 7961G.....Thesis Post.....3 credits
Masters Supervision can substitute for 7951G or 7961G

One Studies Elective.....3 credits
Four additional elective courses .....12 credits

TO COMPLETE A THESIS AS A CINEMATOGRAPHER
FGSC 7277G .....Craft of Film 3: Cinematography..... 3 credits
FGSC 7964G.....Portfolio Development.....3 credits
FGSC 7964G.....Thesis Specialist.....3 credits
Masters Supervision can substitute for 7964G

One Studies Elective.....3 credits
Five additional elective courses .....15 credits

TO COMPLETE A THESIS AS AN EDITOR
FGSC 7278G .....Craft of Film 3: Post Production.....3 credits
FGSC 7964G.....Portfolio Development.....3 credits
FGSC 7964G.....Thesis Specialist.....3 credits
Masters Supervision can substitute for 7964G

One Studies Elective.....3 credits
Five additional elective courses .....15 credits

TO COMPLETE A THESIS AS A PRODUCER
FGSC 7274G .....Craft of Fim 3: Production Management.....3 credits
FGSC 7964G.....Portfolio Development.....3 credits
FGSC 7964G.....Thesis Specialist.....3 credits
Masters Supervision can substitute for 7964G

One Studies Elective.....3 credits
Five additional elective courses .....15 credits

TO COMPLETE A THESIS AS A SCREENWRITER
FGSC 7952G.....Thesis Project 1: Screenwriting.....3 credits
FGSC 7962G.....Thesis Project 2: Screenwriting.....3 credits
Masters Supervision can substitute for 7952G or 7962G

One Studies Elective.....3 credits
Five additional elective courses .....15 credits

TO COMPLETE A THESIS AS A VFX ARTIST
FGSC 7601G.....Digital Imaging & Compositing 1.....3 credits
FGSC 7611G.....Digital Imaging & Compositing 2.....3 credits
FGSC 7964G.....Thesis Specialist.....3 credits
Masters Supervision can substitute for 7964G

Three VFX additional VFX core courses or electives from the list of electives specified under Digital Animation & Visual Effects.....9 credits

One Studies Elective.....3 credits
One additional elective courses ..... 3 credits

DIGITAL ANIMATION & VISUAL EFFECTS

FGSC 7635G.....Computer Animation IV.....3 credits
FGSC 7943G.....Digital Animation & VFX Thesis Development.....3 credits
FGSC Film 7955G...Digital Animation & VFX Thesis I .....6 3 credits
FGSC Film 7965G... Digital Animation & VFX Thesis II .....3 credits
FGSC Film 7966G... Digital Animation & VFX Portfolio Development....3 credits
FGSC 7957G..... DAVE Thesis Tech.....3 Credits
FGSC 7613G.....History of Animation & VFX Techniques.....3 credits

Five additional elective courses*

* Examples of Digital Animation & Visual Effects Advanced Discipline Electives:
3D Character Animation 1,
3D Character Animation 2
Typography, Design, and Motion Graphics
Motion Capture
Editing
Screenwriting
Directing Actors
Sound Editing and Design
Lighting Workshop
3D Computer Animation 4
Hybrid Animation
Experimental Animation
Theories of Animation & VFX

Courses

FGSC 7001G Introduction to Research Methods and Archives
60 hours; 3 credits
Overview of bibliographic sources and methods. Application of various critical perspectives and philosophies. Exploration of issues related to screen historiography.

Prerequisite: Matriculation for the M.A. in Screen Studies, the M.F.A. in Cinema Arts or permission of the program director.

FGSC 7002G Screen Theories

60 hours; 3 credits
Examination of major texts in classical and contemporary screen theories influenced by aesthetics, phenomenology, linguistics, narratology, psychoanalysis, and theories of subjectivity and difference.

Prerequisite: Matriculation for the M.A. in Screen Studies, the M.F.A in Cinema Arts, or permission of the program director.

FGSC 7003G Screen Histories

60 hours; 3 credits
Overview of the international development of cinema and related screen technologies as media and art forms from 1895 to the present. Focus on aesthetic and political developments through a close examination of individual film texts. Emphasis will be placed on the major historical currents of each period and on changes in aesthetic, political and industrial context.

Prerequisite: Matriculation for the M.A. in Screen Studies, the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7005G History of World Cinema

60 hours; 3 credits
Overview of the international development of cinema as a medium and art form from 1895 to the present. Focus on major film tendencies, aesthetic and political developments through a close examination of individual film texts. Emphasis will be placed on the major historical currents of each period and on changes in aesthetic, political and industrial context.

Prerequisite: Matriculation in the M.F.A. in Cinema Arts or permission of the Director.

FGSC 7011G Directors

60 hours; 3 credits
Intensive study of the work of either one or more directors and the complex historical and cultural dynamics that shaped their oeuvre.

Prerequisite: Matriculation for the M.A. in Screen Studies, the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7012G Genres

60 hours; 3 credits
Analysis of the formal, aesthetic, and ideological paradigms of a particular genre. Consideration of various critical perspectives. Emphasis on the interaction between audience and text.

Prerequisite: Matriculation for the M.A. in Screen Studies, the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7013G World Cinema to 1960

60 hours; 3 credits
Overview of the international development of cinema as a medium and art form from 1895 to 1960. Focus on major film tendencies and aesthetic and political developments through a close examination of individual film texts. Emphasis will be placed on the major historical currents of each period and on

changes in aesthetic, political and industrial context.

Prerequisite: Matriculation for the M.A. in Screen Studies, for the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7014G Narrative Structure

60 hours; 3 credits
An exploration of the principles and process of effective storytelling. Beginning with Aristotle's Poetics and continuing to contemporary approaches, the aim of the course is to develop an understanding of the elements of narrative structure that produce a compelling screenplay and an engaging work of cinema.

Prerequisite: Matriculation in the M.F.A. in Cinema Arts or permission of the program director

FGSC 7015G Integrated Media

60 hours; 3 credits
This course provides an opportunity to investigate the impact of the rapidly evolving media environment on contemporary cinema. Students will venture beyond the confines of the traditional media categories and explore the implications of new convergent thinking and technology. Includes both a theoretical understanding of the issues as well as an opportunity to create work across platforms.

Prerequisite: Matriculation in the M.F.A. in Cinema Arts, the M. A. in Screen Studies, or permission of the program director.

FGSC 7016G History of FGSC Narrative

60 hours; 3 credits
This course seeks to review the different storytelling challenges with which cinema has engaged throughout its evolution. Pairing movies from different times and countries, the course will provide students with both a panoramic timeline of international cinema and a thorough discussion of the ideas that have shaped the criteria of what constitutes a powerful film narrative.

Prerequisite: Matriculation in the M.F.A. Cinema Arts Program or permission from the department chairperson

FGSC 7021G National Screen Cultures

60 hours; 3 credits
Study of the complex cultural, artistic, intellectual, social, economic, political, historical, and aesthetic dynamics of a national screen culture.

Prerequisite: Matriculation for the M.A. in Screen Studies, the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7022G Global Screen Cultures

60 hours; 3 credits
Survey of a major screen tradition that transcends national borders. Themes selected according to political, aesthetic, or cultural traditions shared by people across the globe.

Prerequisite: Matriculation for the M.A. in Screen Studies or the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7023G World Cinema 1960 to present

60 hours; 3 credits
Overview of the international development of cinema as a medium and art form from 1960 to the present. Focus on major film tendencies and aesthetic and political developments through a close examination of individual film texts. Emphasis will be placed on the major historical currents of each period and on changes in aesthetic, political and industrial context.

Prerequisite: FGSC 7013G; Matriculation in the M.A. in Screen Studies, in the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7031G Special Topics in FGSC and Screen Theory

60 hours; 3 credits
An in-depth consideration of a single issue in film and/or screen theory. Topics vary from term to term, but may include a focus on a particular theorist's body of work, a topic, such as psychoanalysis, or a theoretical approach to form.

Prerequisite: Matriculation for the M.A. in Screen Studies, the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7032G Special Topics in FGSC and Screen History

60 hours; 3 credits
Examination of one topic in film and screen cultures in relation to its historical, cultural, technological and theoretical contexts. Topics vary from term to term.

Prerequisite: Matriculation for the M.A. in Screen Studies, the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7033G Screen Aesthetics

60 hours; 3 credits
Analysis of a specific area of screen production, such as cinematography, production design, editing, and its impact on form.

Prerequisite: Matriculation for the M.A. in Screen Studies or the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7034G Screen Technologies

60 hours; 3 credits
Analysis of a specific screen technology, such as widescreen, sound, 3D cinema, virtual reality, new media art, or motion capture. Exploration of cultural, economic, artistic, and historic significance. Students may take this course two times but may not repeat topics.

Prerequisite: Matriculation for the M.A. in Screen Studies or the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7035G Festival Studies

60 hours; 3 credits
Exploration of the history, theory, method, and practice of domestic and international film festivals. Immersive analysis of festivals within the changing global practices of film, including their important ties to both Hollywood and independent cinema.

Prerequisite: Matriculation for the M.A. in Screen Studies or the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7036G Production Studies

60 hours; 3 credits
An intensive study of the unique cultural practices of media production. A survey ranging from contemporary industrial trends to questions of authorship, innovation, and modes of production.

Prerequisite: Matriculation for the M.A. in Screen Studies or the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7037G Studies Symposium

60 hours; 3 credits
Survey of preset-day research trends, career paths, and industry practices, built around presentations by guest speakers, who are leading scholars and professionals in the field.

Prerequisite: Matriculation for the M.A. in Screen Studies or the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7038G Screen Pedagogies

60 hours; 3 credits
Immersive course focusing on teaching techniques and current research in screen pedagogies. Students will be expected to design and implement ideas through teaching demonstrations and curriculum development.

Prerequisite: Matriculation for the M.A. in Screen Studies or the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7050G Thesis Project

60 hours, 3 credits
Under the mentorship of Feirstein professors, screen studies students will be expected to propose, have approved, and then complete a thesis project in one of a variety of acceptable formats: written, web-based, or as a media production. The approved proposal and culminating project should demonstrate evidence of an understanding of audience, format, and scholarly method and a careful consideration of how an academic understanding of screen histories, theories, and technologies is addressed by the thesis project.

Prerequisite: Matriculation for the M.A. in Screen Studies or the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7101G Directing Workshop

60 hours; 3 credits
Study the tools of the craft of directing through workshop of scenes in class with the pressure of a full crew collaboration.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts or permission of the program director.

FGSC 7111G Directing the Camera

60 hours; 3 credits
A hands-on course that investigates ways to design shots, scenes and sequences for specific dramatic purposes in service of the script.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7121G Directing the Actor

60 hours; 3 credits
Hands-on intensive directing workshop in which students work with actors to develop and produce character-driven scenes. All students will both perform in scenes to experience being directed and cast outside actors to get experience casting and directing actors.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7131G Advanced Directing Workshop

60 hours; 3 credits
This class builds on two classes required by students in the Directing program: Directors Workshop and Directing the Actor. The purpose of the course is to provide students with a deeper understanding of the art and techniques of working with actors, from casting through auditions and performance to create believable performances on screen.

Prerequisite: FGSC 7121G Directing Actors and FGSC 7101 Directors Workshop

FGSC 7141G Filmmakers Symposium

60 hours; 3 credits
Examination of the film industry from the perspectives of a variety of industry professionals. The course will analyze the experience and techniques of an array of filmmakers. Students will learn to develop material and to pitch their projects.

Prerequisite: Matriculation in the M.F.A. in Cinema Arts and permission of the program director.

FGSC 7201G Cinematography I

60 hours; 3 credits
This course provides grounding in all aspects of professional cinematography, both theoretical and practical. From the use of professional motion picture cameras, lenses, and other equipment, to the study of composition and lighting, students will develop an understanding of the art and techniques of cinematography.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7202G Cinema Aesthetics

60 hours; 3 credits
Overview and historical review of the creative and technical decisions made within the collaboration between creative contributors in the creation of a film, including directors, cinematographers, production designers, editors VFX artists and colorists. Formal elements and choices in the filmmaking process, including visual storytelling, storyboarding, composition, blocking, mise-in-scene, rhythm, coverage choices, use of location, sets, and art direction, and modern previsualization tools are explored.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts or permission of the department chairperson

FGSC 7211G Cinematography II

60 hours; 3 credits
This is the second of a four-workshop sequence designed specifically for cinematographers. This hands-on course involves extensive examination and use of advanced digital motion picture cameras and lenses. Lighting techniques for digital formats will be explored in depth through practical exercises.

Prerequisite: FGSC 7201G

FGSC 7212G Digital Aesthetics

60 hours; 3 credits
Analysis and practice of the aesthetics of digital cinema. Benefits and challenges of digital cinema acquisition, post-production, and distribution.

Prerequisite: FGSC 7202G Cinema Aesthetics

FGSC 7221G Cinematography III

60 hours; 3 credits
This is the third of a four-workshop sequence designed specifically for cinematographers. Class topics will include Steadicam, car shots, aerial/underwater cinematography, motion control, special optics, high-speed cinematography, and 3D stereography. Guest cinematographers and specialists participate in the workshop to conduct specialized seminars and demonstrations as well as to provide feedback on student work.

Prerequisite: FGSC 7211G

FGSC 7231G Cinematography IV

60 hours; 3 credits
This is the fourth workshop in the sequence designed specifically for cinematographers. Students will be exposed to several different scenarios to develop advanced skills in visual storytelling. Each student will practice pre-visualization techniques and production of the key aesthetic elements, including color, contrast, shot selection, camera movement and placement.

Prerequisite: FGSC 7221G

FGSC 7241G Cinematography: Shooting on FGSC

60 hours; 3 credits
Lighting and visual storytelling. Current motion picture cameras. Principles of lighting, composition, lenses, camera movement, and postproduction in motion picture film.

Prerequisite: FGSC 7201G

FGSC 7271G Craft of Film 1

60 hours, 3 credits
Craft of Film 1 is a fundamental class focused on ensuring graduate students acquire all the necessary technical and logistical skills required to be a filmmaker. This includes not just traditional hard skills like cinematography, editing, and producing but also soft skills in clear communication with teams, effective collaboration, and management of a crew.

Prerequisites: Enrollment in the MFA program or permission of the department chairperson

FGSC 7272G Craft of Film 2

60 hours, 3 credits
Craft of Film 2 is an intermediate class focused on ensuring graduate students continue to develop all the technical and logistical skills required to be a filmmaker. This includes not just traditional hard skills like cinematography, editing, and producing but also soft skills in clear communication with teams, effective collaboration, and management of a crew. Craft of Film 2 has a special focus on the needs of working with Sync Sound projects, including special time devoted to ensuring all students master the skills of recording high quality audio.

Prerequisites: 7271G or permission of the department chairperson

FGSC 7274G Craft of Film 3:Pre-production & Producing

60 hours; 3 credits
Principles and practices of the line producer, production manager and assistant director during pre-production and production of a motion picture. Hands on preparation for upcoming productions is combined with learning from case studies to learn how to mount and manage movies at a variety of budget levels. Topics examined will include the script breakdown, scheduling, budgeting, casting, finding and securing locations and permits, working with unions, insurance, hiring crew, and negotiating cast and crew contracts, as well as myriad other pertinent facets of film production such as the use of music, special effects, stunt sequences and aerial photography.

Prerequisite: 7272G or permission of the program chairperson

FGSC 7275G Craft of Film 3: Production Design

60 Hours, 3 Credits
Production Design is one of the fundamental skills of crafting the appearance of a motion picture. From the basics of dressing a found location to the constructing of elaborate sets, understanding the goals and techniques of the art department is vital to the growth of any filmmaker. This course will prepare students for supervising the look of their own films, for contributing to other student productions, and potentially for working freelance in the art department on professional productions.

Prerequisite: 7272G or permission from the department chairperson

FGSC 7277G Craft of film 3: Cinematography

60 hours; 3 credits
Examination and use of professional motion picture cameras, lenses, electric and grip equipment in both film and digital formats.

Prerequisite: 7272G or permission from the department chairperson

FGSC 7278G Craft of Film 3: Post Production

60 hours; 3 Credits
An introduction to all aspects of post-production, including picture editing, color grading, motion graphics, sound editing, design and mixing, music editing and the post production workflow.

Prerequisite: 7272G or permission from the department chairperson

FGSC 7301G Screenwriting 1

60 hours; 3 credits
Hands-on intensive course in screenwriting. Fundamentals of writing for film and developing a short film script, with a focus on writing short films of up to 5 minutes.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts or permission of the department chairperson

FGSC 7302G Script Analysis and Development

60 hours; 3 credits
Through the analysis of successful film scripts with a focus on premise, structure, character, time and causality, tone and genre, students develop an in-depth understanding of story from seed idea through script.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts or permission of the program director.

FGSC 7311G Scene Writing Workshop

60 hours; 3 credits
Intensive exercises in scene writing. Focus on subtext, point of view, dialogue, visual language, tone and genre, conflict, and characterization.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts or permission of the program director.

FGSC 7312G Screenwriting 2

60 hours; 3 credits
Hands-on intensive screenwriting workshop. Students will develop and polish an intermediate-length screenplay of 10-12 pages.

Prerequisite: FGSC 7301G or permission of the program chairperson

FGSC 7321G Rewriting and Structuring Workshop

60 hours; 3 credits
This course focuses on clarity, economy, visual scenic language and staging, character subtext, internal/external conflict and development, premise, balance and tone. In order to gain distance on their work, students draft self-critiques of their own work prior to the rewriting process.

Prerequisite: FGSC 7312G or permission of the program director.

FGSC 7322G Screenwriting 3

60 hours; 3 credits
Hands-on intensive workshop in advanced screenwriting. Students will develop and write the first draft of a feature-length screenplay or an original pilot script for an episodic series.

Prerequisite: FGSC 7312G or permission of the department chairperson

FGSC 7323G Adaptation for the Screen

60 hours; 3 credits
This course will focus on the process of adapting fiction (short and long), stage plays, true-to-life stories, myth and fairy tale into short and feature-length screenplays. Issues of rights acquisitions will be examined. Classic and contemporary theories of adaptation will also be considered.

Prerequisite: FGSC 7312G or permission of the program director.

FGSC 7331G Writing and Creating Content for New Media

60 hours; 3 credits
A hands-on intensive course in writing narratives and creating content for emerging new media productions. Students will complete a script and visual mapping of their story world for an interactive environment.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts or permission of the program director.

FGSC 7332G Advanced Screenwriting 3

60 hours; 3 credits
Building on the work completed in FGSC 7322G, students will redraft and polish their feature-length script. Students will serve as story editor on another student's screenplay.

Prerequisite: FGSC 7322 or permission of the program director.

FGSC 7401G Process of Producing

60 hours; 3 credits
This course covers the various facets of producing, from development of an idea through distribution of a completed movie .

Prerequisite: Matriculation for the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7411G Pre-production and Production Management

30 hours lecture, 30 hours lab; 3 credits
This course is an introduction to the physical production of feature and short motion pictures. It will discuss principles and practices of the line producer, production manager and assistant director during the pre-production of motion pictures.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts and permission of the program director.

FGSC 7414G Intensive FGSC Scheduling and Budget Workshop

30 hours; 2 credits
Intensive workshop on the budgeting and scheduling of feature films. Students will perform a series of exercises in and out of class that will solidify their experience in scheduling and budgeting both feature films and short films. "Real world" budgeting and scheduling will involve exercises that simulate the actual process of producing short and feature films - along with changes.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts and permission of the chairperson.

FGSC 7421G Production and Set Management

60 hours; 3 credits
Theory and practice of the real-world functions of the line producer. Emphasis on the craft, logistics and technical aspects of filmmaking.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts and permission of the program director.

FGSC 7422G Producing for New Media

60 hours; 3 credits
In the increasingly complex technologically-driven media environment, learning to produce for new and emerging media is an essential competency for a producer today. This course offers an in-depth exploration of topics and issues at the forefront of new media production.

Prerequisite: Matriculation in the M.F.A. in Cinema Arts and permission of the program director.

FGSC 7423G Finance for FGSC and Other Media

60 hours; 3 credits
An essential function of the producer is to recognize, source and capitalize on financing opportunities. Toward that goal, this course provides a comprehensive understanding of how the "money chase" works beginning with a survey of traditional finance structures such as co-productions, tax credits and equity investment and concluding with a hands-on crowd-funding campaign run by students in support of their capstone thesis projects.

Prerequisite: Matriculation in the M.F.A. in Cinema Arts and permission of the program director.

FGSC 7431G Distribution and Exhibition

60 hours; 3 credits
An advanced practical and theoretical overview of film distribution, from theatrical to new on-line platforms. Analysis of the exhibition landscape, from conventional forms to emerging possibilities.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts or permission of the program director.

FGSC 7432G FGSC Development: From Script to Screen

60 hours; 3 credits
This course is designed to provide producers with the tools necessary to develop an intellectual property from initial concept to a feature film script. Using examples from the real world of film production, students will explore the development of several feature film projects from different media: magazine articles, plays, novels, short stories, and original story ideas, among others.

Prerequisite: Matriculation for the M.F.A. in Producing or permission of the Department Chair.

FGSC 7462G The Business of FGSC

60 hours; 3 credits
This course is designed to provide producing students with a systematic overview of the modern day filmed entertainment business. The course will not only cover the traditional "Hollywood System" operating out of Los Angeles but will examine the independent film model as well as worldwide approached to producing moving image works. The course will take a critical look at the financing, production, marketing, and distribution of filmed entertainment.

Prerequisite: Matriculation for the M.F.A. in Producing or permission of the Department Chair.

FGSC 7471G Entertainment Law

60 hours; 3 credits
This course is designed to provide producing students with an overview of the Business and Legal aspects necessary to produce moving image work. The course will cover the basic concepts of the legal system as it relates the to film industry at large and also introduce students to the day to day legal and business affairs practices that producers confront as they produce filmed entertainment.

Prerequisite: Matriculation for the M.F.A. in Producing or permission of the Department Chair.

FGSC 7501G Editing 1

60 hours; 3 credits
The art and techniques of editing narrative films. Principles of continuity, dramatic emphasis and clarity, aesthetics and visual style are studied. This is a hands-on workshop where students edit a variety of scenes. Emphasis is on peer critique.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts or permission of the program director.

FGSC 7502G Sound Design and Mix

60 hours; 3 credits
Students explore how sound works with visual image as an active and creative partner in storytelling. Sound design provides an aural narrative that is a critical component of filmmaking. Practical approaches to sound editing, Foley, and ADR. Course culminates in a final group sound project.

Prerequisites: Matriculation for the M.F.A. in Cinema Arts or permission of the program director.

FGSC 7511G Editing 2

60 hours; 3 credits
Intermediate workshop in editing tools and techniques. Exploration of media such as commercials, music videos, documentary and other forms. Working within traditional narrative structure, collaborating with musicians and graphic artists, and other related editing skills will be covered.

Prerequisite: FGSC 7501G or permission of the chairperson.

FGSC 7512G Sound Editing and Design 2

60 hours; 3 credits
Continuation of sound editing and design for cinema arts. Introduces advanced dialogue editing, film music, and preliminary mixing along with sound effects. Culminates in a final group sound project.

Prerequisite: FGSC 7501G or permission of program director.

FGSC 7513G Editor's Symposium

60 hours; 3 credits
This course is an opportunity for students to study the work of master editors and also to meet guest editors who will talk about their process.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7514G Production Sound

60 hours; 3 credits
The fundamentals of sound recording for film and television production. The course will cover acoustics, psychoacoustics, microphones, recorders and other audio equipment, studio and location recording of dialogue, music, and effects. Hands-on use of audio equipment. Students will learn the fundamentals of practical scene analysis from an audio perspective.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7515G Sound Recording for Production and Post

60 hours; 3 credits
The fundamentals of sound recording for film and media production. The course will cover acoustics, psychoacoustics, microphones, recorders and other audio equipment, studio and location recording of dialogue, music, and effects. Hands-on use of audio equipment. Students will learn the fundamentals of practical scene analysis from an audio perspective. Students will also be introduced to industry standard post tools including Adobe Audition and ProTools to learn the basics of post production recording.

Prerequisite: Matriculation for the M.F.A. in Post Production or permission of the Department Chair.

FGSC 7521G Editing 3

60 hours; 3 credits
Advanced workshop in editing tools and techniques. Emphasis on creative storytelling and technical mastery, including sound design, the use of titles and effects, color correction, media management and deliverables. Class projects include editing second year films.

Prerequisite: FGSC 7511G (Editing 2) or permission of the chairperson.

FGSC 7522G Digital Media Integration

60 hours; 3 credits
The theory and practice of digital media integration, including digital cinema capture, formats, compression, mastering and workflow. Best practices for the use of linear media within interactive and new media applications. This course provides the expertise for working within current digital media environments.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts or permission of the program director.

FGSC 7523G Visual Effects and Motion Graphics

60 hours; 3 credits
This course is an overview and introduction to motion graphics techniques that are used in the film industry. The course will include the terminology, theory, and practice of Motion Graphics, focusing on composting techniques, dynamic titling and informative graphics along with the beginnings of compositing and VFX. The basics of industry-standard compositing and motion graphics software will be taught and used in the hands-on creation and execution of visual effects and motion graphics sequences.

Prerequisite: FGSC 7522G or permission of the program director

FGSC 7524G Advanced Visual Effects

60 hours; 3 credits
Building on the techniques studied in FGSC 7523G this course provides practical, applied knowledge of advanced compositing and an introduction to CG techniques that are used in the film industry. Includes the terminology, theory, and practice of 3D computer graphic and advanced compositing techniques.

Prerequisite: FGSC 7522G, FGSC 7523G, or permission of the program director

FGSC 7531G Post-Production Supervision

30 hours; 2 credits
Creative and strategic approaches to the post-production process, including scheduling and budgeting, overseeing cuts and test screenings, finishing and deliverables. An emphasis on collaboration through effective management of all post-production personnel and elements including sound design, music, titles, and visual effects.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts or permission of the program director.

FGSC 7532G New Media Design

60 hours; 3 credits
New media design environment for media producers working in the cinema industry. Examination of how sound and image productions such as motion pictures, video games, and content for the Internet and mobile devices, are produced and distributed across multiple platforms.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts, or permission of the program director.

FGSC 7541G Color Grading

60 hours; 3 credits
To introduce the student to the skills involved in color timing for digital video, with a specific emphasis placed on hands on work with Da Vinci Resolve. The student will gain a working knowledge of color correction that can be applied to narrative, music video and commercial projects along with basic compositing and beauty work techniques. Additional time will be devoted to understanding the technical issues of color on set and in delivery.

Prerequisite: Matriculation for the M.F.A. in Post Production or permission of the Department Chair.

FGSC 7542G Color Grading 2

60 hours; 3 credits
An advanced class in color grading techniques designed to build on the learning from color grading with an expansion into a variety of techniques and a more comprehensive examination of the historical processes that have lead us to where we are today, including lab printing. This is an elective class open to all students who have taken Color Grading.

Prerequisite: FGSC 7541G or permission of the instructor.

FGSC 7601G Digital Imaging and Compositing 1

60 hours; 3 credits
An introduction to methods of manipulating and compositing still and moving images to create visual effects for narrative and commercial cinema. Includes the fundamentals of layering, keying, matting, rotoscoping, and color correcting. Introduces the art and technique of photographing for visual effects, including the use of green screen.

Prerequisite: Matriculation in the M.F.A. or permission of the Director.

FGSC 7611G Digital Imaging and Compositing 2

60 hours; 3 credits
Introduction to advanced methods of compositing computer-generated imagery and live-action; includes the integration of footage containing physical effects with digitally generated imagery; also includes motion tracking, stabilization, matte painting/set-extension, film and lighting effects, image manipulation, retouching, and painting. Students complete a case study for a hybrid scene from a feature film that includes both physical and digital elements.

Prerequisite: FGSC 7601G Digital Imaging and Compositing 1

FGSC 7612G Digital Animation & VFX Symposium

60 hours; 3 credits
Survey of present-day techniques, industry practices, career paths, trends, and specific production case studies, built around presentations by guest speakers, who are leading professionals and artists in the field of Digital Animation & Visual Effects.

Prerequisite: Matriculation in the M.F.A. or permission of the Director.

FGSC 7613G History of Animation and VFX Techniques

60 hours; 3 credits
Course surveys the histories of visual effects and animation within the history of cinema. Application of historically significant techniques and principles through hands-on production assignments.

Prerequisite: Matriculation in the M.F.A. or permission of the Director.

FGSC 7614G 3D Computer Animation I

60 hours; 3 credits
Introduction to the fundamental principles of 3D modeling, sculpting, and texturing. Focus is on navigation inside of Autodesk Maya, covering basic and advanced modeling, as well as texturing techniques and workflows.

Prerequisite: FGSC 7601G Digital Imaging and Compositing 1

FGSC 7621G Digital Imaging and Compositing 3

60 hours; 3 credits
Introduction to node-based visual effects compositing and industry-standard tool for photo-real compositing, Nuke, including its scripting language. Emphasis on compositing computer-generated imagery with live-action to achieve photo-real shots.

Prerequisite: FGSC 7611G Digital Imaging and Compositing 2

FGSC 7622G Drawing, Illustration, and Digital Cel Animation

60 hours; 3 credits
Hands-on practicum in foundational drawing and illustration techniques; application in digital cel animation. Includes acting approaches for animation formats, the application of narrative structure, and the wide assortment of technical options in executing hand-drawn animation in the digital realm.

Prerequisite: Matriculation for the M.F.A. or permission of the Director.

FGSC 7624G 3D Computer Animation 2

60 hours; 3 credits
Introduction to 3D computer-generated animation practices and principles, rigging for 3D animation, pre-visualization techniques, and layout; emphasis on the holistic application of the fundamentals of storytelling to both computer animation and 3D character development.

Prerequisite: FGSC 7614G 3D Computer Animation 1

FGSC 7631G Digital Imaging and Compositing 4

60 hours; 3 credits
Introduction to advanced strategies and techniques for photo-real compositing using the industry-standard tool Nuke. Explore solutions to complex visual effects challenges, including compositing with problematic live-action footage. Students will deepen their understanding of compositing computer-generated imagery with live-action to achieve photo-real results and create their own hybrid visual effects shots from scratch.

Prerequisite: FGSC 7621G Digital Imaging and Compositing 3

FGSC 7634G 3D Computer Animation 3

60 hours; 3 credits
Introduction to lighting and rendering of 3D Computer-generated imagery, including shading networks, image-based rendering, rendering multiple passes, and layered compositing techniques. Emphasis on efficient and professional workflow. Course focuses on lighting and rendering workflow, and concepts, utilizes those concepts inside of Mental Ray for Maya and other industry standard renderers; layered compositing techniques versus Node based compositing workflows side-by-side inside of Adobe After Effects and The Foundry Nuke.

Prerequisite: FGSC 7624G 3D Computer Animation 2

FGSC 7635G Computer Animation IV

60 hours; 3 credits
This course will focus on advanced 3D animation techniques, including character animation, using industry standard tools, such as Autodesk's Maya software. The focus will be on real-world production techniques and processes. The course will combine learning the necessary technical skills with developing the creative skills of being an animator and a digital artist, including thinking like a director in terms of how to construct shots, focus the viewer's attention, and express story points. The course will consist of many hands-on exercises and will result in a final and finished 3D project.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts or permission of the program director.

FGSC 7801G Collaborative Filmmaking Workshop 1

60 hours; 3 credits
Creation of short, non-sync (non-dialogue) films with instruction on pre-production, production, and post-production. Course focuses especially on the artistic process of finding a voice, telling a story, and especially on how to do so collaboratively with a team within the complex world of filmmaking.

Prerequisite: Matriculation for the M.F.A. in Cinema Arts or permission of the department chairperson

FGSC 7811G Post Workshop

60 hours; 3 credits
A hands-on course that teaches the fundamentals of post-production. Students learn the art and techniques of picture editing and all other aspects of post-production, including sound and music editing, and managing the post-production workflow. (Not required for Post-Production students)

Prerequisite: FGSC 7801G

FGSC 7821G Collaborative Filmmaking Workshop 2

60 hours; 3 credits
The course is designed to help film students: 1) to produce a 3-5 minute sync sound narrative film; and 2) to harness the processes and relationships that are critical to the success as filmmakers. The course will emphasize the following: working within tight constraints on time and resources, collaboration, and intensive preparation. Students will be required to work with scripts written by others and will rotate through positions as Director, Producer, Cinematographer, and Sound Recordist.

Prerequisite: FGSC 7801G or permission of the department chairperson

FGSC 7831G Narrative Pre-Production

60 hours; 3 credits
Intensive hands-on pre-production workshop for the Second Year Film. Students work together as a team to pre-produce their second year film projects.

NOTE: class is 60 hours over 10 weeks, so class runs 6 hours instead of 4. Class only offered Mondays and Fridays.

Prerequisite: FGSC 7821G, 7312G, 7272G or permission of the department chairperson

FGSC 7832G Narrative Post-Production

60 hours; 3 credits; lecture and production course
Intensive hands-on production workshop. Students work together as a team to post-produce one narrative film. Note: class is 60 hours over 10 weeks, so class runs 6 hours instead of 4. Class only offered Mondays and Fridays.

Prerequisite: FGSC 7831G, and one of FGSC 7271G, 7272G, 7274G, or 7277G, and the completed shooting of a second year film production during the production period.

FGSC 7901G Independent Research 1

60 hours; 3 credits
Faculty supervised research or fieldwork in an aspect of film studies or film production.

Prerequisite: Matriculation in the M.A. in Screen Studies, the M. F.A. in Cinema Arts, or Permission of the Chairperson.

FGSC 7902G Independent Research 2

60 hours; 3 credits
Faculty supervised research or fieldwork in an aspect of film studies or film production.

Prerequisite: Matriculation in the M.A. in Screen Studies, the M. F.A. in Cinema Arts, or Permission of the Chairperson.

FGSC 7903G Independent Research 3

60 hours; 3 credits
Faculty supervised research or fieldwork in an aspect of film studies or film production

Prerequisite: Matriculation in the M.A. in Screen Studies, the M. F.A. in Cinema Arts, or Permission of the Chairperson.

FGSC 7911G FGSC Internship 1

Minimum 135 hours fieldwork; 3 credits
Intensive workshop for students engaged as interns or apprentices in a museum film study center or film/media publication (print or on-line); at a distribution, marketing, or production office; or on a professional production.

Prerequisite: Matriculation in the M.A. in Screen Studies, the M. F.A. in Cinema Arts, or Permission of the Chairperson.

FGSC 7912G FGSC Internship 2

Minimum 135 hours fieldwork; 3 credits
Intensive workshop for students engaged as interns or apprentices in a museum film study center or film/media publication (print or on-line); at a distribution, marketing, or production office; or on a professional production.

Prerequisite: Matriculation in the M.A. in Screen Studies, the M. F.A. in Cinema Arts, or Permission of the Chairperson.

FGSC 7913G FGSC Internship 3

Minimum 135 hours fieldwork; 3 credits
Intensive workshop for students engaged as interns or apprentices in a museum film study center or film/media publication (print or on-line); at a distribution, marketing, or production office; or on a professional production.

Prerequisite: Matriculation in the M.A. in Screen Studies, the M. F.A. in Cinema Arts, or Permission of the Chairperson.

FGSC 7921G Special Topics in Cinema Arts 1

60 hours; 3 credits
Focused exploration of topics in directing, cinematography, post-production, screenwriting, producing, or digital animation and visual effects. May include hands-on production, or research. Course content varies from term to term. Students may not repeat topics.

Prerequisite: Matriculation for the M.A. in Screen Studies or for the M.F.A. in Cinema Arts or permission of the deputy chairperson.

FGSC 7922G Special Topics in Cinema Arts 2

60 hours; 3 credits
Focused exploration of topics in directing, cinematography, post-production, screenwriting, producing, or digital animation and visual effects. May include hands-on production, or research. Course content varies from term to term. Students may not repeat topics.

Prerequisite: Matriculation for the M.A. in Screen Studies or for the M.F.A. in Cinema Arts or permission of the deputy chairperson.

FGSC 7923G Special Topics in Cinema Arts 3

60 hours; 3 credits
Focused exploration of topics in directing, cinematography, post-production, screenwriting, producing, or digital animation and visual effects. May include hands-on production, or research. Course content varies from term to term. Students may not repeat topics.

Prerequisite: Matriculation for the M.A. in Screen Studies or for the M.F.A. in Cinema Arts or permission of the deputy chairperson.

FGSC 7924G Directing the Commercial

60 hours, 3 credits; lecture and production course
Directing the 30-second commercial requires a highly specialized set of tools as a filmmaker. Creating story, emotion, and inspiring action in 30 seconds is a skill that requires both focus and practice, and this course is designed to both introduce students to those skills and give them a platform for practicing those skills in a creative fashion.

Prerequisite: FGSC 7801G

FGSC 7942G Thesis Project Development

60 hours, 3 credits
Working both collaboratively and in their areas of specialization—Producing, Directing, Screenwriting, Cinematography, Post-Production—this course provides an opportunity for students to source, write, re–write, develop and prepare materials for their thesis projects. Each group will work under the supervision of faculty specialists to undertake a thorough preparation and seek to gain approval of their capstone projects. The work must be awarded a grade of B or higher in order to be eligible for consideration toward the completion of the master of fine arts degree in cinema arts. Students register for each of these courses only once.

Prerequisite: Matriculation in the M.F.A. in Cinema Arts and permission of the program director.

FGSC 7943G Digital Animation & VFX Thesis Development

60 hours; 3 credits
Students will originate, revise, and finalize the creative, the pre-production materials, and the detailed production plan for their capstone Digital Animation and VFX Thesis Project. The pre-production materials will include a final script, creative specification, storyboards, storyboard animatic, design frames, references, and a substantive prototype of the project. The production plan will include a detailed schedule and specification for the production pipeline. With all this completed work the student will be prepared to begin full production on their Thesis Project at the start of Digital Animation and VFX Thesis Production 1, which is the next course in the sequence.

Prerequisite: Matriculation in the M.F.A. or permission of the Director.

FGSC 7951G Thesis Production

60 hours, 3 credits
Under the mentorship of production professors, students will direct a 15-20 minute narrative film. The project should evidence a firm grasp of the craft and the ability to create a work of originality and imagination. In addition, all production students will be expected to work in a collaborative manner on each other's projects, rotating through the various positions.

Prerequisite: FGSC 7832G

FGSC 7952G Thesis Project 1: Screenwriting

60 hours; 3 credits
The first half of a two-semester M.F.A. capstone sequence in which students complete the first draft of a feature length screenplay or an original pilot script.The draft needs to be approved as ready for revisions in order to continue onto the second half of the capstone sequence. Students register for each of these courses only once.

Prerequisite: FGSC 7322G

FGSC 7953G Thesis: Specialist 1

60 hours, 3 credits
Under the mentorship of specialized professors, students will each be expected to execute their skill on one or multiple thesis level projects. The project should evidence a firm grasp of the craft and the ability to create a work of originality and imagination.

Prerequisite: FGSC 7832G

FGSC 7955G Digital Animation & VFX Thesis Project 1

60 hours; 3 credits
Students begin full production on their Digital Animation & VFX Thesis Project, building on the foundation of the pre-production materials and production plan from the Thesis Development course. The progress on the project will be tracked week-by-week, according to the production plan and schedule, to ensure the successful execution and completion of the project. The Thesis Project must demonstrate exceptional ability with craft and technique to create a work of originality and imagination within the chosen area of specialization.

Prerequisite: FGSC 7943G Thesis Project Development

FGSC 7957G DAVE Thesis Tech

60 hours; 3 credits
This course will focus on the specific production pipelines and specific techniques used on each of the DAVE Thesis Projects. Areas of study, development, and refinement will include advanced 2D and 3D digital animation techniques (including character animation), as well as VFX and compositing techniques. Production pipeline issues, such as rendering, final compositing, and mastering, will be covered. The focus will be on real-world industry-standard production techniques and processes, but with a focus on the practical needs for the completion of each DAVE Thesis Project. The overall objective of the course is to set up each DAVE Thesis Project so that it can be executed creatively and efficiently.

Prerequisite: 7943G or permission of the department chair.

FGSC 7961G Thesis Project 2: Production

60 hours, 3 Credits
Students in the production tracks will complete post-production requirements on the films shot during the previous semester in FGSC 7951G. All production students are expected to work collaboratively on their projects with an emphasis on their specialized discipline. The work must be awarded a grade of B or higher in order to be eligible for consideration toward the completion of the master of fine arts degree in cinema arts. Students register for each of these courses only once.

Prerequisite: FGSC 7951G

FGSC 7962G Thesis Project 2: Screenwriting

60 hours, 3 credits
The first half of a two-semester M.F.A. capstone sequence in which students redraft and polish their long format screenplay or original pilot script.Their final draft needs to be approved as ready for professional submission in order to be eligible for consideration toward the completion of the master of fine arts degree in cinema arts. Students register for each of these courses only once.

Prerequisite: FGSC 7952G

FGSC 7963G Thesis Project 2: Post-Production

60 hours, 3 credits
Under the mentorship of a post-production professor, students will complete post-production requirements on thesis films. The project should evidence a firm grasp of the craft and the ability to create a work of originality and imagination. All production students will be expected to work in a collaborative manner on their projects, with an emphasis on their specialized discipline.

Prerequisite: FGSC 7951G and the completed principal photography of your thesis project.

FGSC 7964G Portfolio Development

60 hours; 3 credits
This course provides students with an opportunity to develop the tools they will need to enter the film industry, and a familiarity with the structure and function of the film industry in New York and Hollywood, the studio system, the world of indie film production and the various other avenues of launching a career including short form content and entrepreneurship. Students will develop and revise the marketing materials they will need to launch their careers.

FGSC 7965G Digital Animation & VFX Thesis 2

120 hours; 6 credits
Under the mentorship of production professors, Post-Production students will complete post-production for the films shot during the previous semester in FGSC 7953G. The project should evidence a firm grasp of the craft and the ability to create a work of originality and imagination. All production students will be expected to work in a collaborative manner on their projects, with an emphasis on their specialized discipline. The work must be awarded a grade of B or higher in order to be eligible for consideration toward the completion of the master of fine arts degree in cinema arts. Students register for each of these courses only once.

Prerequisite: FGSC 7955G Digital Animation & VFX Thesis 1

FGSC 7966G Digital Animation & VFX Portfolio Development

60 hours; 3 credits
Develop a strong portfolio with which to enter the digital media industry. Learn the present structures, professional practices, and career paths within the media industry, with a focus on animation and visual effects, including feature films, animated features, CG features, commercials, internet media, and social media.

Prerequisite: Matriculation for the M.F.A. or permission of the Director.

Finance

Department office: 201 Whitehead Hall
Phone: 718.951.5012

Full-time Faculty

Professors: Mohanty, Park
Associate Professors: Baek, Glambosky, Lin, Peterburgsky
Assistant Professor: Kang
Lecturer: Ninan

Courses

FINC 7215X Money and Capital Markets

30 hours plus conference; 3 credits
Sources and uses of funds in financial markets. Market structure of interest rates. Flow of funds analysis. This course is the same as Economics 7215X and Business 7215X.

Prerequisite: undergraduate course in macroeconomics.

FINC 7216X Managerial Finance

30 hours plus conference; 3 credits
Drawing upon current managerial finance theory and practice, this course develops students' ability to apply the techniques of financial analysis and financial modeling to make business decisions from the perspective of a chief financial officer. Topics covered include: agency theory, managerial finance functions, financial statements analysis, cash flow management, financial planning and control, financial institutions and markets, time value of money, interest rates, financial assets valuation, risk analysis, capital budgeting, choice of capital structure, dividend policy, working capital management, and long-term financing. (Not open to students who have completed [Business 7216X]).

Prerequisite: One undergraduate course in accounting and one undergraduate course in corporate finance or equivalent.

FINC 7240X Global Finance and Management

30 hours plus conference; 3 credits
Environment of financial management: The international monetary system, international capital, foreign exchange parity relations, foreign exchange determination. International investing: Foreign exchange risk management and multinational working capital management. Foreign investment analysis: international portfolio investment, corporate strategy and foreign direct investment. Assessment and management of international taxation and political risk. (Not open to students who have completed [Business 7240X]).

Prerequisite: one undergraduate course in macroeconomics and one undergraduate course in statistics.

FINC 7290G Independent Research and Financial Analysis

Minimum of 135 hours of independent research; 3 credits
Independent reading and financial analysis supervised by a faculty member. One or more written reports and/or final examination.

Prerequisite: permission of the chairperson or the chairperson’s designee

General Science

Department office: 2606 James Hall
Phone: 718.951.5061

Courses

GSCI 7010T Selected Concepts in Physical Science for Childhood and Middle Childhood Teachers
45 hours plus conference; 3 credits
Matter and energy and their interrelationship. Development of the concepts of force, electricity, magnetism, heat and energy. Application to explanation of phenomena appropriate for elementary and middle school topics. Addresses content and pedagogy. Field trips may be required.

Prerequisite: permission of the general science coordinator.

GSCI 7011T Space, Time and Motion: Physical Science for Secondary Science Teachers
45 hours asynchronous online instruction; 3 credits
Major discoveries of ancient Greek philosophers on to Galileo Galilei, Newton and Einstein. Properties of motion, time, space, matter, and energy. Special Theory of Relativity, photon hypothesis, wave-particle duality, General Theory of Relativity and its implications for astrophysics and cosmology, quest for unified field theory. Einstein as a social and political figure. Implications of technology for society, energy production in stars, black holes, the Big Bang. Role of the scientist in modern society. Links content and pedagogy. Offered in collaboration with the American Museum of Natural History Seminars on Science. Asynchronous online.

Prerequisite: permission of the General Science Coordinator.

GSCI 7014T The Solar System

45 hours asynchronous online instruction; 3 credits
Solar System: components, origins and evolution. Current space missions, profiles of space scientists, experimental techniques applicable to the investigation of celestial bodies. The Sun, nuclear fusion, energy, gravity and electromagnetism, conditions and processes that shaped the early Universe. Examination of the rocky and gaseous bodies that orbit the Sun. Terrestrial and extra-terrestrial atmospheres and magnetospheres. Classification of planets, comets, asteroids and other objects in space. Search for extra-solar star systems and life. Offered in collaboration with the American Museum of Natural History Seminars on Science. Asynchronous online. (Not open to students who have taken Geology 7012T [612].)

GSCI 7030T Selected Concepts in Life Science for Childhood and Middle Childhood Teachers
45 hours plus conference; 3 credits
Selected concepts in life science; adaptations, characteristics and life cycles of plants and animals, microorganisms, habitats, ecosystems, and environments. Methods of inquiry in life science. Addresses content and pedagogy. Field trips will be required.

Prerequisite: permission of the general science coordinator.

GSCI 7031T Field Studies in Life Science for Teachers

30 hours plus 30 hours laboratory in field; 3 credits
Place-based field study of selected concepts in Life Science: emphasis on populations, community interactions, evolution, taxonomy, ecosystems and biomes, biogeochemical cycles. Methods of inquiry in field biology. Addresses content and pedagogy. May be repeated for credit with permission.

Prerequisite: permission of the general science coordinator.

GSCI 7032T Evolution, Ecology and Biodiversity

45 hours; 3 credits
Exploration of concepts in evolution, ecology and biodiversity at the American Museum of Natural History and environs. Evidence for evolution, evolutionary mechanisms, speciation, human evolution. Evolutionary relationships as a lens for biodiversity. Environmental change, healthy ecosystems. Traditional and molecular methods of assessment of and threats to biodiversity. Integrates content and pedagogy.

Prerequisite: Permission of the director

GSCI 7033T Diversity of Fishes: Classification, Anatomy, and Morphology
45 hours asynchronous online instruction; 3 credits
Inquiry-based examination of the diversity, evolution, ecosystems, and biogeography of fish. Cladistics, and species characteristics. Analysis of digitized specimens from the American Museum of Natural History Ichthyology Department Collections. Links content and pedagogy. Offered in collaboration with the American Museum of Natural History Seminars on Science. Asynchronous online.

GSCI 7034T Link Between the Dinosaurs and Birds

45 hours asynchronous online instruction; 3 credits
Fossil and behavioral evidence linking dinosaurs to modern birds; evolutionary relationships; comparative anatomy, cladistics; geologic time, extinction. Asynchronous online instruction. Links content and pedagogy. Offered in collaboration with the American Museum of Natural History Seminars on Science. Asynchronous online.

GSCI 7035T Evolution

45 hours asynchronous online instruction; 3 credits
Investigation of evolution through lens of paleontology, geology, systematics, embryology and molecular biology. Major evidence for and mechanisms of evolution. Applications in the life sciences; medicine, public health, agriculture and conservation. Observation of patterns in nature; evolutionary relationships among all species; origin and evolution of humans. Links content and pedagogy. Offered in collaboration with the American Museum of Natural History Seminars on Science. Asynchronous online.

GSCI 7036T Genetics, Genomics, Genethics -- Molecular Biology for Middle Childhood and Adolescence Educators
45 hours asynchronous online instruction; 3 credits
Foundations of genetics and mechanisms of transmission of hereditary characteristics; genomics (the study of genomes); exploration of molecular lab techniques, sequencing of the human genome; evolutionary theory, role of genetic diversity; medical advances. Social, ethical, and legal implications of genetically modified organisms, cloning for therapeutic and reproductive purposes, genetic enhancement of humans, and the ownership of genetic information. Links content and pedagogy in middle childhood and adolescence education. May be offered in collaboration with the American Museum of Natural History Seminars on Science. Asynchronous online or face to face.

Prerequisite: Enrollment in Secondary Science Education or permission of the Coordinator of General Science

GSCI 7037T Sharks and Rays - Ecology, Classification, and Evolution
45 hours asynchronous online instruction; 3 credits
Basic biology, ecology, diversity, and evolution of sharks and rays (the elasmobranches). Examination of conservation issues, methods of study, adaptations for survival, reproduction, and predatory behaviors using online access to museum collections, the fossil record, and research. Links content and pedagogy. Offered in collaboration with the American Museum of Natural History Seminars on Science. Asynchronous online.

GSCI 7039T Ecology: Ecosystem Dynamics and Conservation
45 hours; 3 credits
Foundations of ecology: Ecosystems and biodiversity, including ecosystem components; population dynamics; species roles and interactions; matter, energy and the environment; biotic and abiotic interactions; ecosystem resistance and resilience. Ecosystems and humans, including ecosystem disruption and recovery; the “anthropocene”; interplay of biodiversity conservation and human activities; and multiply interacting systems. Assignments address formulation and testing of scientific questions. Links content and pedagogy. Offered in collaboration with the American Museum of Natural History (Seminars on Science). Online.

GSCI 7040T Selected Concepts in Earth Science for Childhood and Middle Childhood Teachers
45 hours plus conference; 3 credits
Selected concepts in Earth Science: spaces systems, geologic systems, atmospheric systems, and water systems. Addresses content and pedagogy. Methods of inquiry in Earth science. Field trips will be required.

Prerequisite: permission of the general science coordinator.

GSCI 7041T Field Studies in Earth Science for Childhood and Middle Childhood Teachers
45 hours; 3 credits
Place-based field study of selected concepts in Earth Science: emphasis on geologic systems; processes of mineral and rock formation, characteristics of minerals and rocks, methods of identification and classification, structure of the earth, surface forces, crustal movements, erosional-depositional processes, landscape development, geologic history, interaction between landscape and atmospheric and water systems. Methods of inquiry in field geology. Addresses content and pedagogy. May be repeated for credit with permission.

Prerequisite: permission of the general science coordinator.

GSCI 7042T Earth Inside and Out

45 hours asynchronous online instruction hours; 3 credits
Investigation of five guiding questions regarding Earth systems: How do geologists "read" the rocks? What causes climate and climate change? How has the Earth evolved? Why are there ocean basins, mountains, and continents? Why is the Earth habitable? Links content and pedagogy. Offered in collaboration with the American Museum of Natural History Seminars on Science. Asynchronous online. Field trips may be required.

GSCI 7043T Earth and Space Science for Teachers

45 hours; 3 credits
Exploration of concepts in Earth and Space science at the American Museum of Natural History and environs. Organized around essential questions. Lectures by Museum scientists, investigations in Museum exhibitions, earth science labs, and field experiences. Integrates content and pedagogy.

Prerequisite: Permission of the director

GSCI 7050T Selected Concepts in Environmental Science for Childhood and Middle Childhood Teachers
45 hours plus conference; 3 credits
Air and water pollution, solid waste, and natural resources. Scientific and technological material related to the environment. Methods of inquiry in environmental science. Addresses content and pedagogy. Field trips will be required.

Prerequisite: permission of the general science coordinator.

GSCI 7053T Water

45 hours; 3 credits
Exploration of water through an environmental science lens. Chemical and physical properties, abundance, sources, circulation through Earth systems, local and global human impacts; freshwater systems and ecosystem services; wetlands; standards of and threats to water quality; water system management and policies. Links content and pedagogy. Offered in collaboration with the American Museum of Natural History (Seminars on Science).

GSCI 7054T The Ocean System

45 hours asynchronous online instruction; 3 credits
The ocean system. Interaction between the atmosphere, hydrosphere, geosphere and biosphere. Properties of the water molecule; action of waves, wind, and density variations; deep-sea and surface currents and implications for Earth's climate and local weather. Influence of symbiotic relationships and biological adaptations on ocean dynamics. Characteristics of marine organisms. Origin and diversification of life across a variety of ecosystems. Ocean habitats: coral reefs, mangrove forests, tidal zones and deep-sea hydrothermal vents. Profiles of oceanographers and emerging technologies such as ocean-going robots and core-drilling. Offered in collaboration with the American Museum of Natural History Seminars on Science. Asynchronous online.

GSCI 7059T Climate Change

45 hours; 3 credits
Foundations of climate change: Climate as a dynamic Earth system. Atmospheric and ocean circulation; heat transfer; the greenhouse effect. The Keeling Curve. Natural and anthropogenic sources of climate change, including drivers and forcings. The role of the ocean in climate change; theory, observation; paleoclimate research; potential consequences, risks and uncertainties. A focus on how scientists study climate including an in-depth application of climate modeling. Links content and pedagogy. Offered in collaboration with the American Museum of Natural History (Seminars on Science). Asynchronous online.

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

GSCI 7000T General Science in Childhood, Middle Childhood and Adolescence Education

Health and Nutrition Sciences

Department office: 4123 Ingersoll Hall
Phone: 718.951.5026

Full-time Faculty

Professor: Axen
Associate Professors: Jiang, Leung, Pouget, Schnoll, Wong
Assistant Professors: Caviglia, Cheung, Feyissa, Horlyck-Romanovsky, Koizumi
Lecturers: Cai, Geraghty, Khalfin, Kruszelnicka, Pemberton, Wolf

The Department of Health and Nutrition Sciences provides premier, thoughtfully created programs in which students learn to help people maintain and recover good health in all contexts: locally, globally, geographically, culturally, socially, and emotionally. Innovative programs and cutting-edge knowledge place the department in the vanguard of educators at the university level. All programs prepare students for significant careers in their chosen field. Students choose from courses in a large range of topics in health and nutrition, from birth to old age. With the understanding that in the digital age information about health and nutrition is being developed and disseminated faster than ever before, all programs offer a framework in which to appraise and assess facts and theories and apply them for the benefit of all people.

M.A. degree program in community health
HEGIS code 1214; SED program code 78495

The master of arts degree in community health serves both national and international students who are pursuing a career in health promotion/disease prevention. Many of our graduate students are in practice in the field and come to Brooklyn College for advanced training and professional development.

The program has three concentrations: Community Health Education, Thanatology, and Food and Health Equity. The Community Health Education concentration provides broad knowledge of community health and health services with an emphasis on community planning and assessment. Graduates will design educational programs, conduct, and evaluate community and public health activities and services to help improve the health of communities and individuals. Graduates typically find employment in public health departments, community-based organizations, hospitals, and clinics as patient educators, health coaches, community organizers, public health educators, and health program managers.

The thanatology concentration provides community health training with a focus on the development of expertise in the area of dying, death, and bereavement. Graduates are prepared for a variety of positions in community health settings, including community-based organizations, hospitals, clinics, and in hospice and palliative care.

The Food and Health Equity concentration prepares graduates to work in community settings with a focus on addressing inequities in our food and nutrition systems that disproportionately impact vulnerable and economically disadvantaged groups. Program graduates may work in preventive health services, including clinical healthcare, in corporate wellness centers, community nutrition outreach centers, college health services. Food and health equity program organizers and developers may work in healthcare settings creating food and nutrition programs that focus on diversity; programs that address access to healthy and affordable foods in urban neighborhood.

Students who have completed a Didactic Program in Nutrition and Dietetics (DPD) from an ACEND (Accreditation Council for Education in Nutrition and Dietetics) -accredited program may also apply to the Brooklyn College Dietetic Internship (DI) after completion of 24 credits in the MA Food and Health Equity program. The DI provides students with the supervised practice needed to sit for the Registered Dietitian-Nutritionist (RDN) exam administered by the Commission on Dietetic Registration (CDR).

Matriculation requirements

Applicants for the Community Health Education and Thanatology concentrations must have at least 18 credits in acceptable health-related courses at the undergraduate or graduate level and a minimum GPA of 3.0. One year of relevant experience in the field may be accepted in place of up to 18 credits.

Applicants for the Food and Health Equity concentration must have at least 18 credits in acceptable health-related and/or nutrition courses as well as a course in human nutrition. Credit for coursework in the Food and Health Equity concentration may be given for relevant experience in the field (up to 6 credits). Credit will be determined by the Chair

Degree requirements (30 credits)

Thirty credits are required for the degree. Students must complete one of the following three concentrations of study: Community Health Education (30 credits), Thanatology (30 credits), or Food and Health Equity (30 credits). The MA in Community Health is a fully online

program. Students also have the option to take courses in-person at Brooklyn College or at another CUNY college.

Community Health Education concentration

Required courses (27 credits): Health and Nutrition Sciences 7110X, 7120X, 7140X, 7150X, 7163X, 7170X, 7925X, and 7930X.

Elective courses: 3 credits

Thanatology concentration

Required courses (30 credits): Students must complete 18 credits from the following courses: Health and Nutrition Sciences 7175X, 7180X, 7181X, 7182X, 7183X, 7184X, 7185X, 7186X, 7187X, 7188X, 7901X. Students must complete Health and Nutrition Sciences 7110, and 9 additional credits from the following courses: Health and Nutrition Sciences 7120X, 7141X, 7150X, 7163X, 7170X, 7171X, 7930X, 7950X

Food and Health Equity concentration

Required courses (21 credits): Health and Nutrition Sciences: 7110X, 7221X, 7230X 7242X, 7243X, 7244X, 7931X
Elective courses: Students must complete 9 credits from the following: Health and Nutrition Sciences 7140X, 7184X, 7201X, 7202X, 7212X, 7232X, 7233X, 7234X, 7240X 7950X

Students who choose a capstone project as the exit requirement must complete Health and Nutrition Sciences 7950X.

Students with advanced preparation may substitute other courses for required courses with the permission of the deputy chairperson.

Students interested in applying to the Dietetic Internship (DI) accredited by ACEND must have completed a Didactic Program in Nutrition and Dietetics (DPD) and 24 credits in the MA Foods and Health Equity program, including the elective course HNSC 7240X prior to the start of the internship.

Dietetic Interns must register for the following courses: Health and Nutrition Sciences 7200X, 7201X, 7202X, and 7203X. The supervised practice courses, Health and Nutrition Sciences 7202X and 7203X, will not count for electives towards the MA in Foods and Heath Equity completion requirements. Only students accepted to the Dietetic Internship may use HNSC 7200X and 7201X as elective courses.

Note: Separate applications must be made to the DI and to the M.A. Food and Health Equity program.

Dietetic Internship (DI)

The ACEND accredited Dietetic Internship (DI) at Brooklyn College is a two-semester program that provides the supervised practice experience required to sit for the Registered Dietitian Nutritionist (RDN) examination. Students must be enrolled in the M.S. Nutrition program or the M.A. in Community Health-Food and Health Equity program in order to be eligible for the DI, and they must file a separate application through DICAS (Dietetic Internship Central Application System.) Students who have completed a DPD and have earned a graduate degree are also eligible to apply to the Brooklyn College DI. The supervised practice program enables students to apply theory and research to practice in clinical, community, and food service settings, thereby enriching their education and preparing them to make significant contributions to the profession.

Exit requirements
Students matriculated in the Community Health Education concentration are required to submit an acceptable capstone project at the culmination of HNSC 7925X.

Students matriculated in the Thanatology concentration are required to pass a comprehensive exam or complete HNSC 7950X Capstone. Students in the Food and Health Equity concentration must pass a comprehensive examination or complete a capstone project - the course 7950X must be completed as the capstone course. Information about the requirements for the comprehensive examination is in the section "Academic Regulations and Procedures."

Courses in the Health and Nutrition Sciences Department offered toward the degree must be 7000-level courses.

Community Health Education students interested in national certification as a Certified Health Education Specialist (CHES) may take the examination administered by the National Commission for Health Education Credentialing, Inc.

Thanatology students interested in national certification in Thanatology (CT) may take the examination administered by the Association for Death Education and Counseling (ADEC).

M.S. degree program in nutrition
HEGIS code 1306; SED program code 86173

The master of science degree in nutrition provides advanced-level study of nutritional science and clinical nutrition. The program addresses the academic interests of individuals who wish to become nutrition educators, administrators of programs that provide nutritional services, nutritionists in community centers or private practice, researchers, or interpreters of research for the public.

The M.S. program by itself does not lead to the credentials of Registered Dietitian Nutritionist (RDN) or New York State Certified Dietitian/Nutritionist (CDN). Students interested in obtaining these credentials may use a number of the courses in the M.S. program, as well as the courses that are prerequisites to the program, toward meeting the requirements of an ACEND (Accreditation Council for Education in Nutrition and Dietetics) accredited Didactic Program in Dietetics (DPD). Admission to the Brooklyn College, graduate level Dietetic Internship is by separate application and is not guaranteed by acceptance to the M.S. program.

Prerequisites for application to the M.S. program can be met by students whose baccalaureate degrees are in fields other than nutrition by taking specified courses. Please contact the graduate deputy chairperson for advisement on prerequisites for the M.S. program, and the DPD director for advisement concerning the DPD and Dietetic Internship.

Matriculation requirements

Applicants must offer undergraduate or graduate courses in general biology, physiology, general chemistry, organic chemistry, nutrition, biochemistry or nutritional chemistry, statistics, and medical nutrition therapy. General matriculation and admission requirements of Graduate Studies are in the section "Admission".

Degree requirements

Thirty-three credits are required for the degree. Students must complete the following required core courses:
Health and Nutrition Sciences 7210X, 7211X, 7213X or 7230X, 7241X, and 7931X. Students must receive a minimum grade of B in each of these courses or approval of the Graduate Deputy Chairperson for Nutrition in order to qualify for the comprehensive examination or thesis; courses may be repeated if necessary.

A minimum of 18 additional credits is required. Students may choose among the following courses: Health and Nutrition Sciences 7120X or 7244X, 7183X, 7200X, 7201X, 7212X, 7213X or 7230X, 7221X, 7231X, 7232X, 7233X, 7234X, 7240X, 7243X, 7250X, 7935X, 7999X. Students who choose a thesis as the exit requirement must complete Health and Nutrition Sciences 7935X and 7999X as elective courses (6 elective credits). Only students accepted to the Dietetic Internship may use HNSC 7200X and 7201X, 7202X, and 7203X as elective courses.

Students in the MS in Nutrition program interested in applying to the Dietetic Internship (DI) accredited by ACEND must have completed 21 credits, including all required courses and Heath and Nutrition Sciences 7240X prior to the start of the internship.

Dietetic Interns must register for the following courses: Health and Nutrition Sciences 7200X, 7201X, 7202X, and 7203X. HNSC 7202X and 7203X will not be applied as electives towards MS in Nutrition degree requirements.

Separate applications must be made to the DI and to the M.S. program in nutrition. Students must pass a comprehensive examination or submit a thesis acceptable to the department. Students who choose to write a thesis must complete Health and Nutrition Sciences 7935X and 7999X. Information about the requirements for the comprehensive examination and thesis is in the section "Academic Regulations and Procedures."

Dietetic Internships (DI)

The Academy of Nutrition and Dietetics ACEND accredited Dietetic Internship (DI) at Brooklyn College is a two-semester program that provides the supervised practice experience required to sit for the Registered Dietitian Nutritionist (RDN) examination. Students must be enrolled in the M.S. in nutrition program or the M.A. in Community Health (Foods and Health Equity) program to be eligible for the DI, and they must file a separate application through DICAS (Dietetic Internship Central Application System). Students who have completed a Didactic Program in Nutrition and Dietetics (DPD) from an ACEND (Accreditation Council for Education in Nutrition and Dietetics) - accredited program may also apply to the Brooklyn College Dietetic Internship (DI). Completion of 24 credits in the MA Food and Health Equity program is required prior to the start of the DI program. The DI provides students with 6 elective credits and the supervised practice needed to sit for the Registered Dietitian-Nutritionist (RDN) exam administered by the Commission on Dietetic Registration (CDR).

Advanced certificate program in thanatology
HEGIS code 2104.10; SED program code 30468

The advanced certificate in thanatology presents foundational and advanced knowledge in the areas of death, dying, and bereavement. The program is designed to provide training for individuals who have completed a baccalaureate degree and are working with, or interested in working with, the dying and the bereaved or for individuals who have completed a master's degree and are seeking further training. In addition, the program will allow practitioners to meet professional continuing education requirements to maintain existing licenses or certifications. The program is designed to conform to the Association for Death Education and Counseling (ADEC) certification requirements for those persons interested in becoming certified or maintaining their certification in Thanatology: Death, Dying, and

Bereavement. The advanced certificate can be completed fully online, though not all thanatology courses in the program are offered online.

Course description

Brooklyn College students matriculated in related graduate degree programs may be admitted to the advanced certificate and earn both their graduate degree and the certificate, applying 12 credits to both programs of study.

Matriculation requirements

Applicants must present a baccalaureate degree with at least a 3.00 GPA in the major and a minimum 2.85 overall GPA in 18 credits of acceptable health- or thanatology-related courses; courses in health and nutrition sciences, philosophy, psychology, sociology, biology, anthropology, chaplaincy, and counseling may meet this 18 credit matriculation requirement. Students matriculated in related graduate programs at Brooklyn College may be admitted and earn this advanced certificate in addition to the graduate degree they are pursuing. Professional development courses offered by recognized associations may also be used to meet the requirement for health- or thanatology-related coursework. Applicants must have experience in a related field.

Certificate requirements

Fifteen credits are required for the advanced certificate. Students must maintain a minimum grade point average of 3.00. No more than two courses with a grade below B may be offered toward the completion of the certification requirements.

Students must complete Health and Nutrition Sciences 7180X, 7186X, 7187X. The remaining 6 credits are elective courses chosen in consultation with the program director from the following: Health and Nutrition Sciences 7175X, 7181X, 7182X, 7183X, 7184X, 7185X, 7188X, 7901X. Other elective graduate courses may be substituted with the approval of the program director.

All courses within the advanced certificate program are currently offered as part of the Brooklyn College Master of Arts in Community Health as well. Credits earned toward the certificate are applied to the master's degree for those certificate students who successfully apply to the master's program. In turn, master's students in related degree programs at Brooklyn College can obtain the advanced certificate in thanatology

Courses

To register for courses numbered 7000 and higher, students who offer fewer than 18 undergraduate credits in health and nutrition sciences must have permission of the deputy chairperson before registration.

Unless a prerequisite is specific, students may apply graduate or undergraduate courses toward fulfillment of that prerequisite.

HNSC 7100X Proseminar in Public Health

45 hours; 3 credits
Introduction to the field of public health through an examination of its theories, principles, methods, and history. Overview of national and international health and health services. Introduction to public health resources and written presentation of critical analysis. The professional discipline of public health. Ethical issues in public health.

HNSC 7110X Fundamentals of Social and Behavioral Health

45 hours; 3 credits
This course provides a topical and theoretical survey of social and behavioral issues in public health

HNSC 7120X Fundamentals of Epidemiology

45 hours; 3 credits
Apply principles and methods of epidemiological analysis. Identify and interpret epidemiological data.
Illustrate and investigate incidence, distribution, determinants, and control of disease.

HNSC 7130X Fundamentals of Environmental Health

45 hours; 3 credits
Survey of chemical, physical and biological factors influencing quality of ambient, workplace and
home environments. Topics include: air and water pollution; radiation; hazardous substances; solid
wastes; food protection; and natural and human-made disasters.

HNSC 7131X Occupational Health in the Health Care Industry

45 hours; 3 credits
Demographics of health care workers. Common physical, chemical, biological, and psychosocial hazards in the health care environment and their effects. Nature of occupational injuries and illnesses. Control and regulation of workplace hazards. Regulatory agencies.

HNSC 7140X Fundamentals of Health Policy and Management

45 hours; 3 credits
Examination of the organization, delivery and financing of health care in the United States as it pertains to the health policy-making process, including the organization of the agencies and personnel
constituting the health care system, and analysis of government structure, laws, and regulations.
Theoretical concepts, practice, and implementation of health

programs in organized settings, including
the planning, administration, management, evaluation, and policy analysis of public health agencies
and private sector managed care.

HNSC 7141X Planning, Strategic Analysis, and Organizing of Health Care Services
45 hours; 3 credits
Dilemmas resulting from the practice of the health sciences including clinical care, public health practice, human subjects research, and the delivery of health services and the development of health policies. Conflicting needs and values of the practioners, clients, health care system, and communities. Critical evaluation of proposed solutions offered by the professions, government, communities. Case study evaluations. Examination of historic and contemporary cases.

Prerequisite: Health and Nutrition Sciences 7140X [770X]

HNSC 7142X Health Policy and Administration in Public Health
45 hours; 3 credits
Study of public health policy and its impact on health care service organization, administration, and delivery. Study of public policies that drive health care organization and delivery. Examples of special topics in public health policy such as Medicare and Medicaid development and changes. Administrative responses to policy shifts. Increasing complexity and frequent changes in law and regulation change how health care services are defined and delivered.

Prerequisite: Health and Nutrition Sciences 7140X [770X] or its equivalent.

HNSC 7143X Health Care Financial Management
45 hours; 3 credits
Study of the basic principles of health-care accounting. Analysis of health-care financial statements and responsibility-accounting techniques. Evaluation of methods of managing working capital, budgeting, using cost information in decision making, controlling costs, and financing capital projects in the health-care setting. Analysis of approaches to pricing, rate setting, and cost control in the health-care reimbursement environment.

HNSC 7144X Health Economics
30 hours plus conference; 3 credits
Economic analysis of the structure, performance, and government policy in the health care sector of the economy. Demand and supply of health care services, the role of third party payers, and the public policy debate over government reform of the health care system. Microeconomic, econometric, and political philosophy concepts relevant to issues of justice in health care. This course is the same as Economics 7060X.

HNSC 7145X Human Resources Management in Health Care
45 hours; 3 credits
Theoretical analysis of techniques for leadership and motivation of professional and nonprofessional health care employees. Study of methods for managing work groups and minimizing conflict in health care institutions. Examination of health personnel management. Evaluation of employee communications in health care. Analysis of workplace negotiation, with special reference to health care labor negotiations.

Prerequisite: a course in health care management or appropriate employment in health care management.

HNSC 7146X Law and Public Health
45 hours; 3 credits
An analysis of public health policy and legal thinking in the context of the U.S. legal system, and the roles of the branches of government in creating, administering, and enforcing the health laws. Examination of basic health law concepts and practices in the health industry. Concepts of institutional and individual responsibility. The focus is upon such areas as legal reasoning, sources of health laws, regulations, legal rights to health, standards, licensure, malpractice, and litigation.

HNSC 7150X Fundamentals of Biostatistics
30 hours lecture, 30 hours laboratory, plus conference; 3 credits
Application and interpretation of basic descriptive and inferential statistical methods for the analysis of public health and other health-related data.

HNSC 7151X Biostatistics in Health and Nutrition Sciences II
30 hours lecture, 30 hours laboratory, plus conference; 4 credits
Application of evaluation techniques for community health and nutrition professionals. Design of tools to evaluate health and nutritional status, knowledge, attitudes, and behavior for individuals and populations. Multivariate techniques for assessment of health data including survival analysis, multiple regression, multivariate analysis of variance, discriminant analysis, logistic regression, and factor analysis. Use of computer programs to analyze and interpret health and nutrition data with these techniques.

Prerequisite: Health and Nutrition Sciences 7150X [778.1X] or permission of the chairperson.

HNSC 7163X Conducting Community Needs and Strengths Assessments
45 hours; 3 credits
Introduction to community needs and strengths assessments. Identification, gathering, synthesis and presentation of population (neighborhood) specific data related to a public health issue or condition using technologically appropriate presentations. Analysis of multiple data sources including: U.S., Census, State, county, and neighborhood quantitative data as well as key informant interviews and focus groups.

Prerequisite: 9 credits of core courses in MA Community Health Education.

HNSC 7164X Health Services Development and Implementation in Community and Public Health
45 hours; 3 credits
Planning, developing and implementing public health and personal health services and relationship to population health. Examination of health planning in the United States and New York State from historical and contemporaneous perspectives. Public policy agenda shaping health services; and local activity derivation from national agenda. Implementation and operating among policy and resource constraints.

Prerequisites: 9 credits of core courses in MA Community

Health Education.

Community Health Education courses

HNSC 7170X Foundations of Community Health Education
45 hours; 3 credits
Introduction to the community health education profession. Expectations of a professional, professional development, and overall mission of public health. Discussion of the theoretical basis for the community health education profession. Introduction to a community health education program planning and evaluation model.

HNSC 7171X Program Evaluation in Community Health
45 hours plus conference; 3 credits
Development and application of program evaluation methods applicable in a range of community health and public health settings. Critique of existing community health education and other health programs for promoting critical thinking and analytic skills.

Prerequisite: Health and Nutrition Sciences 7170X [758X] or Health and Nutrition Sciences 7110X.

Thanatology courses

HNSC 7175X Human Encounters with Death and Bereavement
45 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.

HNSC 7180X Bereavement
45 hours; 3 credits
Theoretical concepts of grief and bereavement. The impact of mourning on the bereavement process. Health implications of incomplete mourning and pathological bereavement. The role of the health care professional and related personnel in providing care. Research to improve care.

HNSC 7181X Children and Death
45 hours; 3 credits
The child's concept of death. Typical childhood coping patterns in response to death of self, family member, friend. Needs of the terminally ill child, the family, and the caregiver. Alternative care settings. Available resources and supports for the health professional.

HNSC 7182X Health Crisis Intervention
45 hours; 3 credits
Relationships among health, emotion, destructive behavior. Development of sensitivity to behavior patterns leading to destructive acts. Role of the health professional in understanding crisis situations. Agencies designed to assist in health crises.

Prerequisite: Health and Nutrition Sciences 7183X [762X] or a course in health counseling.

HNSC 7183X Health Counseling
45 hours; 3 credits
Application of principles and methods of counseling to health problems. Case studies, identification of problems, techniques of interviewing.

Prerequisite: A course in personal and community health.

HNSC 7184X Bioethics: Health and Medical Dilemmas
45 hours; 3 credits
Dilemmas resulting from the practice of the health sciences including clinical care, public health practice, human subjects research, and the delivery of health services and the development of health policies. Conflicting needs and values of the practitioners, clients, health care system, and communities. Critical evaluation of proposed solutions offered by the professions, government, communities. Case study evaluations. Examination of historic and contemporary cases.

HNSC 7185X The Health Care Provider and Thanatological Counseling
45 hours; 3 credits
Theory and practice of counseling the dying patient and the bereaved. Focus on personal skill development in anticipatory bereavement and postmortem bereavement counseling. Examination of group support, self-help, and individual intervention strategies. Research and evaluation of support programs and techniques.

HNSC 7186X Principles in the Care of the Terminally Ill
45 hours; 3 credits
Needs of the dying patient and family. Clinical approaches to care of terminally ill patients and their families. Role of the hospice as an alternative-care setting. Techniques of pain management and palliative care. The role of the health care professional and related personnel in providing care.

HNSC 7187X Trauma and Traumatic Grief
45 hours; 3 credits
A study of trauma and traumatic grief. Evaluation of assessment tools, treatment modalities, and programs of prevention. Identification of the factors influencing the quality of care provided to a traumatized griever. Critique of trauma research study designs and findings.

HNSC 7188X Adolescents, Death, and Bereavement
45 hours; 3 credits
Encounters with death and bereavement during adolescence. Developmental tasks and transitions during adolescence as foundation for understanding adolescent encounters with death and bereavement. Interventions with terminally ill adolescents. Interventions with bereaved adolescents. Preventive interventions. Assessment of interventions.

Health teacher courses

HNSC 7190X The Family and Personality Development
45 hours; 3 credits

Influence of the family on the individual. Personality development and family interrelationships. Consideration of major problems of adjustment in each phase of the family life cycle. Fall term.

Prerequisite: a course in family relationships.

HNSC 7192X Problems of Drugs in Contemporary Society
45 hours; 3 credits
Drug traffic. Community cooperation in preventing and treating drug abuse. Legal factors and crime relationships; physiological, psychological, sociological aspects of drug abuse. Guidelines for drug abuse prevention and programs. Resources to support such programs in schools and communities. Field trips.

HNSC 7194X Alcohol, Alcoholism, and Health

45 hours; 3 credits
Examination of the effects of alcoholism on the United States health care system; the effects of alcohol on individual and community health. An analysis of etiology, treatment, and rehabilitation models. Issues with regard to prevention strategies and the influence of laws on alcohol abuse.

Nutrition courses

HNSC 7200X Seminar in Nutritional Practice

30 hours plus conference; 3 credits
Concepts and methods essential to the work of a practicing dietitian-nutritionist. Nutritional assessment, counseling, evaluation, management, instruction, organization, and health promotion techniques.

Prerequisite: completion of 30 credits in the MS Nutition program or 24 credits in the MA Community Heath (Foods and Health Equity) program.
Corequisite: Health and Nutrition Sciences 7202X.

HNSC 7201X Seminar in Clinical Applications of Nutrition Research
30 hours plus conference; 3 credits
The importance of the scientific literature in evaluating clinical techniques. Use and interpretation of this literature. Review of relevant research techniques. Examination of recent findings in topics of current clinical interest and their relation to clinical practice.

Prerequisite: Health and Nutrition Sciences 7200X.
Corequisite: Health and Nutrition Sciences 7203X.

HNSC 7202X Fieldwork in Dietetic Practice I

500 hours fieldwork; 3 credits
Supervised experience in medical nutritional therapy, food systems management, public health and community wellness and independent practice. The supervised practice takes place at specifically approved sites throughout the New York metropolitan area and fulfills the core competencies that have been established by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), the accrediting body of the Academy of Nutrition and Dietetics. Interns will engage in activities that include the application and provision of nutrition assessment, planning and implementation of nutritional care plans for diverse populations, counseling to individuals and groups, nutrition education, management functions and food systems analysis.

Prerequisite: Completion of 21 graduate credits in the MS Nutrition program or 24 credits in MA Community Health (Foods and Health Equity) program and acceptance into the Department's Dietetic Internship.
Corequisite: Health and Nutrition Sciences 7200X.

HNSC 7203X Fieldwork in Dietetic Practice II

500 hours fieldwork; 3 credits
A continuation of supervised fieldwork experience, specified activities, and assignments of Health and Nutrition Sciences 7202X.

Prerequisite: Health and Nutrition Sciences 7202X.
Corequisite: Health and Nutrition Sciences 7201X.

HNSC 7210X Nutritional Biochemistry

45 hours; 3 credits
Emphasis on homeostatic mechanisms and hormonal controls of intermediary metabolism on a cellular level. Select topics related to the metabolic diseases and inborn errors of metabolism.

Prerequisite: a course in advanced nutrition and a course in nutritional chemistry or biochemistry or permission of the chairperson.

HNSC 7211X Micronutrients

45 hours; 3 credits
Physiological regulation of metabolism of vitamins and minerals; effects of deficiencies and excesses.

Prerequisite: a course in nutrition and a course in biochemistry; or permission of the chairperson.

HNSC 7212X Evaluating Nutrition Research

45 hours; 3 credits
Critical examination of current literature and scientific research in nutrition. Impact of current nutritional developments relating to individual, family, and community well-being.

Prerequisite: Courses in biochemistry, medical nutrition therapy and statistics, or permission of the chairperson.

HNSC 7213X Human Pathophysiology

45 hours; 3 credits
Etiology, pathogenesis, and clinical manifestations of human diseases that are treated by nutritional therapies.

Prerequisite: a course in human physiology.

HNSC 7220X Nutrition and World Food Problems

45 hours; 3 credits
National and international nutritional conditions. Government problems, issues, policies concerning nutritional status of individuals and population groups. Regulation of food production and distribution in developing countries.

Prerequisite: a course in nutrition or permission of the chairperson.

HNSC 7221X Cultural Aspects of Foods

45 hours; 3 credits
Foodways, the study of relationships of food and culture.

Ethnic, geographic, economic, social, religious influences on food habits and practices of individuals and families.

Prerequisite: a course in food science or nutrition or permission of the chairperson.

HNSC 7222X Advanced Experimental Foods

15 hours lecture, 60 hours laboratory; 3 credits
Research techniques in food science and their application to the study of selected problems in food marketing, preparation, service, storage. Opportunity for students to conduct individual experimental projects.

Prerequisite: a minimum of 10 credits in courses in food science and nutrition and two laboratory courses in biology and/or chemistry or permission of the chairperson.

HNSC 7223X Recent Developments in Foods

45 hours; 3 credits
Review and evaluation of recent trends, issues, research in product development, food processing, distribution. Modern food technology, application, use.

Prerequisite: 6 credits in courses in foods or permission of the chairperson.

HNSC 7224X Organizational Management of Food

45 hours; 3 credits
Decision-making skills involved in the field of food service management. Application of management theories to control of food costs, work simplification techniques, and management accountability in the food service system.

Prerequisite: completion of the core requirements in the program in nutrition.

HNSC 7230X Community Nutrition

45 hours; 3 credits
Community and public health nutrition with focus on factors affecting food consumption of a community and nutritional problems of select groups. Consumption patterns, assessment techniques, intervention programs, and evaluation of programs (federal, state, and local).

Prerequisite: a course in human nutrition and a course in life cycle, developmental or geriatric nutrition, or permission of the chairperson.

HNSC 7231X Pediatric Nutrition

45 hours; 3 credits
Effects of nutritional factors on development from prenatal growth to adolescence. Topics include: placental transport of nutrients, causes of congenital defects, breast feeding vs. bottle feeding, factors affecting rate of growth and age at puberty, effects of nutritional deficiencies and excesses, and the relationship of nutrients to morphogenetic or biochemical processes.

Prerequisite: a course in advanced nutrition and a course in physiology.

HNSC 7232X Geriatric Nutrition

45 hours; 3 credits
Recent knowledge of nutrition and human aging. Special emphasis on interactions of physiological stages, age, lifestyle, health, disease, and nutrition. Examination of research findings focusing on the relationship of nutrition to the structural and functional changes associated with the aging process.

Prerequisite: a course in nutrition or permission of the chairperson.

HNSC 7233X Nutrition and Behavior

45 hours; 3 credits
The relationship between nutrient deprivation during critical growth periods and interactional and learning deficits and maladaptive behavior patterns. Behavioral disorders and nutrient needs and idiosyncrasies. Psychodietetics: determinants of psychological reactions to foods and evolving food behavior patterns.

Prerequisite: one course in psychology and a course in human nutrition and a course in physiology.

HNSC 7234X Nutrition and Exercise

45 hours; 3 credits
Exploration of human nutritional requirements of exercise; the significance of intermediary metabolic pathways and the effect of dietary manipulation on exercise performance. (This course is the same as KINS 7279X.)

Prerequisite: a course in human or animal physiology and a course in exercise physiology or biochemistry.

HNSC 7240X Assessment Techniques and Nutritional Care

45 hours; 3 credits
Study of the components of nutritional assessment as the initial step in nutrition care process. Emphasis on comparative analysis of dietary intake methods, interpretation of clinical laboratory values, evaluation of anthropometric and body composition methods, retrieval of medical history/physical examination data.

Prerequisite: a course in medical nutrition therapy.

HNSC 7241X Nutritional Aspects of Disease

45 hours; 3 credits
Changes in requirements and utilization of nutrients; nutritional status of the individual during pathological states. Disease, malnutrition, and environmental pollution assaults on nutrient metabolism. Methodology and interpretation of recent clinical nutrition research.

Prerequisite: a course in medical nutrition therapy or permission of the chairperson.

HNSC 7242X Nutrition in Health and Disease

45 hours; 3 credits
Examination of the effects of dietary patterns and nutritional factors on health outcomes with a focus on marginalized populations; adequate nutrition for health and well-being of individuals and communities; the major causes of premature mortality and morbidity; behavioral and environmental contributions to chronic disease including obesity, diabetes, heart disease, hypertension and cancer.

Prerequisites: a course in nutrition or permission from the department chair.

HNSC 7243X Food Policy

45 hours; 3 credits

A broad approach to food and nutrition policy with a focus on justice and food insecurity; programs that impact food production, distribution, consumption and access; A review of the national, state and local food and nutrition policies that effect industries, labeling, advertising.

Prerequisites: A course in community nutrition, community health course, or permission from the department chair.

HNSC 7244X Nutritional Epidemiology

45 hours; 3 credits
Principles and methods of nutritional epidemiology. Analysis and interpretation of local, national, and global food and nutrition survey tools and data. Critical investigation of the population-level contribution of food and nutrition to racial and ethnic inequities in health and diet-related disease.

Prerequisites: HNSC 7242X, an introductory course in epidemiology, statistics or an equivalent course, or permission from the department chair.

HNSC 7250X Integrative and Functional Nutrition

45 hours; 3 credits
Introduction to principles guiding the practice of integrative and functional nutrition therapy; patient centered approach; identification of unique nutritional imbalances; support for detoxification pathways; evaluation of interaction among dietary, genetic, environmental and lifestyle factors that impact chronic disease risk.

Prerequisite: A course in medical nutrition therapy and a course in human physiology

HNSC 7931X Principles of Nutrition Research

45 hours; 3 credits
Examination of experimental design as applied to nutrition research, including intervention, observational, survey, and animal models. Development of research topics; methods of data collection; interpretation and presentation of results; ethical considerations; application of principles for development of research proposals and evaluation of the nutrition literature.

Prerequisites: advanced coursework in Nutrition and a course in Biostatistics

Elective courses

HNSC 7160X Health Issues of the Urban Society

30 hours plus conference; 3 credits
The effect of poverty on the health behaviors of people living in urban and suburban areas. Analysis of current public health problems in the context of race, class, and gender. The effects of transnational migration on health.

Prerequisite: Health and Nutrition Sciences 7110X [761X]

HNSC 7162X International Health

45 hours; 3 credits
Comparative analysis of health problems in developing and developed nations. Exploration of social, cultural, political, and economic determinants of health in developing countries. Examination of the role of multilateral and bilateral assistance programs in influencing changes in health status in developing nations.

HNSC 7172X Aging: A Study of Needs and Services

45 hours; 3 credits
A study of the needs and services to the aged, emphasizing family relationships, food, nutrition, health, economic stability, and security.

HNSC 7300X Maternal, Child, Reproductive, and Sexual Health: Social and Historical Perspectives

45 hours; 3 credits
Introduction and critical overview of public health issues, approaches, and concerns in the area of maternal, child, reproductive, and sexual health. The focus will be on the United States, but global issues will be considered as well. Specific topics will include the medicalization of maternity care and infancy/childhood; the consequences of 'risk' as a dominant ideology for maternal and child health care; issues in reproductive justice, with particular attention to race and class; the historic and contemporary influence of eugenics in public health; the history of midwifery and global trends in midwifery care; and the role of public health interventions in infant care.

HNSC 7301X Human Sexuality: A Public Health Perspective

45 hours; 3 credits
Through a Public Health lens, students will develop an awareness and understanding of human sexuality. Students will understand differences in sexual expression and be able to articulate the relationship between sexuality and health. Students will learn about the effect of sterility, infertility, contraception, and abortion on individuals and population health.

HNSC 7310X Maternal, Child, Reproductive and Sexual Health: A Life Course Perspective

45 hours; 3 credits
Theoretical framework as to how life course exposures affect vulnerability to disease, with an emphasis on the roles of maternal, child, reproductive and sexual health. This course also considers how intra- and inter-generational influences may be relevant to disparities in health. Readings address empirical patterns, prevailing theories and controversies regarding life course influences, and address interventions or policies that may be applied to improve population health.

Prerequisite: HNSC 7120X and HNSC 7150X.

HNSC 7932X Introduction to Health Survey Methods and Design

45 hours; 3 credits
Introduction to health survey design and methodology. Topics include: types of inquiries best suited for survey instruments, conditions necessary for sampling, how to design, and develop both questions and survey instruments, how to test validity and reliability, conduct data cleaning and analysis.

Prerequisites: HNSC 7150X and HNSC 7930X.

Seminars, special topics, independent research

HNSC 7901X Internship I

135 hours; 3 credits
Supervised internship in a health or nutrition counseling setting similar to that in which the student expects to work. Interns are

expected to participate in the complete range of position-defined responsibilities and to be supervised jointly by certified counseling personnel and a faculty adviser from the Department of Health and Nutrition Sciences.

Prerequisite: completion of 27 graduate credits in courses in health and nutrition sciences, including Health and Nutrition Sciences 7183X [762X] and one of the following: Health and Nutrition Sciences 7200X [720X], 7195X [765X] or 7185X [774.5X], and permission of the chairperson.

HNSC 7910X Special Topics

45 hours; 3 credits
Topical discussion of recent contributions in health science. Course content varies from term to term.

HNSC 7915X Independent Reading

Minimum of 135 hours of independent work and conference; 3 credits
Reading, approved by a faculty adviser, in an area of health science. One or more written reports or a final examination.

Prerequisite: matriculation for the M.S. in Ed. in health science or for the M.A. in community health; and permission of the deputy chairperson.

HNSC 7920X Supervised Fieldwork in Public Health

180 hours of fieldwork plus weekly seminars; 3 credits
Students carry out 180 hours of supervised fieldwork that is intended to bridge academic preparation and public health practice. Knowledge and skills from the core MA and specialization courses are applied in a public health agency, community organization or other setting relevant to the student' s academic background, specialization and career expectations. This is accomplished under the supervision and guidance of an experienced preceptor. Field-based hours are implemented with classroom and individual meetings along with online communication. Aside from deliverables required by the preceptor, the student develops a reflection paper, a self-evaluation and a capstone proposal.

Prerequisites: Completion of at least 18 MA credits that include Health and Nutrition Sciences 7120X, Health and Nutrition Sciences 7150X, and two courses in the student's area of specialization.

HNSC 7925X Internship and Field Experience Seminar in Community Health

90 hours of fieldwork plus weekly seminars; 6 credits
Supervised individual projects in community health education in a community or health agency.
Culminating capstone experience for students in the MA Community Health concentration.

Prerequisite: Health and Nutrition Sciences 7170X, 7163X and 7171X, or permission of the deputy chairperson.

HNSC 7930X Research Seminar

45 hours; 3 credits
Examination of the stages of the research process, highlighting selected research designs and data collection techniques. Application of the principles and methods of research to the critical analysis of the health and nutrition sciences literature.

HNSC 7935X Research Seminar II

45 hours; 3 credits
Examination of quantitative and qualitative techniques appropriate for research in the health sciences. Class discussions of each student's efforts in developing a master's thesis. Not open to students who are enrolled in or have completed Health and Nutrition Sciences 7940X [791.3X] or 7950X [797.1X].

Prerequisite: Health and Nutrition Sciences 7930X [791.1X] or 7931X, and a GPA of 3.00 (B) or better in graduate courses completed to date.

HNSC 7940X Research Seminar III

45 hours; 3 credits
Examination of quantitative and qualitative techniques appropriate for research in the health sciences. Class discussion of each student's effort in developing a master's paper. This course may be taken two times. (Not open to students who are enrolled in or have completed Health and Nutrition Sciences 7935X [791.2X].)

Prerequisite: Health and Nutrition Sciences 7930X [791.1X] and a GPA of 3.00 (B) or better in graduate courses completed to date.

HNSC 7950X Capstone Project

30 hours plus conference; 3 credits
This course consists of a structured seminar aimed at allowing students to apply experiences gained during their graduate program and synthesize that knowledge and experience in the form of a major writing project. It is expected that students use a combination of synthesized evidence, theoretical models, and empirical research to answer a public health research question or practice problem using interdisciplinary perspectives. Not open to students who have completed Health and Nutrition Sciences 7935X [791.2X].

Prerequisite: Health and Nutrition Sciences 7930X with a grade of B or higher.

HNSC 7995X Independent Study

Minimum of 135 hours; 3 credits
Research project in a selected area of health science supervised by a faculty member.

Prerequisite: matriculation for the M.S. in Ed. in health science or for the M.A. in community health; and permission of the deputy chairperson.

HNSC 7999X Thesis Research

Hours to be arranged; 3 credits
Research for master's thesis supervised by a faculty member. Credit is not earned until the thesis is accepted. Students register for this course only once.

Prerequisite: HNSC 7931X or permission of the deputy chairperson

Kinesiology courses

KINS 7043X Applications of Exercise and Fitness Theory

45 hours; 3 credits
Examination of exercise theory, psychological aspects of

physical activity, and current fitness trends. Application of theory to the development and implementation of fitness programs in industrial, commercial, and educational settings.

KINS 7044X Risk Management and Legal Issues in Sport
45 hours; 3 credits
Risk management and legal concepts and their application to sports are covered. Common issues of risk management in sport programs are explored to protect the business, the employees and the participants. Consideration of constitutional requirements, tort, contract and commercial laws as they relate to the sports professional and participant are presented. Special topics highlighting such developing law as product liability, worker's compensation, and Titles VII and IX are included. (Not open to students who have completed Physical Education [766X.])

KINS 7100X Technology in Kinesiology

45 hours; 3 credits
Students will receive in-depth training in various digital technologies commonly used in kinesiology. Training and extensive use of assorted software, digital video, digital photography and other such digital instrumentation will be provided.

KINS 7110X Group Dynamics and Psychological Constructs in Sport and Physical Activity
45 hours; 3 credits
This course will acquaint students with theory and practice related to group behavior in sport, educational and community settings. Students in this course will be provided with a theoretical understanding of group processes, motivation for sport and performance, and leadership, relevant to sport, physical activity and community organizations.

KINS 7153X Sociology of Sport

45 hours; 3 credits
Sport in American society. Sport in relation to education, leisure, social stratification, social mobility, race, sex. Socioeconomic dimensions of sport. Literature on the sociology of sport.

KINS 7158X Motor Learning and Human Performance

45 hours; 3 credits
Behavioristic and cognitive theories related to the acquisition of gross motor skills are presented. Application of research findings to the teaching of motor skills is included.

KINS 7342X Business Management of Community/Club Sports and Recreation
45 hours; 3 credits
Business administration practices as they relate to community/club sports and recreation are covered. Overview of the field of community/club sports and recreation management are presented. Emphasis is on the practical and contemporary aspects of successful management. (This course must be taken before the completion of 12 credits in the program.) (Not open to students who have completed Physical Education [766X].)

KINS 7370X Seminar on Ethical Issues in Sport, Exercise, and Physical Activity
45 hours; 3 credits
Students will identify and analyze ethical dilemmas. This course will examine ethical decision-making in a variety of environments with an emphasis on sport, exercise, and physical activity. Real and hypothetical situations will be utilized.

KINS 7455X Administration of Interscholastic and Intercollegiate Sport
45 hours; 3 credits
Coordination of procedures for success in school-based sport programs at the secondary and collegiate level is presented. Programs, budgets, risk management, legal aspects, coaching, training, medical supervision, rehabilitation, recruitment and hiring practices are explored.

KINS 7460X Budgeting and Finance in Sports and Recreation
45 hours; 3 credits
This course focuses on fiscal and budgetary control of public and private sport organizations, recreation departments, leagues, and facilities. A number of case studies will be presented. Prior knowledge of accounting is beneficial to success in this course.

KINS 7470X Sport Marketing

45 hours; 3 credits
Students will learn about effective marketing strategies employed in successful sport programs including school-based, community-based, national and international organizations/events and professional sport.

KINS 7480X Global Sport: Olympic/Paralympic Movements and Sport Governance
45 hours; 3 credits
An overview course that explores the structure, operation, and role of global sport organizations such as the International Olympic Committee, the International Paralympic Committee, National Olympic/Paralympic Committees and an assortment of international sport governing bodies.

KINS 7999X Research Seminar in Physical Education

45 hours; 3 credits
Seminar style class with a focus on research practices in exercise/sport science, sports management and physical education in which formal course work is not offered. Independent reading, reports, and/or fieldwork are utilized. Discussion and examinations are conducted in coordination with course instructor. This course is intended to be the culminating experience for the student and should be taken in the student's last semester of enrollment in the program.

KINS 7345X Internship

15 hours seminar, 90 hours fieldwork; 3 credits
Supervised internship experience for students in Sports Management or Exercise Science and Rehabilitation. Development of competencies in an approved agency and under the direction and supervision of agency personnel and a member of the college faculty.

Prerequisite: Completed at least 18 credits in the program of study and approval of the Chairperson.

KINS 7364X Advanced Biomechanics of Sports Performance
45 hours; 3 credits
Examination of biomechanical principles associated with sports performance. Investigation of common sport activities and the kinematic and kinetic factors associated with performance.
Prerequisite: a course in biomechanics equivalent to KINS 7263X.

KINS 7365X Advanced Biomechanics of Orthopedic Injury
45 hours; 3 credits
Examination of biomechanical principles associated with causative factors in orthopedic injuries. Investigation of common human activities and the kinematic and kinetic factors associated with injury potential to the musculoskeletal system including activities of daily living, work tasks, sport and exercise.

Prerequisite: a course in biomechanics equivalent to PEES/KINS 7364X.

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

HNSC 7195X Human Relations Training Workshop in Sex Education

HNSC 7196X Family Living and Sex Education

HNSC 7902X Internship II

HNSC 7921X Internship in Public Health II

History

Department office: 1105 Boylan Hall
Phone: 718.951.5303

Full-time Faculty

Professors: Banerjee, Carp, Johnson, Meyer, O'Keeffe, Rawson, Remy, SenGupta, Stern Gabbay, Troyansky, Warren
Associate Professors: Ebert, Fishman, Mancia, Napoli

The Department of History, with award-winning faculty and students, offers rigorous study in a broad range of regions, methods, and issues across historical time. In course work and seminars, the instructors, who are published authors of books and scholarly articles, offer students a wealth of information about and insight into history in Africa, Asia, Europe, Latin America, the Middle East, and the United States as well as transnational and comparative history. The department is also notable for providing study in historiography and examining problems involved in the recording of history. With a philosophy that includes the belief that no single methodology provides the "right" answer in historical investigation and encourages inquisitiveness, the department offers courses in political, social, economic, environmental, religious, and cultural history, including the history of ideas, race, and gender. Many graduates go on to careers in teaching, law, archival management, museum work, and public service, or continue with graduate student and pursue PhDs in History or related fields.

M.A. degree program in history
HEGIS code 2205; SED program code 02107

Matriculation requirements

Applicants must have completed at least 12 credits in advanced undergraduate courses in history or, with permission of the chairperson or graduate deputy, 12 credits in advanced undergraduate courses in related fields

Students admitted as matriculants in history must complete History 7000X with a grade of A or B by the end of their first fall semester or they will lose matriculated status.

Students admitted as nonmatriculants must complete History 7000X with a grade of A or B in order to achieve matriculated status in the Department of History.

General matriculation and admission requirements of Graduate Studies are in the section "Admission."

General requirements for all students

To fulfill degree requirements, M.A. students must complete either thirty or thirty-three (30-33) credits in History Department courses. As detailed in the options below, students selecting the Thesis Option must complete thirty (30) credits and students selecting the Portfolio Option must complete thirty-three (33) credits.

Among the 30-33 hours of coursework undertaken to fulfill the general degree requirements, all students must complete three credit hours in each of three geographic areas: African, Asian, Caribbean, European, Latin American, and Middle Eastern history; Transnational and Comparative History; and U.S. One of these courses must cover in whole or substantial part the pre-1800 period, (those courses are listed below with * after their numbers).

African, Asian, Caribbean, European, Latin American, and Middle Eastern history courses include: Medieval Europe (HIST 7210X)*; Early Modern Europe (HIST 7220X)*; The Enlightenment (HIST 7230X)*; The Old Regime and the French Revolution (HIST 7310X)*; Modern France (HIST 7320X); History of Russia since 1856 (HIST 7340X); Stalinism (HIST 7350X); Modern Latin America (HIST 7512X); Topics in Caribbean and Latin American History (HIST 7515X); Modern Ottoman History, 1700-1923 (HIST 7530X); Pre-Modern China (HIST 7550X)*; Modern China (HIST 7552X); Modern South Asia;(HIST 7562X); Imperialism and Nationalism in South and Southeast Asia (HIST 7566X); Social Change in Africa, 1750-1945 (HIST 7580X); Themes in European History (HIST 7730X); Themes in Asian, African, and/or Middle Eastern History (HIST 7770X)

Transnational and/or Comparative, and/or Global history courses include: Main Currents in Contemporary World History (HIST 7110X); Global Environmental History (HIST 7130X); The Industrial Revolutions of the Eighteenth and Nineteenth Centuries (HIST 7120X); Ancient Explorations (HIST 7140X)*; Ancient History and Culture On-Site (HIST 7141X)*; The Imperial World at War (HIST 7370X); Europe Since 1945 (HIST 7380X); Slavery and Freedom: Comparative and Transnational Perspectives (HIST 7517X); Gender, Race, and Empire (19th-20th centuries) (HIST 7568X); Themes in World History (HIST 7780X)

U.S. history courses include: The Colonial Period (HIST 7411X)*; The American Revolution and the Constitution (HIST 7412X); Civil War and Reconstruction (HIST 7420X); The Gilded Age and the Progressive Era (HIST 7425X); Twentieth-Century America (HIST 7430X); History of American Political Parties (HIST 7440X); American Economic History (HIST 7441X); Modern American Diplomatic History from 1898 (HIST 7442X); American Environmental History (HIST 7444X)
The Environmental History of Urban America (HIST 7445X); The History of the American Presidency (HIST 7446X) American Constitutional History (HIST 7448X); African American History (HIST 7450X)
Race, Ethnicity, and Migration: Histories and Discourses (HIST 7460X); Themes in United States History (HIST 7740X)

Special Topics in History (HIST 7600X) can apply to any one of the categories above, depending on the topic.

Students selecting both Thesis and Portfolio Options must also complete:

(1) History 7000X with a grade of A or B. All students must take History 7000X during their first fall semester in the program, and must receive a grade of A or B to satisfy graduation requirements; and (2) History 7050G.

Thesis Option Requirements:

Completion of general department requirements and six (6) courses numbered from History 7110X-7780X. After completing both History 7000X and 12 hours of course work, students who select the thesis option must take at least one Independent Reading (History 7840G) or one Independent Research (History 7850G) course with their chosen thesis adviser. A second Independent Study or Independent Research course could, with permission, substitute for the sixth of the courses numbered from History 7110X-7780X. Following the Independent Reading course, the thesis adviser will evaluate the student's preparedness to write a thesis. A student approved to write a thesis will be required to submit a proposal to the adviser and to complete a Master's Essay (History 7830G).

Portfolio Option Requirements:

Completion of general department requirements and nine (9) courses numbered History 7110X to History 7780X. With the permission of the chairperson or the graduate deputy, students may replace a maximum of two (2) of these courses with History 7840G and/or History 7850G. Students who select the Portfolio option must provide a portfolio containing two substantial papers written for graduate-level history courses taken in the History Department at Brooklyn College, and must pass an oral defense before a departmental committee of full-time faculty. At least one of the two papers submitted must be a research paper based on an extensive use of primary sources.

Department Recommendations

Students should consult the graduate deputy early in their course of study and each semester thereafter.

Students who intend to study toward a doctoral degree should have completed at least two years of college-level foreign language study.

Students who intend to study toward a doctoral degree should ascertain the matriculation requirements of the graduate school they plan to attend.

CUNY Ph.D.

The City University of New York offers a doctoral program in history. General information about CUNY Ph.D. programs is in the chapter “Support for Academic Success in Graduate School.” Department courses may be credited toward the CUNY history doctoral degree with permission of the executive officer of the doctoral program. For information, students should consult the graduate deputy of the History Department and the executive officer of the doctoral program.

Courses

Asian/African/Caribbean/European/Latin American history

HIST 7210X Medieval Europe

30 hours plus conference; 3 credits
Topics in the culture and society of western Europe from late antiquity to the fifteenth century. The transition from the Roman world. The Carolingians. “Feudal” society. Agricultural change and commercial revolutions. The Crusades. Jewish-Christian-Muslim relations. Universities and Scholasticism. Chivalry. Mysticism. The development of the Church and the Papacy. The Black Plague. Romanesque and Gothic art and architecture. The development of nation states and empires in Europe. Ultimately, we will ask the question: how was the medieval world essential to the development of our modern ideas and institutions?

HIST 7220X Early Modern Europe

30 hours plus conference; 3 credits
The history of Europe from 1350 to 1789. For a long time, Early Modern Europe has been glorified as a time of “renaissances,” scientific and religious “revolutions,” and overall “Enlightenment.” After all, this period saw the print revolution,

tremendous developments in art-making, and huge transformations in civic culture. But the early modern world also created systems of race, slavery, capitalism, and colonialism that would last for centuries. This class will determine how (and whether) we can reconcile these two polarities.

HIST 7230X The Enlightenment

30 hours plus conference; 3 credits
European thought and culture in the eighteenth century. The Republic of Letters and its social and cultural contexts. Enlightenment and Counter-Enlightenment as roots of modern culture wars. Relationship between Enlightenment and Revolution. Globalizing, racializing, and gendering the Enlightenment.

HIST 7310X The Old Regime and the French Revolution

30 hours plus conference; 3 credits
Society, culture, and politics of the Old Regime. French Revolution (1789-1799) and its historiography. Political culture, monarchy and republic, left and right, democracy and terror. Gender and race in current French Revolutionary scholarship.

HIST 7320X Modern France

30 hours plus conference; 3 credits
Legacies of the French Revolution and Napoleon. Social, cultural, and political conflicts in the nineteenth, twentieth, and early twenty-first centuries. Histories of revolution and reaction, religion, republicanism and secularism, work and social class, region, nation, and transnational institutions, gender and race.

HIST 7340X Late Imperial Russia and the Soviet Union

30 hours plus conference; 3 credits
Russian and Soviet history from the mid-nineteenth through late twentieth centuries. Emphasis on social and political upheaval during the so-called “era of great reforms” and its aftermath; ethnicity, race, and empire; revolutionaries and revolutions; Bolshevism, Leninism, and Stalinism; everyday Soviet life; ideology and its social meanings; cold war; de-Stalinization; “stagnation;” perestroika, and the demise of the USSR.

HIST 7350X Stalinism

30 hours plus conference, 3 credits
Stalinism and historiographical debates on Stalinism. Critical analysis of ideology, citizenship, the economy, state violence, gender, ethnicity, war, everyday life, and selfhood in the Soviet Union under Stalin. Study of and debates over historical memory of Stalin and Stalinism in the late Soviet and post-Soviet eras.

HIST 7355X Race and Ethnicity in the Soviet Union

45 hours; 3 credits
History of race and ethnicity in the Soviet Union with emphasis on ordinary people’s varied experiences of Soviet racial and ethnic politics. Topics include: Soviet internationalism and transnational communism; Black sojourners to the USSR; Soviet nationality policy and ethnic diversity; Stalinist ethnic cleansing; Cold War racial politics; decolonization and development in a bipolar world; the racialization of ethnicity within the USSR over time; the ethnic/racial dimensions of perestroika and the USSR’s demise; historical comparison of ideologies of race and racial regimes; and historiographical debates about race and ethnicity in the Soviet context.

HIST 7512X Modern Latin America

30 hours plus conference; 3 credits
Transformation of the leading countries of Latin America from the age of reform and independence. Emergence of the changing political culture, society, and economic order of today.

HIST 7515X Topics in Caribbean and Latin American History

30 hours plus conference; 3 credits
Topics in the history and historiography of Latin America and the Caribbean basin.

HIST 7530X Modern Ottoman History, 1700-1923

30 hours plus conference; 3 credits
Historiography and historical background; Ottomans and their wider world; statecraft and autocracy; trade and economic life; society and popular culture; women in the empire; peasants and townspeople; minority relations; encroaching Europe and reform; Egypt and Muhammad Ali; the Young Ottomans; centrality of the Balkans and consequences of their loss; debates over "decline"; debt crisis; Young Turks and centralization; pan-Islam; emergence of Arab nationalism; Ottomans and Zionists; war and collapse; imperial legacies.

HIST 7550X Pre-Modern China

30 hours plus conference; 3 credits
The history of China from its earliest origins to the Ming dynasty. Topics will vary, but may include the earliest Stone-Age civilizations, origins of the Chinese state and religion, the period of classical philosophy, the first conquest dynasties, the development of popular culture.

HIST 7552X Modern China

30 hours plus conference; 3 credits
China from the early nineteenth century to the present. Breakdown of the Manchu dynasty and transformation of the traditional civilization during the republican and Communist eras.

HIST 7562X Modern South Asia

30 hours plus conference; 3 credits
India under British rule, and India, Pakistan, and Bangladesh since independence. Evolution of nationalist movements and problems of modernization. Role of these independent nations in world affairs.

HIST 7566X Imperialism and Nationalism in South and Southeast Asia

30 hours plus conference; 3 credits
Patterns of British and French rule in South and Southeast Asia from the nineteenth century. The rise of nationalism in India and Vietnam from the late nineteenth century. Comparative 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 and Japanese expansion for European rule and nationalist movements. Independence in the postwar period and the continuing role of great powers in the region. Some comparisons will be made to Indonesia, Malaya, Burma, and Cambodia.

HIST 7580X Social Change in Africa, 1750-1945

30 hours plus conference; 3 credits
Introduction to social change in sub-Saharan Africa from the era of the slave trade to the end of World War II. Emphasis on internal transformations sparked by industrialization, imperial expansion and colonization, including both political innovations and changing market relations as well as transformations in kinship and gender relations. In depth coverage of slavery, women in the economy, the development of an African working class, religious transformations, the emergence of new elites, the growth of modern political activism, and resistance to colonization. This course is the same as Africana Studies 7050X.

HIST 7730X Themes in European History

30 hours plus conference; 3 credits
Readings, discussions, and analyses of significant themes in European history. Topics vary each semester. Students may take this course for credit twice, but may not repeat topics.

HIST 7770X Themes in Asian, African, and/or Middle Eastern History

30 hours plus conference; 3 credits
Readings, discussions, and analyses of significant themes in African, Asian, Caribbean, Latin American, or Middle Eastern history. Topics vary each semester. Students may take this course for credit twice, but may not repeat topics.

Transnational, comparative and/or global history

HIST 7110X Main Currents in Contemporary World History

30 hours plus conference; 3 credits
The history of the main world regions and their interrelationship since 1945. Breakdown of the wartime alliance; confrontation between the West and the Soviet Union; the atomic age; the eras of the cold war and peaceful coexistence; wars of national liberation and the new states of Africa and Asia. Historical contexts of modern revolutions and wars. Breakup of the Soviet Union; Persian Gulf War and the primacy of oil; the new nationalism and ethnic conflicts; the global economy and the silicon age.

HIST 7120X The Industrial Revolutions of the Eighteenth and Nineteenth Centuries

30 hours plus conference; 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.

HIST 7130X Global Environmental History

30 hours plus conference; 3 credits
Interactions among human societies and the natural environment within the context of global history. Attention to pre-modern environmental relationships; the ecological expansion of Europe; the impact of industrialization, urbanization, and colonialism; and the rise of conservation and environmental movements.

HIST 7140X Ancient Explorations

6 hours; 6 credits
On-site learning and teaching. Topography and monuments of one or more major centers of ancient Mediterranean culture such as Athens, Rome, the Bay of Naples, or western Asia Minor. Emphasis on research methodologies and social contexts.

Prerequisite: Permission of the chairperson.

HIST 7141X Ancient History and Culture On-Site

45 hours; 3 credits
On-site learning and teaching. Intensive study of one or more aspects of the ancient history, culture, and development of ancient Mediterranean cultures such as Athens, Rome, or western Asia Minor. Emphasis on research methodologies and social contexts.

Prerequisite: Permission of the chairperson.

HIST 7370X The Imperial World at War

30 hours plus conference; 3 credits
History of global conflict between imperial states from the late 1800s through the 1980s. Topics include competition for colonies and regional conflicts in the Caribbean, Africa, Europe, and Asia; World War I and World War II as instances of conflict between imperial states; decolonization as an extension of the age of global imperial wars.

HIST 7380X Europe Since 1945

30 hours plus conference; 3 credits
European politics and society from 1945 to the present. Emphasis on changes in European society brought about by the catastrophes of war and genocide: "deradicalization" of the right and left, the politics of memory, decolonization, the impact of the United States, the collapse of communism and the USSR, German reunification, European economic integration, and the Balkan wars.

HIST 7517X Slavery and Freedom: Comparative and Transnational Perspectives

30 hours plus conference; 3 credits
History and historiography of slavery and meanings of freedom in geographical regions including but not limited to the Atlantic and Indian Ocean Worlds. Use of the scholarship, archives, and images inspired by peoples in bondage, to connect and compare the ways in which slavery was codified, experienced, imagined, narrated, and contested in different parts of an interconnected world. Concepts of “agency,” “diaspora,” and tropes of “difference,” in histories of slavery and emancipation; boundaries between law and practice, family and the market, and nation and empire within that history; its relationship with

discourses of poverty and the workings of political economy, culture and community; identity formations of race, caste, class, gender, sex, and sexuality; impact of migrations, revolts and revolutions.

HIST 7568X Gender, Race, and Empire (19th-20th centuries)
30 hours plus conference, 3 credits
Traces intersections 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 race and gender specific ideologies introduced by colonial regimes and their impact on native population in a comparative framework. Explores connections between women and imperialism and involvement and activism of European and American women with nationalist and women' s questions in South Asia and beyond.

HIST 7780X Themes in World History

30 hours plus conference; 3 credits
Readings, discussions, and analyses of significant themes in transnational, comparative, or international history. Topics vary each semester. Students may take this course for credit twice, but may not repeat topics.

United States history

HIST 7411X The Colonial Period

30 hours plus conference; 3 credits
British American colonies. Colonial intellectual trends. Intercolonial aspects of social development. Foundations of American nationality to 1763.

HIST 7412X The American Revolution and the Constitution
30 hours plus conference; 3 credits
Political, social, and economic forces that accompanied the American Revolution. Nature of the critical period. Drafting and ratification of the Constitution.

HIST 7420X Civil War and Reconstruction

30 hours plus conference; 3 credits
Scholarly interpretations of the U.S. Civil War; its memory; its influence on concepts of citizenship and states' rights. Slavery, race, and the "Peculiar South"; westward expansion; new forms of mass politics, and economic and cultural changes within northern society that shaped the antislavery movement. The impact of class, gender, and racial affiliations. Debates in Reconstruction historiography.

HIST 7425X The Gilded Age and the Progressive Era

30 hours plus conference; 3 credits
Political, economic, and social issues of the Gilded Age. Populist revolt. Spanish-American War; overseas expansion and commitments. Progressive reforms. World War I and its immediate consequences.

HIST 7430X Twentieth-Century America

30 hours plus conference; 3 credits
American history from the aftermath of the Progressive Era until the present. The course will focus on the effects of the Wilson presidency; the Depression and American life; the New Deal, World War II, and the onset of the Cold War; the changing nature of postwar liberalism; the United States in Vietnam; Richard Nixon and Watergate; environmentalism, feminism, and new social movements; the revitalization of American conservatism; 9/11 and its impacts; the Obama and Trump presidencies.

HIST 7440X History of American Political Parties

30 hours plus conference; 3 credits
Development, role, and impact of political parties in American history.

HIST 7441X American Economic History

30 hours plus conference; 3 credits
Historical analysis of such factors as the frontier, immigration, absence of a rigid class system, regionalism, sectionalism in development of American economic thought and institutions from colonization through the nineteenth century.

HIST 7442X Modern American Diplomatic History from 1898
30 hours plus conference; 3 credits
American international relations from the Spanish-American War to the present.

HIST 7444X American Environmental History

30 hours plus conference; 3 credits
Interactions among humans and the North American environment. Attention to influence of environment on human culture, impact of human culture on the environment, and ideas about nature. Native American approaches to the natural world; environmental impact of European colonization; rise of industrial cities; romanticism; conservation and preservation; environmentalism and environmental justice.

HIST 7445X The Environmental History of Urban America
30 hours plus conference, 3 credits
Interactions between urban societies and the natural environment in United States history. Attention to early urbanization and industrialization; the relationship between city and country; the development of pastoral parks and suburbs; pollution, public health, and environmental justice; and sprawl.

HIST 7446X The History of the American Presidency

30 hours plus conference; 3 credits
The history of the American presidency from the constitutional era until the present day. Topics include: the constitutional debates over the executive; the establishment and consolidation of the office; the records of important presidents, such as Washington, Lincoln, and the Progressive Era presidents; FDR and the expansion of the executive branch bureaucracy; the modern presidency and security matters, the law, foreign affairs, and public opinion.

HIST 7448X American Constitutional History

30 hours plus conference; 3 credits
This course will examine American constitutional history since 1750. Beginning with the Revolutionary Era and the Constitutional Convention, the course will cover the establishment of the Supreme Court, nineteenth-century debates over slavery and economics, and the changing role of the Court in twentieth- and twenty-first century America.

HIST 7450X African American History

30 hours plus conference; 3 credits
African American history, historiography, and epistemologies within the framework of major landmarks, including the role of Africa and Africans in the making of the Atlantic World; enslavement, structural racism, and emancipation in North America; the Great Migration; civil rights struggles and meanings of freedom; and the legacies of this history in contemporary society. Underlying connecting themes include racial formation mediated by constructs of gender, sex, and sexuality; memory and diaspora; politics of representation in scholarship and popular culture; and the interplay between “agency,” and structure in African American pasts.

HIST 7460X Race, Ethnicity, and Migration: Histories and Discourses

30 hours plus conference; 3 credits
History of the movement of peoples to what is now the United States from the 1500s to the present. Immigration, migration, and enslaved peoples in the Colonia era; citizenship, race and ethnicity in the age of Revolution; the rise of nativism; immigration policy; assimilation, ethnic resilience, and cultural hegemony; the impact of race on identities cultures; post-World War II immigrants, migrants, and refugees; America's newest arrivals.

HIST 7740X Themes in United States History

30 hours plus conference; 3 credits
Readings, discussions, and analyses of significant themes in United States history. Topics vary each semester. Students may take this course for credit twice, but may not repeat topics.

Colloquia

HIST 7000X Introduction to the Study of History

30 hours plus conference; 3 credits
Analysis of historical sources and of approaches to writing history.

HIST 7050G Research and Writing Workshop

30 hours plus conference; 3 credits
Application of basic principles and techniques of primary source based historical research and writing to the production of student theses and portfolio papers.

Prerequisite: History 7000X [700X] with a grade of A or B and permission of the chairperson or the graduate deputy.

Special topics

HIST 7600X Special Topics in History

30 hours plus conference; 3 credits
Offered at intervals. Topics vary. May be taken more than once, but a student may not repeat the same topic.

Independent Studies

HIST 7830G Master's Essay

Hours to be arranged; 3 credits
Research for master's essay supervised by a faculty member. Credit is not earned until the essay is accepted. Students may register for this course only once.

Prerequisite: History 7000X [700X] and 7050G [705G] (or 7850G [785G]); and permission of the instructor, and of the chairperson or the graduate deputy.

HIST 7840G Independent Reading

Minimum of 135 hours of independent reading and conference; 3 credits
Independent study of readings from a selected area of history supervised by a faculty member. Findings are presented in written reports and/or a final examination. This course may be taken for credit twice.

Prerequisite: History 7000X [700X]; and permission of the instructor, and of the chairperson or the graduate deputy.

HIST 7850G Independent Research

Minimum of 135 hours of independent research and conference; 3 credits
Extensive research under faculty supervision. Findings presented in a substantial research paper.

Prerequisite: History 7000X [700X] with a grade of A or B; and permission of the instructor, and of the chairperson or the graduate
deputy.

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

HIST 7330X Modern Britain: 1780 to the Present

HIST 7384X Women in Modern Europe

HIST 7390X History of Marxism

HIST 7540X Nationalism and Revolution in Modern East Asia

HIST 7570X Asia and the United States

Judaic Studies

Department office: 3111 James Hall
Phone: 718.951.5229

Full-time Faculty

Professors: Flatto, Shapiro
Associate Professors: Amanik, Brodsky

The Department of Judaic Studies is committed to rigorous, critical, and serious teaching and research about the Jewish civilization born in the ancient Middle East that has flourished in a variety of forms in many places for more than three thousand years. The department's course offerings and programs reflect the chronological scope and geographic diversity of the Jewish experience, with particular strength in the fields of intellectual, religious, and social history, founded on analytic study of primary sources.

Areas of study include the Bible; Talmud and Midrash; Jews of Central and Western Europe and America; the Holocaust; Israel and the Middle East; and modern Jewish thought.

Courses

Judaic Studies

JUST 7783G Thesis Research

Hours to be arranged; 3 credits
Research for the master's thesis supervised by a faculty member.

Prerequisite: permission of the chairperson.

JUST 7785G Independent Study

Hours to be arranged; 3 credits
Readings in a selected area of Judaic studies supervised by a faculty member. Research paper and/or final examination.

Prerequisite: permission of the chairperson.

JUST 7821X Special Topics: Bible

30 hours plus conference; 3 credits
Topics vary from term to term.

JUST 7822X Special Topics: Talmud and Midrash

30 hours plus conference; 3 credits
Topics vary from term to term.

Prerequisite: permission of the chairperson

JUST 7823X Special Topics: Jews of Central and Western Europe

30 hours plus conference; 3 credits
Topics vary term to term.

JUST 7824X Special Topics: Jews of Eastern Europe

30 hours plus conference; 3 credits
Topics vary from term to term.

JUST 7825X Special Topics: Holocaust

30 hours plus conference; 3 credits
Topics vary from term to term.

JUST 7826X Special Topics: Jews of America

30 hours plus conference; 3 credits
Topics vary from term to term.

JUST 7827X Special Topics: Israel and the Middle East

30 hours plus conference; 3 credits
Topics vary from term to term.

JUST 7828X Special Topics: Modern Jewish Thought

30 hours plus conference; 3 credits
Topics vary from term to term.

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

JUST 7707X Dead Sea Scrolls

JUST 7720X Western European Jewry from the Seventeenth Century to 1815

JUST 7723X Topics in the History of Western and Central European Jewry

JUST 7724X Modern German Jewry

JUST 7730X East European Jewry Until 1917

JUST 7731X Jews in Eastern Europe, 1917 to the present

JUST 7736X Hasidic Dynasties: Leadership and Community

JUST 7741X The Jewish Experience in the United States

JUST 7747X Perspective on the Holocaust

JUST 7748X The Holocaust in Literature

JUST 7749X The British and American Response to the Holocaust

JUST 7750X Holocaust Seminar

JUST 7751X Israel in the Modern World

JUST 7754X Zionism

JUST 7755X Jews in the Moslem World

JUST 7760X Jewish Perspectives on Contemporary Ethical Issues

JUST 7761X Contemporary Jewish Thought

JUST 7763X Suffering: The Book of Job and Its Literature

Management, Marketing and Entrepreneurship

Department office: 218 A Whitehead Hall
Phone: 718.951.5154

Full-time Faculty

Professors: Bell, Clarke, Connell, Davidoff, Fogel, Friedman, Hu, Queneau, Raghupathi, Stone
Associate Professors: Amoo, Birnbaum, Chiu, Hampton-Sosa, Hirakubo, Langbert, Lewis, Lynch, Manlow
Assistant Professors: Pham, Rifkin, Zeng
Lecturer: Bassell

M.S. degree program in business administration
HEGIS code 0517; SED program code 01895

The program offers seven options: Economic Analysis, Global Business, Accounting, General Business, Business Intelligence, Data Analysis, Marketing, and Producing in Cinematic Arts. Accounting is open only to students who have taken introductory accounting, managerial accounting, financial accounting, and income taxation or the equivalent. The program provides students with the knowledge and skills to successfully pursue a wide range of careers in management, marketing, business analytics, international business, and economic analysis.

The Master of Science in Business Administration at Brooklyn College provides students with the knowledge and skills to successfully pursue a wide range of careers in management, marketing, business analytics, international business, economic analysis, and producing in cinematic arts. Options 2, 3, 4, 5, and 6 of the program can be completed fully online.

All applicants must have undergraduate courses in macroeconomics, microeconomics, statistics, and calculus.

Please note that Option 3: Accounting is open only to students who have taken Accounting 2001, 3001, 3011, 3021, and 3101 (introductory accounting, managerial accounting, financial accounting, and income taxation) or the equivalent.

Applicants to option 7 are not required to have taken macroeconomics, microeconomics, statistics, and calculus.

Degree Requirements (30 - 36 credits)

Students must complete at least 24 credits in courses offered by the Business Management, Accounting, Finance, or Economics Departments. Consistent with college policy, transfer credits for graduate courses taken at other institutions may be accepted for some of these courses at the discretion of the chairperson or deputy chairperson.

Option 1: Economic Analysis (33 credits)

Required: 15 credits (5 courses): Economics 7000X, Economics 7010X, Economics 7020X, Economics 7021X, and Economics 7025X.

Major specific requirement: 18 credits (6 courses) from the following: Economics 7215X or Finance 7215X, Finance 7216X, Economics 7230X or Business 7230X, Economics 7309X, Economics 7027X, Economics 7028X, Economics 7030X, Economics 7040X, Economics 7045X, Economics 7050X, Economics 7055X, Economics 7060X or Health and Nutrition Sciences 7144X, Economics 7090X, Economics 7091G, and Economics 7095G.

Substitutions: With the permission of the chairperson or graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the 18 credit Major Specific requirement: Students who have taken Mathematics 2101 or equivalent may, with permission of the graduate deputy, waive Economics 7025X, and substitute an appropriate course in Economics or another department. Students who have taken Mathematics 2501 or Mathematics 3501 or equivalent may, with permission of the graduate deputy, waive Economics 7020X, and substitute an appropriate course in Economics or another department. Students that have taken Finance 7215X may not register for Economics 7215X.

Option 2: Global Business (30 credits)

Required: 12 credits (4 courses) from the following: Business 7204X or Business 7208X or Business 7279X or Economics 7021X; Business 7206X or Economics 7000X; Business 7276X or Economics 7020X; and Business 7278X or Economics 7025X.

Major specific requirement: 12 credits (4 courses) from the following: Business 7210X, Business 7220X, Business 7257X, and Business 7260X.

Electives: 6 credits (2 courses): Any Business course with a Business prefix (BUSN). This can include Business courses that were not used to fulfill the Required courses requirement. Students may find the following courses of interest: Business 7280X, Business 7281X, Business 7282X, Business 7283X, and Business 7284X. Courses cross listed with Business courses such as Computer and Information Science 7702X, Computer and Information Science 7704X, Economics 7205X, Economics 7230X, Psychology 7246G, Psychology 7247G, and Television, Radio and Emerging Media 7727X may also be used to satisfy this requirement.

Substitutions: With the permission of the chairperson or graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the Electives requirement.

Option 3: Accounting (30 credits)

This option is only open to students who have taken Accounting 2001, 3001, 3011, 3021, and 3101 (introductory accounting, managerial accounting, financial accounting, and income taxation) or the equivalent.

Required: 12 credits (4 courses) from the following: Business 7204X or Business 7208X or Business 7279X or Economics 7021X; Business 7206X or Economics 7000X; Business 7276X or Economics 7020X; and Business 7278X or Economics 7025X.

Major Specific requirement: 12 credits (4 courses) from the following: Accounting 7108X, Accounting 7109X, and two additional courses with an Accounting prefix (ACCT). Courses cross listed with Accounting courses such as Business 7131X may also be used to satisfy this requirement.

Electives: 6 credits (2 courses): Any Business course with a Business prefix (BUSN). This can include Business courses that were not used to fulfill the Required courses requirement. Students may find the following courses of interest: Business 7280X, Business 7281X, Business 7282X, Business 7283X, and Business 7284X. Courses cross listed with Business courses such as Computer and Information Science 7702X, Computer and Information Science 7704X ,Economics 7205X, Economics 7230X, Psychology 7246G, Psychology 7247G, and Television, Radio and Emerging Media 7727X may also be used to satisfy this requirement.

Substitutions: With the permission of the chairperson or graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the Electives requirement.

Option 4: General Business (30 credits)

Required: 12 credits (4 courses) from the following: Business 7204X or Business 7208X or Business 7279X or Economics 7021X; Business 7206X or Economics 7000X; Business 7276X or Economics 7020X; and Business 7278X or Economics 7025X.

Major Specific requirement: 18 credits (6 courses) from the following: Any Business course with a Business prefix (BUSN). This can include Business courses that were not used to fulfill the Required courses requirement. Students may find the following courses of interest: Business 7280X, Business 7281X, Business 7282X, Business 7283X, and Business 7284X. Courses cross listed with Business courses such as Computer and Information Science 7702X, Computer and Information Science 7704X, Economics 7205X, Economics 7230X, Psychology 7246G, Psychology 7247G, and Television, Radio and Emerging Media 7727X may also be used to satisfy this requirement.

Substitutions: With the permission of the chairperson or graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the Major Specific requirement.

Option 5: Business Analytics (30 credits)

Required: 12 credits (4 courses) from the following: Economics 7000X or Business 7206X; Business 7276X; Economics 7020X; Economics 7021X or Business 7204X or Business 7208X or Business 7279X; and Economics 7025X or Economics 7230X or Business 7230X.
Major Specific requirement: 12 credits (4 courses) from the following: Business 7278X; Business 7280X or Business 7281X; Business 7282X; and Business 7281X or 7284X.

Electives: 6 credits (2 courses): Any Business course with a Business prefix (BUSN). This can include Business courses that were not used to fulfill the required courses requirement. Courses cross listed with Business courses such as Computer and Information Science 7702X, Computer and Information Science 7704X, Economics 7205X, Economics 7230X, Psychology 7246G, Psychology 7247G, and

Television, Radio, and Emerging Media 7727X may also be used to satisfy this requirement.

Substitutions: Those who completed one year of calculus can substitute Economics 7025X with an additional third Elective class. With the permission of the chairperson or the graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the Electives requirement.

Option 6: Marketing (30 credits)

Required: 12 credits (4 courses) from the following: Business 7206X or Economics 7000X; Business 7276X or Economics 7020X; Business 7278X or Economics 7025X; Business 7279X or Business 7204X or Business 7257X or Economics 7021X or Economics 7230X or Business 7230X.

Major specific requirement: 12 credits (4 courses) from the following:
Business 7203X; Business 7208X; Business 7212X; and Business 7280X or Business 7281X or Business 7282X or Business 7284X.

Electives: 6 credits (2 courses): Any Business course with a Business prefix (BUSN). This can include Business courses that were not used to fulfill the Required courses requirement. Students may find the following courses of interest: Business 7280X, Business 7281X, Business 7282X, Business 7283X, and Business 7284X. Courses cross listed with Business courses such as Computer and Information Science 7702X, Computer and Information Science 7704X, Economics 7230X, Psychology 7246G, Psychology 7247G, and Television, Radio and Emerging Media 7727X may also be used to satisfy this requirement.

Substitutions: With the permission of the chairperson or graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the degree.

Option 7: Producing in Cinematic Arts (36 credits)

Required: 30 credits (10 courses) from the following: Accounting 7101X, Business 7200X, Business 7202X, Business 7203X, Business 7212X, Film 7016G, Film 7401G, Film 7411G, Film 7801G, and Film 7462G.

Electives: 6 credits (2 courses): Any Business course with a Business prefix (BUSN) or any Film course with a Film prefix (FILM). This can include Business and Film courses that were not used to fulfill the required courses requirement. Courses cross listed with Business courses such Computer and Information Science 7702X, Computer and Information Science 7704X, Economics 7205X, Economics 7230X, Psychology 7246G, Psychology 7247G.

Substitutions: With the permission of the chairperson or graduate deputy chairperson, students may be allowed to take up to 6 credits of other courses to complete the degree.

Courses

BUSN 7131X Tax Regulation & Strategy

45 hours; 3 credits
The practical application of accounting and government regulations regarding the taxation of individuals and entities. Legal aspects of operating a business, regulation, and corporate social responsibility. The federal tax process, procedures, accounting, and planning are explored. This course is the same as Accounting 7131X.

Prerequisite: At least 9 credits of undergraduate courses in accounting

BUSN 7200X Organization Behavior

30 hours plus conference; 3 credits
History of management thought; individual needs, values, motivation, career development, small groups, formal organization, management processes. (Not open to students who have completed Economics 705.2X.)

BUSN 7202X Bargaining and Conflict Resolution

30 hours plus conference; 3 credits
The nature and dynamics of conflict and the methods to resolve conflict. Focus on mutual problem-solving approaches and mediation. New developments in the economic theories of bargaining, nature of conflict, power, conflict resolution, the nature of negotiation, finding negotiation leverage, principled negotiation, mediation and arbitration. Trends in the discipline of conflict resolution.

BUSN 7203X Media Marketing and Promotion

45 hours; 3 credits
Principles of marketing and promotion. Developing marketing and promotion strategies. Implementing campaigns. Evaluating their effectiveness in attracting audiences and building audience share in increasingly competitive electronic mass communication industries. This course is the same as Television, Radio and Emerging Media 7727X.

BUSN 7204X Strategic Management and Business Policy

30 hours plus conference; 3 credits
Focuses on strategy, value creation, and value capture in different business contexts within changing business environments of the 21st century. Provides students with an

integrative, top management perspective of directing a business. Special attention will be paid to the role of strategic issues in entrepreneurial ventures and small businesses.

BUSN 7205X Managerial Economics

30 hours plus conference; 3 credits
An introduction to microeconomic concepts -- demand cost, profit, pricing strategies, forecasting--with applications to managerial decision making. (Not open to students who have completed Economics 7000X.) This course is the same as Economics 7205X.

BUSN 7206X Microeconomics for Business Decisions

30 hours plus conference; 3 credits
Drawing upon modern managerial economics, this course will develop students' ability to apply the tools of economic analysis to make business decisions. The course will cover the following topics: economists' view of behavior, markets and organizations, demand, production and cost, market structure, pricing, strategy and game theory, incentive conflicts and contracts, organizational architecture, decision rights, human resource decisions, vertical integration and outsourcing, leadership and change within organizations, regulation, and creating organizational architectures that foster ethical behaviors.

BUSN 7208X Marketing Management

30 hours plus conference; 3 credits
A comprehensive course examining the fundamental concepts and principles involved in the marketing of goods, services, and ideas. Topics covered include: marketing for nonprofit organizations, environments of marketing, strategic planning, buyer behavior, marketing research, market segmentation, product planning and development, pricing, promotion, international marketing, and marketing ethics. (Not open to students who have completed Economics 608X or 709X or Business 608X).

Prerequisite: at least 12 credits in undergraduate courses in accounting, business, and/or economics or permission of the graduate deputy chairperson.

BUSN 7209X Business Management of Sports

45 hours; 3 credits
Principles of management; accounting, budgeting, and control systems for sports organizations, athletic facilities and institutions; labor relations, payroll procedures and taxation; break-even analysis; case studies. (Not open to students who have completed Business 609X.)

Prerequisite: Economics 7010X or Accounting 7101X [701X] or an equivalent college-level accounting course.

BUSN 7210X Innovation and the Drive for Growth

30 hours plus conference; 3 credits
New international centers of innovation, including China, India, Israel, Japan, Latin America, and Russia, as well as the United States and Western Europe. The drive for growth. Examples from international business strategy and structure. Corporate and government approaches to managing innovation.

BUSN 7212X Internet Marketing and Social Media

45 hours; 3 credits
Role of the Internet-based marketplace and social media in the business environment. Impact of digital marketing business practices on a company's corporate objectives. Analysis of the infrastructure needed to deploy an effective e-business operation including security, transactions, search engine optimization, and digital marketing methods.

BUSN 7220X Global Business Environment

30 hours plus conference; 3 credits
Key issues and challenges facing businesses in an increasingly global and complex environment. Topics include: globalization, culture, and society, technology trends, regulation, competing models of capitalist operation, state-firm relations, industrial policy and stakeholder activism. The nature of these challenges, their influence on business, and the ways in which business can manage them.

BUSN 7230X Operations Research and Decision Sciences

30 hours plus conference; 3 credits
Tools and techniques of operations research and decision sciences. Quantitative techniques used in business, accounting, and economics including project design and management, scheduling, forecasting, linear programming, inventory and queuing theory, applications of input-output methods. This course is the same as Economics 7230X.

BUSN 7250X International Human Resource Management

45 hours; 3 credits
Human resource decisions and practices in an international context. Topics include: recruiting, selection, expatriation, repatriation, training, career management, performance management, compensation, and cross-cultural issues. This course is the same as Psychology 7246G.

Prerequisite: an undergraduate course in human resource management or permission of the instructor.

BUSN 7255X Managing Diversity in the Global Economy

45 hours; 3 credits
The course will cover the following topics: diversity and individuals; defining diversity in a global context; theoretical perspectives on workplace diversity; diversity legislation in a global perspective; discrimination and fairness in employment; global demographic trends; diversity management; interpersonal relationships in a global context; intercultural communication process; intercultural negotiation process; politico-legal, economic and business environments in selected countries in a comparative perspective with those of the United States; and cultural values, communication patterns and negotiation styles in selected countries. This course is the same as Psychology 7247G.

BUSN 7257X Global Workplace Communication

30 hours plus conference; 3 credits
The role of intercultural communication in global workplace settings. Topics include culture and communication, language and intercultural business communication, understanding other cultures, self-identity and social organization, message

organization for other cultures, and nonverbal language and communication. Intercultural communication approaches for business information, negotiation and conflict resolution, and corporate culture.

BUSN 7260X Entrepreneurship in a Global Economy

30 hours plus conference; 3 credits
The course examines the following topics: Introduction to entrepreneurship; recognizing opportunities and generating ideas; feasibility analysis; Writing a business plan; Industry and competitor analysis; developing an effective business model; Preparing the proper ethical and legal foundation; Assessing a new venture's financial strength and viability; Building a new venture team; Getting financing or funding; Unique marketing issues; Intellectual property issues; Preparing for and evaluating the challenges of growth; Strategies for firm growth; franchising; and global entrepreneurship.

BUSN 7265X Corporate Social Responsibility and Organizational Leadership

45 hours; 3 credits
This course examines how organizations and executives can and should balance responsibilities to their customers, employees, community, society, other stakeholders, and the environment. The course will use textbook readings, cases and other teaching tools to demonstrate how an effective leader integrates the social and fiduciary dimensions of a business problem to make responsible choices and maintain the long-term viability of the organization.

BUSN 7276X Business Analytics for Managers

30 hours plus conference; 3 credits
Introduction to business analytics, data mining, and big data. Business intelligence; descriptive/predictive/prescriptive analytics; data warehouses and data marts; dashboards and scorecards; data visualization; text and web mining; data mining techniques in business decision making; business issues in analytics. Cases, projects and hands-on analytics software use.

Prerequisite: Undergraduate course in statistics and proficiency with spreadsheets.

BUSN 7278X Data Analysis for Business

30 hours plus conference; 3 credits
An overview of applications of multivariate analysis in finance and business research, including Multiple Linear Regression, Logistic Regression, Multivariate Analysis of Variance/Covariance, Factor Analysis, and other relevant topics.

Prerequisite: one undergraduate course in statistics.

BUSN 7279X Applied Business Research

30 hours conference; 3 credit
Students will learn how to define a research problem, to evaluate secondary data, to choose the appropriate research design, to develop measurement instruments, to evaluate different sample designs, to collect primary data, to use various statistical techniques to analyze data, and to present data, research findings, and recommendations in an ethical manner.

BUSN 7280X Applied Data Analysis for Business

45 hours; 3 credits
An overview of applied multivariate analysis in business analytics. Course covers advanced statistical methods such as principal component analysis, factor analysis, correspondence analysis, advanced regression methods, discriminant analysis, conjoint analysis, cluster analysis, multidimensional scaling, structural equation modeling, and other relevant topics. Course employs current industry-standard analytical tools such as R.

Prerequisite: BUSN 7278X

BUSN 7281X Applied Time Series Analysis for Business

45 hours; 3 credits
An introduction to applied time series analysis for business. The course introduces students to industry-standard tools and techniques for analysis such as R. Topics covered include the nature of time series data and problem domains, time series regression models, decomposition, exponential smoothing, ARIMA models, and advanced forecasting methods. Also covered are the assumptions, appropriateness, and limitations of time series analysis. Students learn how to interpret and communicate the results of a time series analysis. Contemporary challenges and issues for managers are presented.

Prerequisite: BUSN 7278X.

BUSN 7282X Data Visualization for Business

45 hours; 3 credits
Learn to explore and analyze large and complex data sets through visualization. Learn how to uncover and communicate insights to target audiences with effective storytelling and illustration. Learn to develop effective dashboards and infographics to facilitate data-driven decision making. Develop proficiency with industry-standard visualization tools. Learn essential design principles and cognitive theories. Course entails hands-on applications and projects. Survey contemporary challenges, issues, research, technology trends, and industry best practices. This course is the same as CISC 7702X. (Not open to students who have completed CISC 7702X.)

Prerequisite: BUSN 7278X

BUSN 7283X Data Mining and Applied Machine Learning for Business

45 hours; 3 credits
An introduction to data mining and applied machine learning for business analytics. The course introduces students to industry standard tools and techniques for analysis such as Python and essential Python libraries such as Numby, Scipy, Matplotlib, Pandas, and scikit-learn. Students learn to wrangle, explore, and visualize data. They learn techniques for data reduction. The course introduces students to prediction and classification methods such as multiple linear regression, logistic regression, discriminant analysis, k-Nearest Neighbors, Bayes classifier, neural nets, and classification trees. Contemporary challenges and issues for managers are presented.
This course is the same as CISC 7704. (Not open to students who have completed CISC 7704.)

Prerequisites: BUSN 7278X

BUSN 7284X Text Analytics for Business

45 hours; 3 credits
The course introduces the fundamentals and foundations of text analytics and unstructured information management. The

objective of text analytics is to enable better decision making by extracting valuable insight from enterprise information, regardless of the source or format. Content analytics can help organizations surface undetected problems, eliminate content-centric process inefficiencies, improve customer service, reduce operating costs and risks, and discover new revenue opportunities.

The course is a combination of lecture, case studies, hands-on exercises, and projects.

Prerequisite: Business 7278X

BUSN 7290X Internship

Minimum of 140 hours of fieldwork; 3 credits
Off-campus internship at a site approved and supervised by a faculty member. Final report and evaluation of supervisor are required.

Prerequisite: Permission of the department

Mathematics

Department office: 1156 Ingersoll Hall
Phone: 718.951.5246

Full-time Faculty

Professors: Benes, Halpern, Hu, Mate, Preston, Sibner, Suzuki
Associate Professors: Aulicino, Chamanara, Clement, Cooley, Kingan, Pinheiro
Assistant Professors: Ginsberg, Goodson, Hubbard
Lecturers: Gibson, Nguyen, Steiner, Will

The Mathematics Department offers a distinctive master of arts program in pure and applied mathematics. Students gain experience with current mathematical software and technology, and may study computational mathematics in conjunction with the Computer and Information Science Department. Students who do not wish to pursue university-level teaching and research careers may elect to develop expertise in financial mathematics to obtain the marketable credentials for work in the financial industry. Mathematics Department faculty members develop and conduct high quality research and participate in the mathematics and urban education doctoral programs of The Graduate Center of The City University of New York.

M.A. degree program in education: mathematics teacher (7-12)
HEGIS code 1701.01; SED program code 26734

The Mathematics Department, in conjunction with the Department of Secondary Education, offers a master of arts degree in education for mathematics teachers (grades 7-12). The New York State Education Department licenses graduates of registered teacher education programs who meet the state requirements for teachers. Applicants must consult matriculation requirements for adolescence education and special subjects in the Department of Secondary Education section of the Bulletin, and should see the chairperson of the Department of Secondary Education for counseling.

The department also participates in a master of science degree program for middle childhood education specialists in math (grades 5-9), with extensions for gifted education at initial and professional certification levels.

This program leads to the M.A. in Education and both New York State Initial and Professional Certification in Adolescence Education in teaching mathematics for grades 7-12.

Matriculation requirements
Applicants must have an undergraduate degree in mathematics, mathematics education grades 7-12, or 18 credits in advanced mathematics including the following: multivariable calculus, linear algebra, abstract algebra, geometry, analysis/advanced calculus, probability and statistics, as approved by the chairperson of the mathematics department and the advisor of the mathematics education (7-12) program.

Applicants must have a minimum undergraduate grade point average of 3.00 for matriculation. A minimum average of 3.00 in graduate courses is required to maintain matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of at least 500 on the paper-based test, or 173 on the computer-based test, or 61 on the internet-based test before being considered for admission.

Applicants who do not meet all of the specific requirements will be given individual consideration and may be admitted with conditions, with the approval of the Program Coordinator of Mathematics Education 7-12 and the Graduate Deputy of the Mathematics Department.

Applicants must consult matriculation requirements for adolescence education and special subjects in the School of Education section of the Bulletin, and should see the Department of Secondary Education for advisement. General matriculation and admission requirements of Graduate Studies are in the section "Admission".

Each student is evaluated individually based upon prior experiences. Based upon this evaluation and current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Program Coordinator.

Degree requirements

Option A: 30 credits
This option leads to New York State Professional Certification in Adolescence Education in teaching mathematics for grades 7-12.

Matriculation requirements
Applicants must hold a New York State Initial Certification in Adolescence Education in teaching mathematics for grades 7-12.

Degree requirements
Thirty credits are required for the degree.
Mathematics Education (12 credits):
The following mathematics education courses, or mathematics education courses approved by the program coordinator, are required in the stated sequence: SEED 7482X, SEED 7483X, SEED 7484T, SEED 7485T.

Mathematics (12 credits):
The following 4 mathematics courses, or mathematics courses approved by the mathematics department chair or Graduate Deputy are required: MATH 7305T, MATH 7307T, MATH 7309T, MATH 7313T.

Education Core (6 credits)
The following education class: Development and SEL: SEED 7507X.

One of the following elective education courses, or an education course approved by the program coordinator, is required:
SEED 7465X, SEED 7503X, SEED 7504X, SEED 7545X, SEED 7671X.

Option B: 30-40 credits
This option, for students without certification to teach, leads to both New York State Initial and Professional Certification in Adolescence Education in teaching mathematics for grades 7-12.

Degree requirements
Thirty to forty credits are required for the degree.

Education Core (12 credits):
The following four education courses are required unless candidates have taken one or more as part of previous coursework.
Foundations: SEED 7500X; Literacy: SEED 7503X; Special Education: SEED 7671X; and Development and SEL: SEED 7507X.

Student Teaching (4 credits):
The following student teaching courses are required unless candidates have a New York State waiver: SEED 7541X, SEED 7542T, and SEED 7543T. (SEED 7500X and SEED 7483T must be completed before student teaching). SEED 7543T is not required if the candidate is teaching mathematics full-time at an appropriate grade level.

Students teaching with a New York State Internship Certificate must be enrolled in either SEED 7542T or SEED 7001T during every semester that they are teaching under the certificate.

Mathematics Education (12 credits):
The following mathematics education courses, or mathematics education courses approved by the program coordinator, are required in the stated sequence unless candidates have taken one or more as part of previous coursework: SEED 7482X, SEED 7483X, SEED 7484T, SEED 7485T.

Mathematics (12 credits):
The following 4 mathematics courses, or mathematics courses approved by the mathematics department chair or Graduate Deputy, are required: MATH 7305T, MATH 7307T, MATH 7309T, MATH 7313T.

Option C: 30-39 credits
This option leads to both New York State Initial and Professional Certification in Adolescence Education in teaching mathematics for grades 7- 12.

Matriculation Requirements:
Applicants must hold a New York State Transitional B Certificate in Adolescence Education in teaching mathematics for grades 7-12.
Degree requirements:

Degree requirements
Thirty to thirty-nine credits are required for the degree.

Education Core (15 credits):
The following six courses in education are required unless candidates have taken one or more as part of previous coursework:
Foundations: SEED 7500X; Literacy: SEED 7503X; Mindfulness; SEED 7504X; Special Education: 7671X; Development and SEL: SEED 7507X; Teacher Performance Assessment: SEED 7541X.

Mathematics Education (12 credits):
The following mathematics education courses, or mathematics education courses approved by the program coordinator, are required in the stated sequence unless candidates have taken one or more as part of previous coursework: SEED 7482X, SEED 7483X, SEED 7484T, SEED 7485T.

Mathematics (12 credits):
The following 4 mathematics courses, or mathematics courses approved by the mathematics department chair or Graduate Deputy, are

required: MATH 7305T, MATH 7307T, MATH 7309T, MATH 7313T

CUNY Ph.D.

The City University of New York offers a doctoral program in mathematics. General information about CUNY Ph.D. programs is in the chapter “Support for Academic Success in Graduate School.”

Mathematics Department courses may be credited toward the CUNY doctoral degree with permission of the executive officer of the doctoral program. For information, students should consult the deputy chairperson of the Mathematics Department and the executive officer of the doctoral program.

Honor Society

Sigma Xi, the Scientific Research Society, encourages original investigation in the natural sciences, pure and applied. The fields of activity of the society include the physical sciences, the life sciences, the earth sciences, and mathematics.
The Brooklyn College Chapter elects students to associate membership in the society on the basis of academic excellence and marked aptitude for research in one of the fields listed above.

Courses

Unless a prerequisite is specific, a student may apply graduate or undergraduate courses toward fulfillment of that prerequisite.

At present, the program is small and many courses are offered as tutorials. Each semester students are consulted in the process of selecting the courses to be offered in the next semester.

Courses offered toward a master of arts degree in mathematics must be 7000-level courses.

MATH 6140T Middle School Mathematics from an Advanced Standpoint
45 hours; 3 credits
Traditional material in arithmetic, algebra, geometry, and other fields treated from a modern viewpoint. This course may not be counted toward the 12 credits required in mathematics in the program for Middle School Teachers.

Prerequisite: permission of the deputy chairperson.

MATH 6141T Transition to Algebraic Thinking for Middle School Teachers I
45 hours; 3 credits
Topics in transitioning from arithmetic to algebraic thinking for teachers of upper elementary and middle school mathematics.

Prerequisite: Permission of the graduate deputy.

MATH 6142T Transition to Algebraic Thinking for Middle School Teachers II
45 hours; 3 credits
Topics in transitioning from arithmetic to algebraic thinking for teachers of upper elementary and middle school mathematics.

Prerequisite: Permission of the graduate deputy.

MATH 7141T Number Systems and Algebra for Childhood Teachers
45 hours; 3 credits
The real number system and some of its subsystems. Introduction to group and field structures, solutions to equations. Number theory. Sequences and patterns, and problem solving. Technology as a tool for investigating algebra. Connections to curriculum and pedagogy. This course may not be offered toward master of arts degrees in secondary education or in middle childhood education.

Prerequisite: A course in mathematics for elementary school teachers, or a mathematics course approved by the deputy chairperson.

MATH 7142T Geometry for Childhood Teachers
45 hours; 3 credits
Investigation of two- and three-dimensional objects and their properties. Congruence and similarity. Coordinate geometry. Transformations in the plane, and their geometric and algebraic properties and similarity. Measurement of length, area, volume, surface area. Inductive and deductive proof in geometry. Connections or geometry to the arts and everyday applications. Technology as a tool for investigating geometry. Connections to curriculum and pedagogy. This course may not be offered toward a master of arts degree in secondary education or in middle childhood education.

Prerequisite: A course in mathematics for elementary school teachers, or a mathematics course approved by the deputy chairperson.

MATH 7143T Probability and Statistics for Childhood Teachers
45 hours; 3 credits
Set and graphical representations, counting principle, sample spaces and probability. Measures of central tendency and variability, binomial and normal distributions. Applications to sampling theory and testing of hypotheses; introduction to correlation and regression; applications to research in education. Use of graphing calculator and databases on the Internet for exploring probability and statistics. Connections to curriculum and pedagogy. This course may not be offered toward master of arts degrees in secondary education or in middle childhood education.

Prerequisite: A course in mathematics for elementary school teachers, or a mathematics course approved by the deputy chairperson.

MATH 7144T History of Mathematics for Childhood Teachers

45 hours; 3 credits
A study of historical and cultural perspectives of mathematics. Mathematical problem solving. Origins of number systems and number theory, algebra and topics in geometry, probability, and calculus. Famous men and women in mathematics. Video and Internet resources for exploring the history of mathematics. Connections to curriculum and pedagogy. This course may not be offered toward master of arts degrees in secondary education or in middle school education.

Prerequisite: Mathematics 7141T [604.1T] or 7142T [604.2T] or their equivalents.

MATH 7145T Discrete Mathematics for Childhood Teachers
45 hours; 3 credits
Selected mathematical topics and modeling in the social sciences. Networks, Euler paths; sets, classification, and the counting principle; matrices; linear programming. Mathematics of voting. Technology as a tool for investigating discrete mathematics. Connections to curriculum and pedagogy. This course may not be taken after Mathematics 7273T [606.1], nor may it be offered toward master of arts degrees in secondary education or in middle school education.

MATH 7271T Problem Seminar in Middle School Mathematics
45 hours; 3 credits
Problem solving, discussion and reports on topics in middle school mathematics. Term paper or final examination. May not be taken after Mathematics 7315X [705X]

MATH 7273T Concepts of Middle School Mathematics I: Discrete Mathematics
45 hours; 3 credits
Topics include graph theory, voting theory, combinatorial mathematics, logic and set theory. Emphasis on aspects found in the New York State mandated middle school mathematics sequence. May not be taken after Mathematics 7000-level courses.

Prerequisite: permission of the deputy chairperson.

MATH 7274T Concepts of Middle School Mathematics II: Geometry
45 hours; 3 credits
Foundations and basic ideas of geometry and their relation to the middle school curriculum. May not be taken after Mathematics 7531X [731.1X].

Prerequisite: Permission of the deputy chairperson

MATH 7275T Concepts of Middle School Mathematics III: Modern Algebra
45 hours; 3 credits
The Euclidean Algorithm, prime numbers, the Fundamental Theorem of Arithmetic, and a selection of topics such as: rational, irrational, real and complex numbers, numeration in bases other than ten, algebraic properties of systems such as the integers modulo n, infinite sets. May not be taken after Mathematics 7520X [720.2X], Mathematics 7620X [720.4X], or Mathematics 7517X [717X].

Prerequisite: Permission of the deputy chairperson.

MATH 7276T Concepts of Middle School Mathematics IV: Probability Theory and Statistics
45 hours; 3 credits
Set theory, counting arguments, functions, sample spaces and probability spaces, conditional probability and independence, discrete random variables and their distribution functions, joint distributions, expected values and moments. The law of large numbers, central limit theorem, applications to sampling theory and testing of hypotheses, confidence intervals, introduction to correlation, and regression analysis. Not open to students who have completed Mathematics 6652X [652X].

Prerequisite: Permission of the deputy chairperson.

MATH 7278T Applied Number Theory for Middle School Mathematics
45 hours; 3 credits
Introduction to number theory and its applications. Figurate numbers; Fibonacci, Lucas, and Fermat numbers; Diophantine equations; linear and multilinear congruences; factoring algorithms; theorems of Fermat, Euler, and Wilson. Applications to cryptology and other areas.

Prerequisite: Permission of graduate deputy or chair.

MATH 7305T High School Mathematics from an Advanced Standpoint
45 hours; 3 credits
Examination of the foundations of high school algebra, geometry and number theory. Justification of algorithms and procedures. Analysis of common, fundamental errors and misconceptions. Strategies and tactics for instruction and remediation. This course may not count towards a master of arts degree in mathematics.

Prerequisite: Acceptance into the Master’s Degree in 7-12 Mathematics Education or permission of the Chair of the Mathematics Department.

MATH 7307T Geometry for High School Mathematics Teachers
45 hours; 3 credits
The course is organized around two main themes: Some Theorems and Applications in "Modern" Euclidean Geometry and Geometric Transformations and their applications. There will be an emphasis on the role of (1) conjecture and proof and (2) proofs using synthetic methods, trigonometric methods, area methods, coordinate methods, and transformational methods. Finally, in addition to Euclidean geometry, students study the basic ideas of spherical geometry. Geometer's Sketchpad or some other dynamic geometry software will be used extensively to explore geometric relationships. This course may not be taken towards a master of arts degree in mathematics.

Prerequisite: Acceptance into the Master’s Degree in 7-12 Mathematics Education or permission of the Chair of the Mathematics Department.

MATH 7309T Theory of Functions for High School Mathematics Teachers
45 hours; 3 credits
This course is centered around topics in theory of functions that are related to topics taught in high school mathematics, but at an advanced, conceptual level. Students will examine functions using formal, rigorous approaches, as well as a geometric, transformational examinations. Technology, such as a graphing calculator, will be used extensively. This course may not count towards a master of arts degree in mathematics.

Prerequisites: Math 4201 [11.1] or its equivalent. Acceptance into the MA program in Adolescent Mathematics Education or permission of the Chair.

MATH 7311T Teaching of Advanced Placement Calculus AB & BC
45 hours; 3 credits
This course is designed to prepare AP calculus teachers to help develop their students' understanding of calculus concepts, methods and applications. This course will involve both the study of calculus and the teaching methods of calculus, using a multi-representational approach. Participants are expected to have completed Calculus III with success and therefore, this course will focus on deeper understandings and will assume that participants are familiar with the basic introductory calculus ideas. Participants are also expected to have command of a graphing calculator. We will examine calculus concepts graphically, numerically, analytically and verbally. Both the AB and BC AP calculus exams will be investigated and problems will be solved using multiple approaches. This course may not count towards a master of arts degree in mathematics.

Prerequisite: Math 4201 [11.1] or its equivalent

MATH 7313T Probability and Statistics for Secondary Education
45 credits; 3 hours
The mathematical theory of probability and statistics, with a focus on those aspects relevant to the secondary education curriculum. Taught with a focus on problem solving and collaborative learning. Topics will include those recommended by the most current CBMS recommendations. The course is centered around topics such as combinatorics, combinatorial probabilities, conditional probabilities, Bayes Theorem, discrete and continuous random variables, expectation and variance, Poisson, normal, and binomial distributions, hypothesis testing, and regression.

Prerequisite: Admission to the MA in mathematics teacher (7-12) program.

MATH 7514X Theory of Functions I

45 hours plus independent work and conference; 4 credits
Unified treatment of functions over the real and complex domains, including limits, continuity, derivatives, integrals. (Not open to students who have completed Mathematics 7514X [714.1G].)

MATH 7910X Independent Study

Hours to be arranged; 1 credit
Independent study of selected reading approved by a faculty adviser. Term paper or final examination.

MATH 7920X Independent Study

Hours to be arranged; 1 credit
Independent study of selected reading approved by a faculty adviser. Term paper or final examination.

MATH 7930X Independent Study

Hours to be arranged; 1 credit
Independent study of selected reading approved by a faculty adviser. Term paper or final examination.

MATH 7999X Thesis Research

Hours to be arranged; no credit
Research for master's thesis supervised by a faculty member. Students register for this course only once.

Prerequisite: 20 credits in approved courses and permission of the instructor.

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

MATH 6652X Topics in Probability Theory and Statistics

MATH 7146T Introduction to Functions and Applications for Childhood Teachers

MATH 7272T Problem Seminar in Secondary School Mathematics

MATH 7277T History of Mathematics for Middle School Teachers

MATH 7283T Calculus I

MATH 7286T Calculus II

MATH 7301X Foundations of Secondary School Mathematics Curricula I

MATH 7302X Foundations of Secondary School Mathematics Curricula II

MATH 7303X Foundations of Secondary School Mathematics Curricula III

MATH 7315X Mathematical Problem-Solving in a Computer-Assisted Environment

MATH 7318X Introduction to the Theory of Sets

MATH 7517X Theory of Numbers

MATH 7520X Modern Algebra I

MATH 7521X Introduction to Field Theory

MATH 7526X Vector Spaces and Matrices

MATH 7531X Geometrical Transformations

MATH 7541X History of Mathematical Ideas

MATH 7552X Introduction to Probability and Statistics

MATH 7560X Introduction to Mathematical Logic

MATH 7580X Social Software and Social Algorithms

MATH 7615X Theory of Functions II

MATH 7620X Modern Algebra II

MATH 7622X Point Set Topology

Modern Languages and Literatures

Department office: 4239 Boylan Hall
Phone: 718.951.5451

Full-time Faculty

Professors: Chang, Llanos Mardones, Renner
Associate Professors: Alonso, Childers
Assistant Professors: Cerat, Huang
Lecturers: Aponte-Olivieri, Panek

The Department of Modern Languages and Literatures is known for its commitment to the highest standards of academic excellence and a distinguished staff of experts in many languages. The department offers students the opportunity to experience the intellectual and personal enrichment that comes with deeper knowledge of the foreign language selected and the diverse cultures with which that language is associated. The department has a Computer Language Instruction Center (CLIC), a state-of-the-art facility with a computer laboratory with specialized software multimedia room and teaching laboratory. CLIC also offers an extensive library of French and Spanish videotapes and audiocassettes. With the department's assets and international students in attendance, you enjoy a truly sophisticated and cosmopolitan atmosphere in which to learn.

M.A. degree program in education: French teacher (7-12)
HEGIS code 1102.01; SED program code 26797

The Department of Modern Languages and Literature in conjunction with the Department of Secondary Education, offers a master of arts degree in education for French teachers (grades 7-12). The New York State Education Department licenses graduates of registered teacher education programs who meet the state requirements for teachers. All students should consult with the Department of Secondary Education for current requirements.

This master of arts program provides students with an introduction to the French/Francophone literature. At the same time, the focus on language and culture fully prepares students for employment as foreign language teachers at the middle and high school levels.

Coursework is divided between the Department of Modern Languages and Literatures and the Department of Secondary Education. The courses required by the Department of Secondary Education vary depending on the entry qualifications of students. The profession of teacher education is licensed by the New York State Education Department. Therefore, program requirements are subject to change.

Matriculation requirements:
Applicants must offer at least 15 credits in advanced courses in French. Applicants must also offer (a) or (b):

(a) New York State Initial Certification in French teacher grades 7-12 or courses in education that meet the New York State standards for the pedagogical core. These courses include study of the following: history of education and philosophy of education or principles of education or educational sociology; educational psychology or developmental psychology or psychology of adolescence or adolescent development; classroom management; teaching students with special needs and English language learners; 6 credits in literacy and language acquisition; curriculum development and methods of assessing student learning; uses of technology in the classroom; methods of teaching French in grades 7-12; 100 hours of fieldwork; 40 full days or 300 hours of student teaching of French in grades 7-12; or one year of full-time teaching French at appropriate grade levels, and passage of a New York State-approved Performance Assessment.

(b) an undergraduate degree with a major in French or appropriate course work in French.

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum average of 3.00 in graduate courses is required to maintain matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of at least 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test, before being considered for admission.

Applicants who have not completed all the specific course requirements are given individual consideration and may be admitted with conditions, with the approval of the chairperson of the Department of Secondary Education and the chairperson of the Department of Modern Languages and Literatures.

General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Each student is evaluated individually based upon prior experiences. Based upon this evaluation and current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with

permission of the Program Coordinator.

Degree requirements

Option (A): 30 credits French (18 credits):
Students who possess Initial Certification in teaching French or the equivalent must complete the following courses in French:
French 7010X; 7510X or 7520X; 12 credits of electives as approved by the chairperson or deputy chairperson of the Modern Languages and Literatures Department.

Students must also complete a substantial final project, which may take the form of a thesis in French, or may consist of a "teaching unit" completed under the co-direction of the Department of Modern Languages and Literatures and the School of Education. The writing of the thesis or completion of the teaching unit may take place during a three-credit tutorial, French 7900X, taken as the final course of the student's program. French 7900X, however, is not a required course for the degree.

Courses in the Modern Languages and Literatures Department and the School of Education offered toward the degree must be 7000-level courses. The program of study must be approved early in the first semester by the chairperson or deputy chairperson of the Modern Languages and Literatures Department and the chairperson of the Department of Secondary Education.

Education (12 credits):
Students must also complete 12 credits in courses in Education as follows:
Research in Modern Languages Education: SEED 7622T; Literacy: SEED 7503X; Mindfulness SEED 7504X; Development and SEL: SEED 7507X.
Option (B) 40 credits.
French (15 credits):
Students who do not possess Initial Certification in teaching French or the equivalent must complete the following courses in French:
French 7010X; 7510X or 7520X; 9 credits of electives as approved by the chairperson or deputy chairperson of the Modern Languages and Literatures Department.

Students must also complete a substantial final project, which may take the form of a thesis in French, or may consist of a "teaching unit" completed under the co-direction of the Department of Modern Languages and Literatures and the School of Education. The writing of the thesis or completion of the teaching unit may take place during a three-credit tutorial, French 7900X, taken as the final course of the student's program. French 7900X, however, is not a required course for the degree.

Courses in the Modern Languages and Literatures Department and the School of Education offered toward the degree must be 7000-level courses. The program of study must be approved early in the first semester by the chairperson or deputy chairperson of the Modern Languages and Literatures Department and the chairperson of the Department of Secondary Education.

Education Core (12 credits):
The following four education courses are required unless candidates have taken one or more as part of previous coursework.
Foundations: SEED 7500X; Literacy: SEED 7503X; Special Education: SEED 7671X; Development and SEL: SEED 7507X.

Student Teaching (4 credits):
The following student teaching courses are required unless candidates have a New York State waiver: SEED 7541X, SEED 7542T, and SEED 7543T. (SEED 7500X and SEED 7620T must be completed before student teaching). SEED 7543T is not required if the candidate is teaching French full-time at an appropriate grade level.

Students teaching with a New York State Internship Certificate must be enrolled in either SEED 7542T or SEED 7001T during every semester that they are teaching under the certificate.

French Education (9 credits):
The following French education courses, or French education courses approved by the program coordinator, are required unless candidates have taken one or more as part of previous coursework: SEED 7620T, SEED 7621T, SEED 7622T.

M.A. degree program in education: Spanish teacher (7-12)
HEGIS code 1105.01; SED program code 26800

The Department of Modern Languages and Literature in conjunction with the Department of Secondary Education, offers a master of arts degree in education for Spanish teachers (grades 7-12). The New York State Education Department licenses graduates of registered teacher education programs who meet the state requirements for teachers. All students should consult with the Department of Secondary Education for current requirements.

This master of arts program provides students with an introduction to the Peninsular/Latin American literature. At the same time, the focus on language and culture fully prepares students for employment as foreign language teachers at the middle and high school levels.

Coursework is divided between the Department of Modern Languages and Literatures and the Department of Secondary Education. The courses required by the Department of Secondary Education vary depending on the entry qualifications of students.

The profession of teacher education is licensed by the New York State Education Department. Therefore, program requirements are subject to change. All students should consult with the School of Education for the current requirements.

Matriculation requirements
Applicants must offer at least 15 credits in advanced courses in Spanish. Applicants must also offer (a) or (b):
(a) New York State Initial Certification in teaching Spanish grades 7-12 or courses in education that meet the New York State standards for the pedagogical core. These courses include study of the following: history of education and philosophy of education or principles of education or educational sociology; educational psychology or developmental psychology or psychology of adolescence or adolescent development; classroom management; teaching students with special needs and English language learners; 6 credits in literacy and language acquisition; curriculum development and methods of assessing student learning; uses of technology in the classroom; methods of teaching Spanish in grades 7-12; 100 hours of fieldwork; 40 full days or 300 hours of student teaching of Spanish in grades 7-12; or one year of full-time teaching Spanish at appropriate grade levels, and passage of a New York State-approved Performance Assessment.

(b) an undergraduate degree with a major in Spanish or appropriate course work in Spanish.

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum average of 3.00 in graduate courses is required to maintain matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of at least 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test, before being considered for admission.

Applicants who have not completed all the specific course requirements are given individual consideration and may be admitted with conditions, with the approval of the chairperson of the Department of Secondary Education and the chairperson of the Department of Modern Languages and Literatures.

General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Each student is evaluated individually based upon prior experiences. Based upon this evaluation and current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Program Coordinator.

Degree requirements

Option (A): 30 credits Spanish (18 credits):
Students who possess Initial Certification in teaching Spanish or the equivalent must complete the following courses in Spanish: Spanish 7010X, 7510X or 7520X; a course in Latin American literature; and a course in Peninsular Spanish literature and 6 credits of electives as approved by the chairperson or deputy chairperson of the Modern Languages and Literatures Department.

Students must also complete a substantial final project, which may take the form of a thesis in Spanish, or may consist of a "teaching unit" completed under the co-direction of the Department of Modern Language and Literatures and the School of Education. The writing of the thesis or completion of the teaching unit may take place during a three-credit tutorial, Spanish 7790G, taken as the final course of the student's program. Spanish 7790G, however, is not a required course for the degree.

Courses in the Modern Languages and Literatures Department and the School of Education offered toward the degree must be 7000-level courses. The program of study must be approved early in the first semester by the chairperson or deputy chairperson of the Modern Languages and Literatures and the Department of Secondary Education.

Education (12 credits):
Students must also complete 12 credits in courses in Education as follows:
Research in Modern Languages Education: SEED 7622T; Literacy: SEED 7503X; Mindfulness SEED 7504X; Development and SEL: SEED 7507X.
Option (B) 40 credits.
Spanish (15 credits):
Students who do not possess Initial Certification in teaching Spanish or the equivalent must complete the following courses in Spanish: Spanish 7010X, 7510X or 7520X; a course in Latin American literature; and a course in Peninsular Spanish literature and 3 credits of electives as approved by the chairperson or deputy chairperson of the Modern Languages and Literatures Department.

Students must also complete a substantial final project, which may take the form of a thesis in Spanish, or may consist of a "teaching unit" completed under the co-direction of the Department of Modern Language and Literatures and the School of Education. The writing of the thesis or completion of the teaching unit may take place during a three-credit tutorial, Spanish 7790G, taken as the final course of the student's program. Spanish 7790G, however, is not a required course for the degree.
Courses in the Modern Languages and Literatures Department and the School of Education offered toward the degree must be 7000-level courses. The program of study must be approved early in the first semester by the chairperson or deputy chairperson of the Modern Languages and Literatures and the Department of Secondary Education.

Education Core (12 credits):
The following four education courses are required unless candidates have taken one or more as part of previous coursework.
Foundations: SEED 7500X; Literacy: SEED 7503X; Special Education: SEED 7671X; Development and SEL: SEED 7507X.

Student Teaching (4 credits):
The following student teaching courses are required unless candidates have a New York State waiver: SEED 7541X, SEED 7542T, and SEED 7543T. (SEED 7500X and SEED 7620T must be completed before student teaching). SEED 7543T is not required if the candidate is teaching Spanish full-time at an appropriate grade level.

Students teaching with a New York State Internship Certificate must be enrolled in either SEED 7542T or SEED 7001T during every semester that they are teaching under the certificate.

Spanish Education (9 credits):
The following Spanish education courses, or Spanish education courses approved by the program coordinator, are required unless candidates have taken one or more as part of previous coursework: SEED 7620T, SEED 7621T, SEED 7622T.

CUNY Ph.D.

The City University of New York offers a doctoral program in French and Spanish. General information about CUNY Ph.D. programs is in the chapter “Support for Academic Success in Graduate School.” Modern Languages and Literatures Department courses may be credited toward the CUNY doctoral degree with permission of the executive officer of the doctoral program. For information, students should consult the deputy chairperson of the Modern Languages and Literatures Department and the executive officer of the doctoral program.

Courses

Linguistics Courses

MLAN 7360X Language and Technology

30 hours plus conference; 3 credits
Computer-Assisted Language Learning (CALL). CALL theory and research. A systematic approach to multimedia resources for students and teachers of Languages Other Than English. Audiovisual materials and resources (audio documents, films, and videos), CALL software programs, electronic hypertext dictionaries and glossaries, translation systems, and voiced enhanced texts. Audio, video, language learning apps, and speech recognition interfaces. Finding and evaluating CALL resources. Critical multimedia and technology literacy. Use of social media and other group sharing, cloud-and Web-based resources as an environment for learning and teaching new languages. Development of bilingual classroom activities using multimedia technologies. To be taught in English.

French

FREN 7010X Grammar and Syntax

30 hours plus conference; 3 credits
Study of linguistic and syntactic patterns with some attention to the historical development of the language. Intensive practice in the written and spoken language.

FREN 7110X Writing and Stylistics

45 hours; 3 credits
Continued practice in French grammar, written expression, stylistics and textual analysis; compositions modeled on selected literary texts.

FREN 7160X Explicating French Literary Works

45 hours; 3 credits
An analysis of major works that are often taught in secondary school curricula, with special attention to developing literary critical perspectives.

FREN 7170X Introduction to Literary Research

30 hours plus conference; 3 credits
Introduction to bibliographic sources, research materials, and the mechanics of documentation. Principles of literary theory and criticism. Presentation of a written paper.

FREN 7210X Translation

30 hours plus conference; 3 credits
French-English and English-French translation of short texts from a variety of fields and styles. Analysis of structures and idioms in both languages.

FREN 7310X History of the French Language

30 hours plus conference; 3 credits
Evolution of French from Latin. Phonology, morphology, syntax, semantics. This course is conducted in English.

Prerequisite: one year of college Latin or the equivalent.

FREN 7510X Culture of France

30 hours plus conference; 3 credits
Aspects of contemporary French civilization and culture and their relations to historical and geographical influences. Perceptions and values as expressed in the arts as well as in the political and social institutions.

FREN 7520X Francophone Cultures

30 hours plus conference; 3 credits
Francophone cultures of Africa, the Caribbean, and Canada. Emphasis on the interplay of French and indigenous values in the areas of language, education, economy, religion, psychology, and literature. The creation of new cultural identities.

FREN 7610X French Literary Movements and Trends

45 hours; 3 credits
A survey of French literary history. A review of all the major

periods in French literature. A study of the appearance and development of literary movements, genres, and trends throughout those periods. Short texts and excerpts will be read as illustrations of the different periods and genres studied.

FREN 7611X French Literature from the Middle Ages

45 hours; 3 credits
Selected masterpieces of French literature from the medieval period, studied within historical and social perspectives

FREN 7612X Studies in Renaissance Literature

30 hours plus conference; 3 credits
Rabelais, Montaigne, Marot and the Lyonese school, La Pleiade.

FREN 7613X Studies in Seventeeth-Century Literature

30 hours plus conference; 3 credits
Theater, poetry, prose.

FREN 7614X Studies in Eighteenth-Century Literature

30 hours plus conference; 3 credits
Prerevolutionary political and social ideas in eighteenth-century literature.

FREN 7615X Studies in Nineteenth-Century Literature

30 hours plus conference; 3 credits
Stendhal, Balzac, Flaubert, Zola, others.

FREN 7617X Studies in Twentieth-Century Literature

30 hours plus conference; 3 credits
French literature from 1890 to 1930.

FREN 7618X Studies in Contemporary French Literature

30 hours plus conference; 3 credits
Readings from novels, theater, and criticism from 1930 to the present. Emphasis on post-World War II developments. Existentialism and the nouveau roman.

FREN 7620X Francophone Literary Movements and Trends

45 hours; 3 credits
A survey of Francophone literary history. A review of all the major periods in Francophone literature. A study of the appearance and development of literary movements, genres and trends throughout those periods. Short texts and excerpts will be read as illustrations of the different periods and genres studied.

FREN 7632X Evolution of Poetic Forms to Baudelaire

30 hours plus conference; 3 credits
French poetry from the Middle Ages through Romanticism.

FREN 7633X Studies in French Poetry from Baudelaire to the Present

30 hours plus conference; 3 credits
Important movements in modern French poetry: Parnasse, Symbolism, Surrealism, postwar.

FREN 7635X Francophone Poetry

45 hours; 3 credits
Majors writers and trends in Francophone Poetry.

FREN 7645X Francophone Novel

45 hours; 3 credits
Selected readings in the Francophone novel.

FREN 7655X Francophone Theater

45 hours; 3 credits
A survey of major playwrights and trends in Francophone theater.

FREN 7690X Writings of a Major French Author

45 hours; 3 credits
An in-depth monographic study concentrating either on the works of a major French writer or on one of the masterpieces of French literature.

FREN 7695X Writings of a Major Francophone Author

45 hours; 3 credits
An in-depth monographic study concentrating either on the works of a major Francophone writer or on one of the masterpieces of Francophone literature.

FREN 7710X Seminar in Literature

30 hours plus conference; 3 credits
Detailed study of representative authors. Content of the course varies. This course may be repeated for credit.

Prerequisite: two graduate courses in French.

FREN 7750X Special Topics in Francophone Literature

45 hours; 3 credits
Special topics in Francophone authors or topics from Caribbean, African European, North American, Asian or Pacific cultures.

FREN 7900X Thesis Research

15 hours; 1 credit
Research for master's thesis, using primary as well as secondary sources, supervised by a faculty member. Student should consult with the instructor to get approval for a topic immediately upon registration. All work is to be in French. Degree is not earned until thesis is accepted. Students register for this course only once.

Prerequisite: permission of the chairperson.

Spanish

SPAN 7550X Seminar in Hispanic Cultures

30 hours plus fieldwork; 3 credits

Detailed exploration of a specific aspect of Spanish culture within the context of Latin American cultures of the Western Hemisphere, with an emphasis on the commonality as well as the diversity of the Hispanic heritage and the potential incorporation of such themes into the Spanish classroom. Content varies. Course may be repeated provided the topics and materials are different. This course is only offered at the Brooklyn College Summer Institute for Teachers in Madrid, Spain.

Research Methods Course

SPAN 7170X Introduction to Literary Research

30 hours plus conference; 3 credits
Introduction to bibliographic sources, research materials, and the mechanics of documentation. Principles of literary theory and criticism. Presentation of a written paper.

Hispanic Linguistics Courses

SPAN 7010X Grammatical and Syntactical Analysis

30 hours plus conference; 3 credits
Advanced analysis of grammatical and syntactical problems. Special attention will be paid to providing the knowledge of grammar and syntax needed to teach the Spanish language.

SPAN 7110X Writing and Stylistics

30 hours plus conference; 3 credits
Continued practice in written expression and in textual analysis for heritage and nonheritage speakers; compositions modeled on selected literary texts.

Prerequisite: Spanish 7010X [717X] or permission of the chairperson.

SPAN 7310X History of the Spanish Language

30 hours plus conference; 3 credits
Evolution of Spanish from Latin. Phonology, morphology, syntax, semantics. This course is conducted in English.

Prerequisite: one year of college Latin or the equivalent.

SPAN 7320X Spanish Dialectology: The Language of Spain and the Americas

30 hours plus conference; 3 credits
A historical and linguistic study of the Spanish language in Spain and its present-day variants in Latin America, the Caribbean, and the United States.

SPAN 7390X Spanish in the United States

45 hours; 3 credits
Socio-historical introduction to Spanish in the US; Varieties of Spanish spoken in the United States. Examination of the evolution of aspects of the morphosyntactic, phonological, and lexical components of the Spanish spoken by US communities. Exploration of sociolinguistic concepts such as codeswitching, translanguaging, linguistic variation, language and dialect contact, language change, language attitudes, and language policy paying special attention to how these concepts manifest in the US context. All lectures and class discussions will be conducted in Spanish.

Peninsular Literature and Culture Courses

SPAN 7510X Peninsular Hispanic Culture

30 hours plus conference; 3 credits
Aspects of contemporary peninsular Spanish culture and civilization and their relation to historical influences. Emphasis on the intellectual and artistic achievements of the Spanish people as well as their political and social institutions.

SPAN 7590X Studies in Contemporary Spanish Culture

30 hours plus fieldwork; 3 credits
Detailed analysis of particular aspects of specific cultural manifestations and trends in present-day Spain as independent phenomena as well as within a larger global context, as manifested in the media, the arts, narrative fiction, and the essay, with attention to the potential incorporation of such subjects into the Spanish classroom. Content varies. Course may be repeated provided the topics and materials are different. This course is only offered at the Brooklyn College Summer Institute for Teachers in Madrid, Spain.

SPAN 7610X Hispanic Literary Movements and Trends

30 hours plus conference; 3 credits
A survey of Spanish literary history. A review of all major periods in Spanish peninsular literature and a study of the appearance and development of literary movements, genres, and trends throughout those periods. Short texts and excerpts will be read as illustrations of the different periods and genres studied.

SPAN 7612X Spanish Prose and Poetry of the Golden Age

30 hours plus conference; 3 credits
Sixteenth- and seventeenth-century prose and poetry from La Celestina to La vida es sueno.

SPAN 7643X Spanish Novel of the Nineteenth Century

30 hours plus conference; 3 credits
Development of the Spanish novel from Romanticism through Realism to Naturalism.

SPAN 7644X Contemporary Spanish Novel

30 hours plus conference; 3 credits
Major novelists from the Generation of 1898 to the present.

SPAN 7650X The Spanish Comedia

30 hours plus conference; 3 credits
Early developments. The plays of Lope, Tirso, and Calderon.

SPAN 7690X Cervantes

30 hours plus conference; 3 credits
Narrative prose of Cervantes. The Quijote.

Latin American Literature and Culture Courses

SPAN 7520X Latin American Culture

30 hours plus conference; 3 credits
Perceptions and values as expressed in the arts as well as in political and social institutions. Emphasis on manifestations of Hispanic, indigenous, and African values in the area as a whole as well as in its separate regions.

SPAN 7620X Hispanic Literary Movements and Trends

30 hours plus conference; 3 credits
A survey of Latin American literary history. A review of all major periods in Latin American literature and a study of the appearance and development of literary movements, genres, and trends throughout those periods. Short texts and excerpts will be read as illustrations of the different periods and genres studied.

SPAN 7622X Studies in Latin American Colonial Literature

30 hours plus conference; 3 credits
Developments through the eighteenth century.

SPAN 7647X Latin American Novel of the Nineteenth Century

30 hours plus conference; 3 credits
Romantic and Realist movements.

SPAN 7648X Contemporary Latin American Novel

30 hours plus conference; 3 credits
Aspects of the novel from the Modernist period to the present.

SPAN 7658X Contemporary Hispanic Theater

30 hours plus conference; 3 credits
Major playwrights and trends in Latin American theater from the 1930s to the present. (Not open to students who have completed Spanish 752X.)

Spanish Electives

SPAN 7160X Explicating Hispanic Literary Works

30 hours plus conference; 3 credits
An analysis of major works that are often taught in secondary school curricula, with special attention to developing literary critical perspectives.

SPAN 7638X Contemporary Hispanic Poetry

30 hours plus conference; 3 credits
Major writers and trends in Latin American and Peninsular poetry from Modernismo to the present. (Not open to students who have completed Spanish 750X or 764X.)

SPAN 7660X Hispanic Short Narrative

30 hours plus conference; 3 credits
A study of short narrative written in the Spanish language, including the essay.

SPAN 7710X Seminar in Literature

30 hours plus conference; 3 credits
Detailed study of representative authors. Content of the course varies. This course may be repeated for credit.

Prerequisite: two graduate courses in Spanish.

MA Thesis Course

SPAN 7790X Thesis Research

30 hours plus conference; 3 credits
Research for the master's thesis supervised by a faculty member. Thesis to be written and orally defended in Spanish for completion of the Degree. Credit for this course is not earned until the thesis is accepted. Students register for this course only once.

Prerequisite: permission of the chairperson

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

FREN 7652X Studies in Modern French Theater

ITAL 7690X Dante's Divina Commedia

SPAN 7020X Problems in Advanced Spanish Grammar

SPAN 7120X Seminar in Writing and Stylistics

SPAN 7340X Studies in Contemporary Spanish Language

SPAN 7600X Hispanic Literary Movements and Trends

SPAN 7910X Aspects of Spanish Culture and the Arts

Music, Conservatory of

Department office: 422 Whitehead Hall
Phone: 718.951.5286

Full-time Faculty

Distinguished Professors: Eckardt, Grubbs, Oppens
Professors: Geers, Gythfeldt, Jensen-Moulton, Rothman, Taylor
Associate Professors: Devaney, Merriweather, Palmquist, Zalben
Lecturers: Cohen, Lewis

The Conservatory of Music, a New York City leader in the training of musicians, offers students rigorous training and individual instruction in both instrumental and vocal music. Students learn from a distinguished faculty of prominent performers, composers, musicologists, music educators, and theorists as well as a prestigious roster of guest artists.

The department teaches composition, musicology, conducting, music education, and music technology as well as guitar, brass, percussion, harp, voice, piano and organ, and strings and woodwinds. More than 150 student performances in various genres and formats are sponsored by the department yearly.

The department maintains an extensive schedule of guest artists, drawing not only from the huge pool of artists in New York City but also from around the globe. State-of-the-art facilities include performance venues of varying sizes, classrooms and practice rooms, and recording spaces. The Walter W. Gerboth Music Library offers music study, research, and listening and has a tremendous music collection as well as an excellent selection of periodicals, yearbooks and online reference works. The newly built Leonard and Claire Tow Center for the Performing Arts offers a state-of-the-art concert hall and new rehearsal spaces.

M.A. degree program in musicology
HEGIS code 1005; SED program code 02020

The master of arts degree in musicology is for the student who wishes to concentrate on music scholarship. With a breadth of graduate seminars that engage topics ranging from art music to jazz and popular music to ethnomusicology, graduate students in musicology can fully explore their interests before beginning thesis research. 30 credits in graduate level music courses and a thesis are required.

Matriculation requirements

Applicants must offer at least 36 credits in music courses including courses in analysis, counterpoint, harmony, and history.

Consideration is given to applicants who do not meet course requirements but have unusual talent or experience equivalent to course work. Such applicants should consult the assistant director.

A placement examination is given to all applicants for admission. The test includes writing skills (harmonic and contrapuntal techniques), analysis, history, and literature. Further information about the examination may be obtained from the assistant director.

Applicants in musicology must submit with the application two papers on either historical or analytic subjects.
General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Degree requirements (30-36 credits)

Thirty credits and a thesis or 36 credits and no thesis are required for the degree in musicology. Before completing 12 credits, students must pass a test given by the conservatory in French, German, or another language approved by the assistant director. Students who completed their bachelor's degree using a modern language other than English may be exempted from this language examination by the assistant director. Students must pass a comprehensive examination. Information about requirements for the comprehensive examination and thesis is in the section "Academic Regulations and Procedures." Courses in the conservatory offered toward the degree must be 7000-level courses. The program of study must be approved by the conservatory.

Music U7000G; Music U7400G; four courses chosen from Music U7601G through U7651X, Music U7840X, U7850X, and 7860X, to include two seminars in history and one in theory; and one course chosen from Music 7700X through 7781X. Students may submit a thesis acceptable to the conservatory or complete specified required courses in lieu of a thesis. Students who choose to write a thesis must complete Music U7930X. Students who do not choose to write a thesis must complete three courses chosen from Music U7601G through U7651X, U7840X, 7850X, and 7860X.

M.F.A. degree program in media scoring
HEGIS code 1004.10; SED program code 37733

The 60-credit master of fine arts in Media Scoring combines advanced knowledge with practical experience in the production of music and sound for media, including film, television, video games, animation, and other commercial applications. Areas of study include music composition, conducting, orchestration, music supervision, music business, music editing, sound design, and recording. Media Scoring students take classes at Feirstein Graduate School of Cinema and collaborate directly on visual media projects as part of their curriculum. Students have the opportunity to work one-on-one with faculty as well as in small group classes, developing the knowledge and skills to master the scoring process as it exists today.

Admissions requirements:
Applicants who have completed a bachelor's degree satisfy the undergraduate requirements of this program. General matriculation and admissions requirements of Graduate Studies are in the section "Admission".

Media Scoring M.F.A. Curriculum:
Sixty credits are required for the master of fine arts degree in Media Scoring.

Courses in the Conservatory of Music offered toward the degree must be 7000-level courses. The program of study must be approved by the Conservatory.

Courses required include (a-c):

a) All of the following sixteen Music courses (39 credits): Music 7203X, 7341X taken and completed four times, 7342X, 7343X, 7352X, 7353X, 7354X, 7378X, 7385X, 7440X, 7663X, 7871X, 7872X.

b) At least 12 credits of graduate cinema courses approved by the academic program advisor.

c) At least 9 additional credits of electives in graduate courses approved by the program Director.

Recommended courses include Music 7015X, 7016X, 7017X, 7225X, 7226X, 7344X, 7345X, 7370X, 7386X, 7371G, 7372G, 7606G, 7664X, 7636X, 7646X, 7873X, 7874X, 7642X, 7881X, 7882X, 7883X, U7911X, U7912X, and U7913X. One or two additional semesters of Music 7341X may also be taken for credit as an elective.

Additional requirements for the M.F.A. degree:

All students in this program must meet with faculty for a formal progress evaluation. This will occur for full-time students near the end of their second semester in the program. For part-time students, it will happen after they have completed twelve credits of coursework in the program.

All candidates for this degree must complete a capstone project. This project will be researched and created in close consultation with a faculty member during the Media Scoring Capstone Seminar I and II courses. It must be a new creative or research work deemed of substantial significance and approved by the Media Scoring faculty.

M.F.A. degree program in sonic arts
HEGIS code 1004.10; SED program code 37730

The 60-credit master of fine arts degree in Sonic Arts is intended for electroacoustic composers, electronic music composers, sound artists, and sound designers who seek advanced knowledge in the production of artistic and commercial works in the medium of sound. The two-year program aims to help develop historically and theoretically informed and technically skilled composers and artists. Graduates of this program should be capable of pursuing successful careers in the arts and commercial media industry. The curriculum is flexible and includes weekly private composition lessons (for four semesters) with a member of our internationally acclaimed faculty, as well as courses on the creation of sounds (both composition and sound design), instrument building, and interactivity.

Admission requirements
Applicants for this M.F.A. program must have completed their bachelor's degree with at least 12 credits in undergraduate courses in music or music technology. Applicants must have experience and facility with electronic/digital music-making.

General matriculation and admission requirements of Graduate Studies are in the section "Admission" of the Graduate Bulletin.

Sonic Arts M.F.A. curriculum
Sixty credits are required for the master of fine arts degree in Sonic Arts.
Courses in the Conservatory of Music offered toward the degree must be 7000-level courses. The program of study must be approved by the Conservatory.

Students must also complete requirements for the program in Sonic Arts as follows. Any remaining credits required for the degree must be in courses chosen in consultation with the program director.

All of the following (a-f; all courses are 3 credits unless otherwise indicated):

a) All of the following (21 credits): Music 7331X, 7332X, 7333X, 7334X, 7664X, 7870X, and 7875X.

b) At least 12 credits from the following courses: Music 7014, 7371G, 7372G, 7373X, 7374X, 7375X, 7376X, 7377X, or 7647X. or 7664X (2 cr.)

c) At least 6 credits from the following courses: Music 7660X, 7661X, or 7662X.

d) At least 3 additional credits from the following courses: Music 7644X or 7663X.

e) At least 12 credits from the following courses: Music 7015X, 7016X, 7017, 7354X, 7370, 7378X, 7379X, 7385X, 7386X, 7440X, 7441, or 7635X, 7636X, or 7744X.

f) f) At least 6 additional graduate-level credits of electives approved by the program Director. Recommended courses include MUSC 7744X, 7342, 7343, 7352, 7380 7606G, 7646X, U7930X, PIMA 7010G, PIMA 7741G, PIMA 7742G, FILM 7811G, and ARTD 7810G.

Additional requirements for a M.F.A. degree
A placement assessment will be given to entering students to assess their level of skill and understanding of digital media skills and essential music skills. Students who do not demonstrate adequate skills will be asked to complete remedial coursework.

All students in this program must meet with faculty for a formal progress evaluation. This will occur for full-time students near the end of their second semester in the program. For part-time students, it will happen after they have completed twelve credits of coursework in the program.

All candidates for this degree must complete a capstone project. This project will be researched and begun during the Sonic Arts Capstone Seminar course, MUSC 7870, and completed in the Sonic Arts Capstone course, MUSC 7875. The capstone project must be a new creative or research work deemed of substantial significance and approved by the Sonic Arts faculty. Students are required to give a formal presentation of their capstone project to faculty and peers.

Master of music degree program in music composition
HEGIS code 1004.10; SED program code 88183

The 30-credit master of music degree in composition is the degree for a composer who seeks advanced study in composition. A key feature is weekly private composition lessons (for four semesters) with a member of our internationally acclaimed faculty. Residencies are available within the Conservatory's numerous ensembles and the orchestra, and a broad range of compositional styles is encouraged. At least two concerts per semester exclusively feature the work of Conservatory students. Students also complete a minimum of three seminars in style criticism, music history, and music theory.

Matriculation requirements

Applicants for this program must offer at least 36 credits in music courses including courses in analysis, counterpoint, harmony, and history.

Consideration is given to applicants who do not meet course requirements but have unusual talent or experience equivalent to course work. Such applicants should consult the assistant director.

A placement examination is given to all applicants for admission. The test includes writing skills (harmonic and contrapuntal techniques), analysis, history, and literature. Further information about the examination may be obtained from the assistant director.

Applicants for the program in music composition must submit a music composition portfolio of three to five pieces, which should be sent as instructed by the program coordinator at the time of application.

General matriculation and admission requirements of Graduate Studies are in the section "Admission" of the Graduate Bulletin.

Degree requirements

Thirty credits are required for the master of music degree in music composition.

Before completing 12 credits, students must pass a test given by the conservatory in French, German, or another language approved by the assistant director. Students who completed their bachelor's degree using a modern language other than English may be exempted from this language examination by the assistant director.

Students must pass a comprehensive examination. Information about requirements for the comprehensive examination is in the section "Academic Regulations and Procedures." Courses in the conservatory offered toward the degree must be 7000-level courses. The program of study must be approved by the conservatory.

Students must also complete requirements for the program in music composition or in performance as follows. Any remaining credits required for the degree must be in courses chosen in consultation with the assistant director.

Music Composition (24 credits): Music U7321X, U7322X, U7323X, U7400G; one course chosen from Music U7603G, U7604G, U7605G, U7606G, U7631G, U7650X, 7651X, U7840X, 7850X, 7860X, 7861X; one course chosen from Music U7632G, U7641X, U7642X, U7643X; two semesters of Music U7420G; and Music U7940G. Students must submit a master's composition project.

Recommendation

Composition majors interested in electronic music who take Music U7321X-U7323X should also consider taking Music U7371G and U7372G.

Master of music degree program in music performance
HEGIS code 1004; SED program code 88184

The 36-credit master of music degree in performance is a program aimed at the student who wishes to pursue a career as a professional instrumentalist or singer. A key component of this program is weekly private studio lessons for four semesters with our internationally acclaimed performance faculty. These lessons are augmented by performance opportunities within the Conservatory's ensembles and student concerts, which include two staged operas each year and numerous orchestra, chamber music and contemporary ensemble performances. Students also complete a minimum of three seminars in style criticism, music history, and music theory. Gifted performers who do not yet meet all matriculation requirements for this program should consider applying for the advanced certificate in music performance.

Separate concentrations are offered in instrumental performance and vocal performance, each of which leads to the master of music degree.

Matriculation requirements

Applicants for either concentration must offer at least 36 credits in music courses including courses in analysis, counterpoint, harmony, and history.

Consideration is given to applicants who do not meet course requirements but have unusual talent or experience equivalent to course work. Such applicants should consult the assistant director.

A placement examination is given to all applicants for admission. The test includes writing skills (harmonic and contrapuntal techniques), analysis, history, and literature. Further information about the examination may be obtained from the assistant director.

Applicants for the program in performance must pass an audition at the time of application. A request for an audition appointment may be made by telephone to the conservatory office.

General matriculation and admission requirements of Graduate Studies are in the section "Admission" of the Graduate Bulletin.

Degree requirements

Thirty-six credits are required for the master of music degree in music performance.

Before completing 12 credits, students must pass a test given by the conservatory in French, German, or another language approved by the assistant director. Students who completed their bachelor's degree using a modern language other than English may be exempted from this language examination by the assistant director.

Students must pass a comprehensive examination. Information about requirements for the comprehensive examination is in the section "Academic Regulations and Procedures." Courses in the conservatory offered toward the degree must be 7000-level courses. The program of study must be approved by the conservatory.

Students must also complete requirements for the program in music performance as follows. Any remaining credits required for the degree must be in courses chosen in consultation with the assistant director.

All music performance students (25 credits): Music U7400G; one course chosen from Music U7601G-U7606G, U7631G, U7650X, 7651X, U7840X, 7850X, 7860X; one course chosen from Music U7632G, U7641X, U7642X; four courses chosen from Music 7700X through 7781X or a decision is needed from the department exempting you from this requirement only if you are a pianist; and and Music 7791X, 7792X, 7793X, U7950G. Students must perform a master's recital.

Additional courses required of instrumental performance students (8 credits): Two semesters of Music 7740X; two semesters of Music 7741X; and four semesters of Music 7815X.

Additional courses required of vocal performance students (3 credits): Two semesters of Music 7710X; and one semester of Music 7713X.

Additional 7000 level music electives will be required to meet the 36-credit requirement and complete the degree. These electives may be chosen from Music 7000, 7201, 7225, 7226, 7420, 7741,7634, and 7643.

Recommendation

Students are strongly urged to take additional ensembles each semester, including Music 7741X, 7742X, 7743X, 7780X or 7781X (i.e., Contemporary Music Ensemble, Brass Ensemble, Jazz Ensemble, or Small Jazz Ensemble).

The list of the music performance faculty is available online at http://www.brooklyn.cuny.edu/web/academics/schools/mediaarts/departments/music/faculty.php

Advanced certificate program in music education
HEGIS code 0832; SED program code 26817

The Conservatory of Music in conjunction with the Department of Secondary Education, offers an advanced certificate program in music education. The New York State Education Department licenses graduates of registered teacher education programs who meet the state requirements for teachers.

The advanced certificate in music education is for the student with an undergraduate music degree who wishes to teach music in the New York State public school system. This course of study meets the curricular requirements for initial certification in New York State. 21 credits, 100 field hours, and forty days of student teaching are required for the certificate. The courses required by the School of Education may vary depending on the entry qualifications of students.

All students should consult with the School of Education for the current requirements.

Matriculation requirements

Applicants must offer a B.Mus., or a B.A. or B.S. in music, or the equivalent from an accredited college or university completed with a grade point average of 3.00 or higher. Also eligible to apply are (a) students holding other music bachelor's degrees with sufficient course work in education and music education to be permitted to take student teaching, or (b) students holding a bachelor's degree with at least 36 credits in music courses, including an array of analysis, counterpoint, harmony, history, conducting, performance, education, and music education courses sufficient for admission to student teaching in music. Requirements for student teaching are available from the coordinator of music education. Applicants must also offer course work including the liberal arts and sciences, one course in human development (child and adolescent development), and one course in philosophy of education. Matriculation is contingent upon admission to Brooklyn College and admission to the Conservatory of Music, including music performance audition, music education interview, theory/aural skills test, and transcript review, and TOEFL score of at least 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test, if required.

Certificate requirements

Twenty-one credits are required for this certificate. The following courses are required.

Music 6510T (2 semesters); Music 6581T; Music 6582T; Music 6583T; three courses chosen from Music 6601X-6661X; Music 7201X; Music 6505T and Music 6506T; and Music 6507T.

Advanced certificate program in music performance
HEGIS code 1004; SED program code 36848 (18 credit); 36849 (36 credit)

Matriculation requirements:

Applicants for the program must a) have completed a bachelor's degree in music or music performance at a U.S. institution or professional equivalent, or a non-U.S. equivalent institutional degree and b) pass a live audition before Conservatory faculty at an advanced level that demonstrates clear promise as a performer. A request for an audition appointment may be made by telephone to the Conservatory office.

International applicants for whom English is a second language are required to take the Test of English as a Foreign Language (TOEFL) and must have a minimum score of 500 on the paper examination (or TOEFL Computer 173; TOEFL iBT 60).

Students who hold an accredited bachelor's degree with at least 36 credits in music courses, including courses in analysis, counterpoint, harmony, and history, may also apply. Consideration is also given to applicants who do not meet course requirements but have unusual talent or experience equivalent to course work. Such applicants should consult the deputy chairperson.
A diagnostic placement examination is given to all admitted students. The test includes writing skills (harmonic and contrapuntal techniques), analysis, history, and literature. Further information about the examination may be obtained from the deputy chairperson.

General matriculation and admission requirements of Graduate Studies are in the section "Graduate Admission" of the Graduate Bulletin.

Degree requirements

Eighteen (or thirty-six) credits over one year (or two years) are required for the advanced certificate in music performance. The duration of study depends on a student's level of ability and performance career goals. The program of study must be approved by the Conservatory.

Students must complete requirements for the program as follows. Any remaining credits required for the degree must be in music courses chosen in consultation with the deputy chairperson. Any course substitutions must be approved in writing prior to registration. Required ensembles are assigned by the conservatory, based on the entrance audition.

First Year (18 credits):
Music 6791X and 6792X (Adv. Performance I & II); 6813X (Repertory Study for Major Instrument or Voice, taken both semesters); two courses from Music 7700X (Opera Workshop), 7760X (Orchestra), or 7770X (Wind Ensemble); two courses chosen from Music 7740X or Music 7741X (Chamber Music or Contemporary Music Ensemble); two courses chosen from Music 7441 (Intro. Music Business & Marketing), Music 7840 (Sem. in Performance Practices) or a department-approved 7000-level Music course.
Second Year (18 credits):
Music 6793X and 6794X (Adv. Performance III & IV); 6813X (Repertory Study for Major Instrument or Voice, taken both semesters); two courses from Music 7700X (Opera Workshop), 7760X (Orchestra), or 7770X (Wind Ensemble) or a decision is needed from the department exempting you from this requirement only if you are a pianist; two courses chosen from Music 7740X or Music 7741X (Chamber Music or Contemporary Music Ensemble); two courses chosen from Music 7441 (Intro. Music Business & Marketing), Music 7840 (Sem. in Performance Practices) or a department-approved 7000-level Music course.

Students must perform a graded jury examination at the end of their first and third terms of study (i.e. for Music 6791X and 6793X). A faculty-approved, graded recital must be presented at the conclusion of the second and fourth terms of study in this program (i.e. for Music 6792X and 6794X).

The list of the music performance faculty is available online at http://www.brooklyn.cuny.edu/web/academics/schools/mediaarts/departments/music/faculty.php

Advanced diploma in music performance
HEGIS code 1004; SED program code 36846 (18 credit); 36847 (36 credit)

Matriculation requirements

Applicants for the program must have completed a Master's degree in music performance at a U.S. institution or professional equivalent, or a non-U.S. equivalent institutional degree.

Applicants for the program must pass an audition at the time of application. A request for an audition appointment may be made by telephone to the Conservatory office.

International applicants for whom English is a second language are required to take the Test of English as a Foreign Language (TOEFL) and must have a minimum score of 500 on the paper examination (or TOEFL Computer 173; TOEFL iBT 60).

General matriculation and admission requirements of Graduate Studies are in the section "Graduate Admission" of the Graduate Bulletin.

Degree requirements

Eighteen (or thirty-six) credits over one year (or two years) are required for the artist diploma in music performance. The duration of study depends on a student's technical level and performance career goals. The program of study must be approved by the conservatory.

Students must complete requirements for the program as follows. Any remaining credits required for the degree must be in music courses chosen in consultation with the deputy chairperson. Any course substitutions must be approved in writing prior to registration. Required ensembles are assigned by the conservatory, based on the entrance audition.

First Year (18 credits):
Music 7795X and 7796X (Distinguished Performance I & II); 7813X (Repertory Study for Major Instrument or Voice, taken both semesters); two courses from Music 7700X (Opera Workshop), 7760X (Orchestra), or 7770X (Wind Ensemble) or a decision from the department exempting you from this requirement only if you are a pianist; two courses chosen from Music 7740X or Music 7741 (Chamber Music or Contemporary Music Ensemble); two courses chosen from Music 7441 (Intro. Music Business & Marketing), Music 7840 (Sem. in Performance Practices) or a department-approved 7000-level Music course.

Second Year (18 credits):
Music 7797X and 7798X (Distinguished Performance III & IV); 7813X (Repertory Study for Major Instrument or Voice, taken both

semesters); two courses from Music 7700X (Opera Workshop), 7760X (Orchestra), or 7770X (Wind Ensemble) or a decision from the department exempting you from this requirement only if you are a pianist; two courses chosen from Music 7740X or Music 7741X (Chamber Music or Contemporary Music Ensemble); two courses chosen from Music 7441 (Intro. Music Business and Marketing), Music 7840 (Sem. in Performance Practices) or a department-approved 7000-level Music course.

Students must perform a graded jury examination at the end of their first and third terms of study (i.e. for Music 7795X and 7797X). A faculty-approved, graded recital must be presented at the conclusion of the second and fourth terms of study in this program (i.e. for Music 7796X and 7798X).

The list of the music performance faculty is available online at http://www.brooklyn.cuny.edu/web/academics/schools/mediaarts/departments/music/faculty.php

CUNY Ph.D.

The City University of New York offers a doctoral program in musicology, ethnomusicology, theory, composition, and performance. General information about CUNY Ph.D. and D.M.A. programs is in the chapter “Support for Academic Success in Graduate School” of the Graduate Bulletin. Conservatory of Music courses may be credited toward the CUNY doctoral degree with permission of the executive officer of the doctoral program. For information, students should consult the assistant director of The Conservatory of Music and the executive officer of the doctoral program.

Walter W. Gerboth Music Library

Named in honor of its principal founder and first librarian, respected teacher and scholar Walter W. Gerboth, the library offers facilities for music study, research, and listening.

The music library is located on the second floor of the Brooklyn College Library. Established more than fifty years ago and augmented by substantial bequests, the collection comprises scores, collected works, phonograph recordings, tapes, compact discs, music and dance video cassettes, CD-ROMs, playback equipment for on-site listening, and general and specialized books about music and dance as well as a fine selection of periodicals, yearbooks, and online music reference works.

Subject strengths lie in American music and performance scores. The collection is complemented by that of the Hitchcock Institute for Studies in American Music, 415 Whitehead Hall.

Courses

Unless a prerequisite is specific, students may apply graduate or undergraduate courses toward fulfillment of that prerequisite.

Not all courses are offered each term.

Courses Music 7700 through 7781 may be taken for credit each term the student is enrolled.

The following Music seminars may be repeated for credit with a different topic, as indicated in the Schedule of Classes and approved by the director:
Music U7603G-U7606G - Seminar(s) in music history;
Music U7631G, U7632G, U7633X, U7634X, U7641X, U7642X, U7650X, U7651X, U7840X, 7850X.

MUSC 6507T Teacher Portfolio Assessment

15 hours; 0 credits
A multi-measure teacher portfolio assessment where candidates demonstrate the pedagogical knowledge and skills identified in the New York State Teaching Standards, as aligned with the New York State Culturally Responsive-Sustaining Education Framework, and their content knowledge and skill in teaching to the State learning standards in the grade band and subject area of a certificate sought. Grading system used for the course is Pass, No Pass

Prerequisite and/or Corequisite: Student teaching fieldwork
Prerequisite: Recommendation by department chair or program coordinator.

MUSC 6510T Music Education Colloquium

15 hours, 20 hours fieldwork; 0 credits
A colloquium for music education majors. Guest speakers, student and faculty presentations, discussions on current topics in music education. Required of music education majors each semester. Field experience in the public schools. Assigned grades of P or F.

MUSC 6581T Music in the Elementary School

45 hours, 30 hours supervised field experience; 3 credits
Techniques, methods, and materials used in teaching music in the elementary schools including instruction for pre-kindergarten 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; diversity. Includes observation and supervised teaching in public schools.

Prerequisite: permission of the director.
Corequisite: Music 6510T [651T].

MUSC 6582T Music in the Secondary School

45 hours, 15 hours field experience; 3 credits
Study of techniques, methods, and materials used in teaching music in diverse, multicultural 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 supervised field experience in public schools.

Prerequisite: permission of the director. Corequisite: Music 6510T [651T].

MUSC 6583T Music in Special Education

45 hours, 15 hours field experience; 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 experience.

Corequisite: Music 6510T [651T].

MUSC 6601X Voice Production

30 hours; 1 credit
Technique of singing. Proper breathing, tone placement, legato scale, agility exercises. Attention to individual needs. Phrasing, diction, interpretation.

Prerequisite: an introductory course in sightsinging and dictation or permission of the director.

MUSC 6611X String Class: Violin and Viola

45 hours; 1 credit
Tuning, bowing, and positions for violin and viola. Practice in reading simple compositions. For beginners. Primarily for use in public school teaching. No previous knowledge of a stringed instrument required.

Prerequisite: Ability to read music and permission of the director. Corequisite: Music 6510T [651T].

MUSC 6621X String Class: Violoncello and Bass Viol

45 hours; 1 credit
Tuning, bowing, and positions for bass viol and violoncello. Practice in reading simple compositions. For beginners. Primarily for use in public school teaching. No previous knowledge of a stringed instrument required.

Prerequisite: ability to read music and permission of the director. Corequisite: Music 6510T [651T].

MUSC 6630X Woodwind Class

45 hours; 1 credit
Mechanism, embouchure, and tone production of the flute, oboe, clarinet, bassoon. Practice in reading simple compositions. For beginners. No previous knowledge of a woodwind instrument is required. Primarily for use in public school teaching.

Prerequisite: ability to read music and permission of the director. Corequisite: Music 6510T [651T].

MUSC 6640X Brass Class

45 hours; 1 credit
Fingering, embouchure, and tone production of the trumpet, French horn, trombone, tuba. Practice in reading simple compositions. For beginners. No previous knowledge of a brass instrument is required. Primarily for use in public school teaching.

Prerequisite: ability to read music and permission of the director. Corequisite: Music 6510T [651T].

MUSC 6650X Percussion Class

45 hours; 1 credit
Principles of percussion technique. Practice in reading simple compositions. For beginners. No previous knowledge of a percussion instrument is required. Primarily for use in public school teaching.

Prerequisite: ability to read music and permission of the director. Corequisite: Music 6510T [651T].

MUSC 6661X Fretted Instrument Class

45 hours; 1 credit
Tuning, sound production, and positions for fretted instruments (guitars and lutes). Practice in reading simple compositions. Primarily for use in public school teaching. No previous knowledge of a fretted instrument is required.

Prerequisite: ability to read music and permission of the director. Corequisite: Music 6510T [651T].

MUSC 6791X Advanced Performance I

30 hours lecture; 15 hours recitation, at least 120 hours independent work; 3 credits.
Advanced level of private performance study of the student's major instrument or voice. Conservatory-approved performance jury required as final examination.

Prerequisite: Conservatory-approved audition and acceptance into the Advanced Certificate program in Music Performance.

MUSC 6792X Advanced Performance II

30 hours lecture; 15 hours recitation, at least 120 hours independent work; 3 credits.
Continuation of MUSC 6791X. Students must continue in voice or instrument studied in MUSC 6791. Conservatory-approved recital required as final examination.

Prerequisite: Music 6791X.

MUSC 6793X Advanced Performance III

30 hours lecture; 15 hours recitation, at least 120 hours independent work; 3 credits.
Continuation of MUSC 6792X. Students must continue in voice or instrument studied in MUSC.6792. Conservatory-approved performance jury required as final examination.

Prerequisite: Music 6792X.

MUSC 6794X Advanced Performance IV

30 hours lecture; 15 hours recitation, at least 120 hours independent work; 3 credits.
Continuation of MUSC 6793X. Students must continue in voice or instrument studied in MUSC.6793. Conservatory-approved recital required as final examination.

Prerequisite: Music 6793X.

MUSC 6813X Repertory for Major Instrument or Voice

30 hours; 1 credit
Study of orchestral, chamber, and solo repertoire for one's major instrument or voice. Students will be expected to speak and write about the works they perform. May be taken each semester the student is enrolled.

Prerequisite: Conservatory-approved audition and acceptance into the Advanced Certificate program in Music Performance.

MUSC U7000G Bibliography and Research Techniques

45 hours; 3 credits
Study and evaluation of sources and bibliographical methods.

MUSC 7014X Musicianship for Sound Artists

45 hours; 3 credits
Introduction to fundamental nomenclature and aural skills of Western music. Music theory and the development of abilities to discern musical intervals, scales, and rhythms.

Prerequisite: Permission of director.

MUSC 7015X Techniques for Recording Music/Audio Engineering

45 hours: 3 credits
Essential theories and techniques of sound recording, mixing, and mastering. Analog-to-digital conversion of audio. Types and uses of microphones. Use of audio mixers. Digital audio workstation software. Techniques for recording and mixing.

Prerequisite: MUSC 7370X or permission of director.

MUSC 7016X Advanced Audio Recording Techniques and Engineering

45 hours: 3 credits
Advanced theories and techniques of sound recording, mixing, and mastering. Live versus studio recording. Microphone techniques, equalization, and application of other signal processing algorithms. Adjusting sound across multiple recordings to match them as a single sonic work.

Prerequisite: MUSC 7015X.

MUSC 7017X Recording Music for Media

45 hours; 3 credits
Regular sessions where students write, perform, and record music for media. Primarily intended for students in composition, performance, media scoring, sonic arts, and music technology. May be repeated for credit.

Prerequisite: Permission of the program director.

MUSC 7101X Choral Workshop

45 hours; 3 credits
Literature and technique pertaining to the development of school choral groups, including preparation and presentation of choral works for school choral ensembles.

Prerequisite: an undergraduate course in conducting or permission of the director.

MUSC 7170T Foundations and Methods of Music Education

45 hours; 3 credits
Philosophical and historical foundations of music education. Methods, techniques, independent projects.

Prerequisite: permission of the director.

MUSC 7190X Jazz Pedagogy

45 hours, 3 credits
Survey various methods and techniques for teaching jazz performance to students at the secondary school and college levels and in private lessons. Organizing and rehearsing large and small bands; choosing appropriate repertoire; teaching jazz-related harmonies, rhythms, and improvisational techniques; approaches to the one-on-one lesson; methods of learning assessment.

Prerequisite: Permission of Director

MUSC 7201X Conducting and Rehearsal Techniques

45 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 and instrumental ensembles. Techniques for teaching heterogeneous choral and instrumental courses. Field observations and fieldwork in the public schools.

Prerequisite: permission of the director

MUSC 7203X Conducting for Recording Sessions

45 hours; 2 credits
Instruction in techniques of conducting for recording sessions. Topics include working with click, conducting to picture, and working with recording musicians. Students also look at time management and balancing the needs of conductor, composer, orchestrator, engineer, contractor, and performer.

Prerequisite: Permission of director.

MUSC 7225X Advanced Keyboard Workshop 1

45 hours; 2 credits
Advanced level of keyboard studies for graduate music students. Enhance and further develop greater technical facility, proficiency in sight-reading and score-reading, and provide the opportunity to work on advanced level repertoire. May be retaken only once if not passed the first time.

Prerequisite: Placement exam or permission of the director.

MUSC 7226X Advanced Keyboard Workshop 2

45 hours; 2 credits
Advanced level of keyboard studies for graduate music students. Enhance and further develop greater technical facility, proficiency in sight-reading and score-reading, and provide the opportunity to work on advanced level repertoire. May be retaken only once if not passed the first time.

Prerequisite: Music 7225X with a grade of C or better or permission of the director.

MUSC U7321X Seminar in Composition I

45 hours; 3 credits
Original writing in various media, instrumental and vocal.

Prerequisite:permission of the director.

MUSC U7322X Seminar in Composition II

45 hours; 3 credits
Original writing in various media, instrumental and vocal.

Prerequisite: Music U7321X [732.1X] and permission of the director.

MUSC U7323X Seminar in Composition III

45 hours; 3 credits
Original writing in various media, instrumental and vocal.

Prerequisite: Music U7322X [732.2X] and permission of the director.

MUSC 7331X Sonic Arts Composition I

45 hours; 3 credits
One-on-one tutorial in which majors develop new compositions under the guidance of a member of the Sonic Arts faculty. Assignment of readings, listenings, and analysis of works as models, as deemed appropriate by the faculty. Students produce finished works for performance or exhibition.

Prerequisite: Permission of director.

MUSC 7332X Sonic Arts Composition II

45 hours; 3 credits
One-on-one tutorial in which majors develop new compositions under the guidance of a member of the Sonic Arts faculty. Assignment of readings, listenings, and analysis of works as models, as deemed appropriate by the faculty. Students produce finished works for performance or exhibition.

Prerequisite: Music 7331X.

MUSC 7333X Sonic Arts Composition III

45 hours; 3 credits
One-on-one tutorial in which majors develop new compositions under the guidance of a member of the Sonic Arts faculty. Assignment of readings, listenings, and analysis of works as models, as deemed appropriate by the faculty. Students produce finished works for performance or exhibition.

Prerequisite: Music 7332X.

MUSC 7334X Sonic Arts Composition IV

45 hours; 3 credits
One-on-one tutorial in which majors develop new compositions under the guidance of a member of the Sonic Arts faculty. Assignment of readings, listenings, and analysis of works as models, as deemed appropriate by the faculty. Students produce finished works for performance or exhibition.

Prerequisite: Music 7333X.

MUSC 7341X Scoring Composition Seminar

45 hours; 1 credit
Masterclass, critique, and discussion during class by the instructor and students.

Prerequisite: Permission of director.

MUSC 7342X Media Scoring Lessons I

45 hours; 3 credits
One-on-one compositional instruction focused on scoring for media.

Prerequisite: Permission of director.

MUSC 7343X Media Scoring Lessons II

45 hours; 3 credits
One-on-one compositional instruction focused on scoring for media.

Prerequisite: MUSC 7342X

MUSC 7344X Media Scoring Lessons III

45 hours; 3 credits
One-on-one compositional instruction focused on scoring for media.

Prerequisite: MUSC 7343X

MUSC 7345X Media Scoring Lessons IV

45 hours; 3 credits
One-on-one compositional instruction focused on scoring for media.

Prerequisite: MUSC 7344X

MUSC 7350T Orchestration

45 hours; 3 credits
Practical work in scoring for various ensembles. Independent projects.

Prerequisite: permission of the director.

MUSC 7352X Orchestration for Cinema I

45 hours; 3 credits
Exploration of the art of orchestration for cinema scoring. Study of canonical scores, with particular attention to techniques for coloring sound for presentation with visual media.

Prerequisite: Permission of director.

MUSC 7353X Orchestration for Cinema II

45 hours; 3 credits
Advanced techniques of art of orchestration for cinema scoring. Study of canonical scores, with attention to techniques for coloring sound and using orchestration to enhance dramatic power of visual media.

Prerequisite: MUSC 7352X

MUSC 7354X Scoring for Motion Pictures and New Media

45 hours; 3 credits
Refinement of skills to combine live musicians and computer-based techniques in music for cinema and interactive artworks.

Prerequisite: MUSC 7203X and 7378X.

MUSC 7360X Fundamentals of Music Technology

45 hours; 3 credits
This course is designed for any musician interested in computer-based tools to enhance their musical life and career. The class will introduce musicians to an array of available software for the creation, documentation, and instruction of music. Topics include digital audio, MIDI, music notation, music

on the Internet, presentation of one's work, and pedagogical tools.

Prerequisite: Permission of instructor.

MUSC 7361G Electroacoustic Music I

45 hours; 3 credits
This class is an exploration of creativity with digital sound. It is the first in a two-semester sequence and is meant to be an introduction to music composition with computer software and hardware. course treats topics of electroacoustic sound and methods of composition that are distinct to this medium, with a focus on concepts derived from musique concrète, acousmatic music, and related styles, coupled with explanation and application of digital signal processing techniques. Students complete a series of projects exploring these concepts, culminating in a major final project.

Prerequisite: Permission of instructor.

MUSC 7362G Electroacoustic Music II

45 hours; 3 credit
This course will explore techniques of sound synthesis, both analog and digital. First topics include simple oscillators and then progress through others including subtractive synthesis, modulation, granular, and physical modeling. Discussion of techniques will also be related to historical and contemporary creators and their works. Control and compositional use of synthesis techniques will be explored via a series of assignments exploring these concepts, culminating in a major final project.

Prerequisite: Permission of instructor.

MUSC 7370X Music Technology for Media

45 hours; 3 credits
This course covers the technical and creative elements necessary to produce audio for media. Through hands-on projects, students will have the opportunity to experiment with sound editing, sound design, foley, adr, mixing, mastering, music editing, music production, audio recording, audio restoration, and syncing music and sound to picture. In some instances students will be given the opportunity to collaborate with peers, which is a crucial skill to attain for working in media. This course also looks at how audio transmission and standards affect our workflow and decisions throughout the post-production process. Through a combination of lectures, practice, and critiques, students will gain the skills to create and edit their own soundtracks, as well as look with a discerning eye and ear at their work and the work of others.

Prerequisite: Matriculation in a graduate visual, media, or performing arts program; or permission of instructor.

MUSC U7371G Audio Sculpting Techniques

45 hours; 3 credits
Use and digital transformation of recorded sound for compositional purposes. A wide variety of digital signal processes will be studied-- their technical details, how they have been used historically, and how to implement them in students' creative work.

Prerequisite: Permission of program director required.

MUSC U7372G Computer Music II

45 hours; 3 credits
Application of digital signal processing techniques to music composition. Computer analysis of sound and speech, digital filtering techniques, computer speech synthesis. Completion of a short work is required. Computer facilities are available for student use.

MUSC 7373X Building Electronic Music Instruments

45 hours; 3 credits
In this course students learn how to design, program, and build their own electronic music instruments and installations, including both hardware and software. Topics include essentials of electronic circuits, interfacing them with computers, and instrument programming. Although the focus is on music, many aspects of the course topics are also applicable to interactive electronic art and theater.

Prerequisite: MUSC 7372G or PIMA 7741G, or permission of instructor.

MUSC 7374X Computer-Assisted Music Composition

45 hours; 3 credits
Introduction and exploration of methods employed by composers and sonic artists to devise work using the computational power of computers. Students learn algorithmic techniques and use them to create new pieces.

Prerequisite: Permission of director.

MUSC 7375X Interactive Computer Music

45 hours; 3 credits
Theory, production, and literature of interactive music, with a focus on developing students' own skills and creative works. Topics include interactive music programming, compositional strategies, coordination of audio with video, and techniques of professional live performance.

Prerequisite: Permission of director.

MUSC 7376X Advanced Interactive Computer Music

45 hours; 3 credits
Advanced topics in theory, production, and literature of interactive music, with a focus on developing students' own skills and creative works. Topics include advanced interactive music programming, interactive multimedia programming, compositional strategies, composition of audio with video, and techniques of professional live performance.

Prerequisite: Music 7375X.

MUSC 7377X Seminar in Sonic Arts

45 hours; 3 credits
Presentation of advanced and timely topics to students in sonic arts. Subjects vary from semester to semester. Content chosen by faculty to reflect interesting and innovative concepts and techniques of contemporary relevance to students.

Prerequisite: Permission of director.

MUSC 7378X Sequencing and Sampling

45 hours; 3 credits
This course covers what sequencing and sampling are and how they are used separately as well as in conjunction with one another in their historical context and in the present. Students will learn how and when to use ready-made samples versus creating original samples, as both are key to creating MIDI

mockups and hybrid scores for media. Students will also have the opportunity to repurpose their own work and the work of others in a transformative manner. Students are encouraged to collaborate as this is a key part of the process of sequencing and sampling. Through the study of loop-based music and collage-based forms in a variety of genres, the course traces the early roots of western traditions in sampling and sequencing as a result of a confluence of influences as well as the role of technology in shaping these techniques and genres. In addition to mainstream and modern techniques, we will look at classical orchestration with MIDI. The course also touches on copyright issues as well as professional roles in media surrounding sequencing and sampling, such as producer, technologist, orchestrator, and MIDI preparation.

Prerequisite: Permission of director.

MUSC 7379X Seminar in Audio Production

45 hours; 3 credits.
Advanced studies in the professional techniques of audio production: Equalization, mixing, editing, and related topics. Industry standards as well as artistic considerations will be discussed and evaluated.

MUSC 7380X Jazz Arranging and Orchestration

45 hours; 3 credits
Technical and aesthetic aspects of jazz arranging and orchestration. Analysis of historically important works for large and small jazz ensemble, with an emphasis placed on the traditional big band.

MUSC 7385X Sound Design I

45 hours; 3 credits
Instruction in techniques of sound design for visual media. Topics include sound editing, ADR, foley, mixing, and sound synthesis. Special attention is given to bringing all elements of a soundtrack together into a completed and deliverable mix to a production.

Prerequisite: Permission of director.

MUSC 7386X Sound Design II

45 hours; 3 credits
Further instruction in techniques of sound design for visual media. Topics include sound editing, ADR, foley, mixing, and sound synthesis. Special attention is given to bringing all elements of a soundtrack together into a completed and deliverable mix to a production.

Prerequisite: MUSC 7385X

MUSC U7400G Seminar in Style Criticism

45 hours; 3 credits
The nature of musical style. Study of selected works, composers, schools of composition, historical eras.

MUSC 7440X Music Business for Media

45 hours; 3 credits
Instruction in professional development and preparation for careers as composers, music editors, music supervisors, managers, and agents. Topics on the protection and commodification of music, including publishing, copyright, work registration, cue sheets, performing rights, royalties, unions, music law and contracts, promotion and marketing, professional networking, grant applications, conferences and festivals, and finances.

Prerequisite: Permission of director.

MUSC 7441X Introduction to Music Business & Marketing

45 hours; 3 credits
Introduction to activities associated with the music business, including working at labels, distribution companies, publishing companies, recording studios, artist management, promotion, producing, and legal counsel. A broad overview of the music industry, and explanation of how its various segments operate on a day-to-day basis: where monies are generated, who the key players are, how deals are made and broken, how interests are protected, and new developments in digital technology that are changing the way that music is marketed, promoted, distributed, and heard.

Prerequisites: Permission of the Director.

MUSC U7540X Fundamentals of Jazz Theory

45 hours; 3 credits
Jazz theory, practice, and technique learned through analysis and performance. Intervallic construction through late chromatic harmony. Special emphasis on harmony and theory in twentieth century classical music and its relationship to jazz. Introduction to non-Western scales and modes, as well as avant-garde approaches to contemporary composition and improvisation.

Prerequisite: permission of the director.

MUSC 7545X Contemporary Jazz Theory and Musicianship

45 hours, 3 credits
Survey of practical jazz techniques based in new organizational methods for understanding advanced jazz and world music theory.

Prerequisite: Permission of the Director

MUSC 7546X Jazz Composition

45 hours, 3 credits
A comprehensive approach to jazz composition and arranging with an emphasis on producing a final written score/arrangement.

Prerequisite: Permission of the Director

MUSC U7603G Seminar in Music History: Baroque Era (1600-1750)

45 hours each term; 3 credits each term
Investigation of general principles and specific phenomena pertaining to the period. Independent research. Topic to be announced. May be repeated for credit with a different topic, as indicated in the class schedule and approved by the director.

Prerequisite: Music U7400G [740G] or the equivalent.

MUSC U7604G Seminar in Music History: Classic Era (1750-1820)

45 hours each term; 3 credits each term
Investigation of general principles and specific phenomena pertaining to the period. Independent research. Topic to be announced. May be repeated for credit with a different topic, as

indicated in the class schedule and approved by the director.

Prerequisite: Music U7400G [740G] or the equivalent.

MUSC U7605G Seminar in Music History: Romantic Era (1820-1900)
45 hours each term; 3 credits each term
Investigation of general principles and specific phenomena pertaining to the period. Independent research. Topic to be announced. May be repeated for credit with a different topic, as indicated in the class schedule and approved by the director.

Prerequisite: Music U7400G [740G] or the equivalent.

MUSC U7606G Seminar in Music History: Twentieth Century
45 hours each term; 3 credits each term
Investigation of general principles and specific phenomena pertaining to the period. Independent research. Topic to be announced. May be repeated for credit with a different topic, as indicated in the class schedule and approved by the director.

Prerequisite: Music U7400G [740G] or the equivalent.

MUSC U7631G Special Topics Seminar: History

45 hours; 3 credits
Intensive historical studies. Examination and evaluation of original sources. Topic to be announced. May be repeated for credit with a different topic, as indicated in the class schedule and approved by the director.

Prerequisite: Music U7400G [740G] or permission of the director.

MUSC U7632G Special Topics Seminar: Theory

45 hours; 3 credits
Intensive theoretical studies. Examination and evaluation of original sources. Topic to be announced. May be repeated for credit with a different topic, as indicated in the class schedule and approved by the director.

Prerequisite: Music U7400G [740G] or permission of the director.

MUSC U7633X Special Topics Seminar: Music Education
45 hours; 3 credits
Intensive study of specific issues and approaches in music education. May be repeated for credit with a different topic, as indicated in the class schedule and approved by the director.

Prerequisite: permission of the director

MUSC U7634X Special Topics Seminar: Performance

45 hours; 3 credits
Intensive studies in music performance. Topic to be announced. May be repeated for credit with a different topic. Prerequisite: permission of the director. May be repeated for credit with a different topic, as indicated in the class schedule and approved by the director.

Prerequisite or corequisite: Music U7400G [740G]. Corequisite: Music 7791X [U779.1X], 7792X [U779.2X], 7793X [U779.3X], or 7950G [U795G].

MUSC 7635X Special Topics in Sonic Arts

45 hours; 3 credits
Presentation from regular and guest faculty of advanced and timely topics in sonic arts. Course subjects will vary from semester to semester. Content will be chosen by faculty to reflect interesting and innovative concepts and techniques of great value to students.

Prerequisite: Permission of director.

MUSC 7636X Special Topics in Music for Media

45 hours; 3 credits
Topics selected from various areas of music for media including existing practice and recent contributions in the field. Course content varies from term to term.

Prerequisite: Permission of the program director.

MUSC U7641X Seminar in Music Theory: Analysis of Tonal Music
45 hours; 3 credits
Intensive analysis of tonal music. Developing adequate theoretical concepts and analytic techniques. May be repeated for credit with a different topic, as indicated in the class schedule and approved by the director.

MUSC U7642X Seminar in Music Theory: Analysis of Twentieth-Century Music
45 hours; 3 credits
Intensive analysis of twentieth-century music. Developing adequate theoretical concepts and analytic techniques. May be repeated for credit with a different topic, as indicated in the class schedule and approved by the director.

MUSC U7643X Seminar in Music: Philosophy of Music

45 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 7512X.

Prerequisite: one course in philosophy or one course in music or permission of the chairperson of Philosophy or Music.

MUSC 7644X Analysis of Electroacoustic Music

45 hours; 3 credits
In-depth study of electroacoustic music works. Discussion of compositional intent and techniques, technological tools and their employment, as well as sonic results and ways to understand works in terms of form and structure, with particular emphasis on methods to depict musical elements such as timbre that may be of primary importance in electroacoustic works but have little mode of representation in traditional Western music notation.

Prerequisite: Permission of director.

MUSC 7646X Seminar in Music for Media

45 hours; 3 credits
In depth study of music and media both in the present and in its historical context. Examination and implementation of traditional

and non-traditional techniques through both established and emerging media. May be repeated for credit with permission of the program director.

Prerequisite: Permission of the program director.

MUSC 7647X Sonic Arts Composition Seminar

45 hours; 3 credits
This course guides students through an exploration of numerous contemporary music composition styles and techniques, to broaden and strengthen their artistic voices. Topics discussed will include harmony, timbre, motivic development, use of processes, chance, improvisation, and other methods to devise musical form and structure.

MUSC U7650X Seminar in American Music

45 hours; 3 credits
American music from the colonial period to the present. Topic to be announced. May be repeated for credit with a different topic, as indicated in the class schedule and approved by the director.

Prerequisite: Music U7400G [740G] or the equivalent.

MUSC 7651X Seminar in Jazz History

45 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 not repeat topics. May be repeated for credit with a different topic, as indicated in the class schedule and approved by the director.

Prerequisite: Music U7400G [740G] or the equivalent

MUSC 7660X History of Electronic and Computer Music

45 hours; 3 credits
History of electronic music from its precursors in the late 1800s to the present. Study of the development of instrument technology, compositional ideas, and musical styles. Introduction to electronic and computer music from diverse periods. Additional emphasis on music technologies in pop music and cross-influences among styles.

Prerequisite: Permission of director.

MUSC 7661X History of Sound Art

45 hours; 3 credits
History and theory of art utilizing the medium of sound. A chronological survey from Futurism, Dada, and Surrealism through Fluxus, minimalism, conceptual art, sound poetry, sound sculpture, installation art, radio art, performance art, sound walks, and noise.

Prerequisite: Permission of director.

MUSC 7662X History of Popular Music and Technology

45 hours; 3 credits
History of the use of electronic technology in popular music, 1900 to the present. Discussion of technologies themselves as well as their impact on music styles, adaptation and innovations by musicians in their use of technology in composition and performance.

Prerequisite: Permission of director.

MUSC 7663X History and Analysis of Cinema Scores

45 hours; 3 credits
Historical overview of the art of music for cinema, with detailed analysis and discussion of selected masterworks.

Prerequisite: Permission of director.

MUSC 7664X Acoustics and Psychoacoustics of Music

45 hours, 3 credits
Introduction to the fundamental concepts of acoustics and the human cognitive functions regarding auditory perception, with a particular focus on music.

Prerequisite: Permission of director.

MUSC 7700X Opera Workshop

45 hours; 1 credit
Study and performance of scenes from operas and operettas. Fundamentals of operatic technique. Coordination of singing and stage movement. May be taken for credit each term the student is enrolled.

Prerequisite: audition.

MUSC 7701X Techniques in Performance for Singers

45 hours; 1 credit
An investigation into practical techniques for dynamic and truthful story-telling in singing using songs in the singer's native language. Exercises will explore the kinesthetic, vocal, and facial modes: how to expand their vocabulary and strength, and how to release tensions that arise as each of the performance modes are asked to channel higher levels of performance energy. Specific attention will be given to how we combine the modes into the unique form of opera/musical theater. The first half of class is dedicated to exploratory exercises, and the second half of class is dedicated to putting discoveries from those exercises into practical use in singing repertoire in a master class setting. The class will culminate in a performance of the selected songs in the singer's native language. May be taken for credit each semester the student is enrolled.

Prerequisite: audition

MUSC 7710X Symphonic Choir

45 hours; 1 credit
Study and performance of choral literature from a multiplicity of genres and style periods, with particular emphasis given to the development of fundamental musicianship skills, music literacy, and vocal technique. This ensemble welcomes all students without audition. May be taken for credit each term the student is enrolled.

MUSC 7711X Conservatory Singers

45 hours; 1 credit
Brooklyn College's premiere choral ensemble performs literature from a multiplicity of genres and style periods, including major works with orchestra. Open by audition. May be taken for credit each term the student is enrolled.

Prerequisite: audition.

MUSC 7712X Glee Club

45 hours; 1 credit
A vocal ensemble for beginning to intermediate singers that

strives to build musicianship and music literacy skills through a repertoire and performance based curriculum. A diverse selection of repertoire from the Renaissance through contemporary musical theatre will offer opportunities to examine social, political, and historical aspects related to the music. May be taken for credit each semester the student is enrolled.

MUSC 7713X Vocal Repertory Practicum for Oratorio and Opera

45 hours; 1 credit
A vocal repertory course for advanced singers to explore appropriate repertoire for future engagements. The course strives to build the repertory of each singer as well as provide the experience of learning a role for important oratorio and opera settings. The repertoire will be tailored to the participants of the class. Selected repertoire from the Renaissance through the twentieth century will offer opportunities to examine social, political, and historical aspects related to the music. May be taken for credit each semester the student is enrolled.

Prerequisite: Audition

MUSC 7720X Percussion Ensemble

45 hours; 1 credit
Study and performance of music for percussion ensemble. May be taken for credit each term the student is enrolled.

Prerequisite: audition.

MUSC 7740X Chamber Music

45 hours; 1 credit
Study and performance of the standard repertoire. May be taken for credit each term the student is enrolled.

Prerequisite: At least two terms (in any combination) of Music 7741X [774.1X], 7742X [774.2X], 7743X [774.3X], 774.5X, or 7780X [778X]; and permission of the director.

MUSC 7741X Contemporary Music Ensemble

45 hours; 1 credit
Study and performance of contemporary music. May be taken for credit each term the student is enrolled.

Prerequisite: audition.

MUSC 7742X Brass Ensemble

45 hours; 1 credit
Experience for both small and large chamber groups in the study and performance of traditional and contemporary music for brass instruments. Emphasis on developing basic musicianship through systematic work on intonation, phrasing, balance, and interpretation. Study of brass instrument history, technique, repertoire, and pedagogy. May be taken for credit each term the student is enrolled.

Prerequisite: audition.

MUSC 7743X Woodwind Chamber Music

45 hours; 1 credit
Study and performance of music for woodwind chamber ensembles. May be taken for credit each term the student is enrolled.

Prerequisite: audition.

MUSC 7744X Electroacoustic Music Ensemble

45 hours; 1 credit
In this course students will develop skills of ensemble music performance with electronic music instruments, combining diverse timbres and approaches to sound production and control. Instruments will include completely electronic ones as well as hybrids that combine acoustic instruments with digital signal processing. The group will explore instrument creation, networked interaction, incorporation of improvisation, and arrangement of amplified sound sources. Students will perform existing repertoire and have the opportunity to compose new works. The goal of each semester will be two or more public performances. May be taken for credit each term the student is enrolled.

Prerequisite: MUSC 7372G, or PIMA 7741G; or permission of instructor.

MUSC 7745X Guitar Ensemble

45 hours rehearsal; 1 credit
The guitar ensemble works on original works written for plucked instruments and explores historical literature through primary and secondary sources. The course is a strongly recommended co-requisite for guitar majors, and open to others through audition and permission of the instructor. The ability to read music in both treble as well as bass clef is a prerequisite for joining the ensemble. May be taken for credit each term the student is enrolled.

Prerequisite: audition or permission of the director.

MUSC 7760X Orchestra

75 hours; 1 credit
Study and performance of new and old literature. May be taken for credit each term the student is enrolled.

Prerequisite: audition.

MUSC 7770X Wind Ensemble

45 hours; 1 credit
Study and performance of new and old literature. May be taken for credit each term the student is enrolled.

Prerequisite: audition.

MUSC 7780X Jazz Big Band

45 hours; 1 credit
Study and performance of new and old jazz literature. May be taken for credit each term the student is enrolled.

Prerequisite: audition.

MUSC 7781X Small Ensemble Jazz

45 hours; 1 credit
Study and performance of music for small jazz combo, including practical experience with jazz improvisation techniques and styles. May be taken for credit each term the student is enrolled.

Prerequisite: audition.

MUSC 7782G Global Music Ensemble

45 hours; 1 credit
This course performance class will be dedicated to styles and repertoires of music that lie outside the realms of standard

Western Art Music and American Jazz. Each semester the ensemble will focus on a specific musical tradition form one of the following areas: Latin America, the Caribbean, Africa, Eastern Europe, the Mid-East, and South and East Asian. May be taken for credit each semester the student is enrolled.

Prerequisite: Audition or permission of the program director.

MUSC 7791X Performance I

45 hours each term; 3 credits each term
Advanced performance in voice or an instrument. One hour a week of individual instruction. Weekly performance seminar.

Prerequisite: audition and permission of the director.
Corequisite: an ensemble performance course (Music 7700X [770X]–7781X [778.1X]) as assigned through audition and permission of the director.

MUSC 7792X Performance II

45 hours each term; 3 credits each term
Advanced performance in voice or an instrument. One hour a week of individual instruction. Weekly performance seminar.

Prerequisite: Music 7791X [779.1X] and audition and permission of the director.
Corequisite: an ensemble performance course (Music 7700X [770X]–7781X [778.1X]) as assigned through audition and permission of the director.

MUSC 7793X Performance III

45 hours each term; 3 credits each term
Advanced performance in voice or an instrument. One hour a week of individual instruction. Weekly performance seminar.

Prerequisite: Music 7792X [779.2X] and audition and permission of the director.
Corequisite: an ensemble performance course (Music 7700X [770X]–7781X [778.1X]) as assigned through audition and permission of the director.

MUSC 7795X Distinguished Performance I

30 hours lecture; 15 hours recitation, at least 120 hours independent work; 3 credits.
Private performance study of the student's major instrument or voice at an exceptionally advanced level. Conservatory-approved performance jury required as final examination.

Prerequisite: Completed master's degree in music, a Conservatory-approved audition and acceptance into the Advanced Diploma program in Music Performance.

MUSC 7796X Distinguished Performance II

30 hours lecture; 15 hours recitation, at least 120 hours independent work; 3 credits.
Continuation of MUSC 7795X. Students must continue in voice or instrument studied in MUSC 7795X. Conservatory-approved recital required as final examination.

Prerequisite: Music 7795X.

MUSC 7797X Distinguished Performance III

30 hours lecture; 15 hours recitation, at least 120 hours independent work; 3 credits.
Continuation of MUSC 7796X. Students must continue in voice or instrument studied in MUSC 7796X. Conservatory-approved performance jury required as final examination.

Prerequisite: Music 7796X.

MUSC 7798X Distinguished Performance IV

30 hours lecture; 15 hours recitation, at least 120 hours independent work; 3 credits.
Continuation of MUSC 7797X. Students must continue in voice or instrument studied in MUSC 7797X. Conservatory-approved recital required as final examination.

Prerequisite: Music 7797X.

MUSC 7810X Seminar in Language and Diction for Singers

45 hours; 3 credits
Essentials of effective singing diction in English, Italian, French, and German. Review of the International Phonetic Alphabet (IPA) and its applications with Italian, French, German, Spanish, and English. Thorough study of standard lyric pronunciation in two European languages, with fundamentals of their respective phonetics and the rules governing their pronunciation. Supervised singing of solo vocal repertoire with clarity and expression. Languages of focus will rotate from term to term. May be taken twice for credit, provided that the languages of focus are different.

Prerequisite: Permission of the director.

MUSC U7811X Piano Repertory Class

30 hours; 0 credit
Study of solo piano repertoire from the 1600s to the present through critique of student performance. Piano history, literature, performance prectice, and performance. Practical application in solo performance settings as assigned. May be taken more than once.

Prerequisite: permission to take Music 7791X [779.1X]-7793X [779.3X], 7950G [U795G], or permission of the director.
Corequisite: Music 7791X [779.1X]-7793X [779.3X], or 7950G [U795G], as applicable.

MUSC 7812X String Repertory Class

30 hours; 0 credit
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 optimal 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 779X sequence or Music 7950G [795X].

MUSC 7813X Repertory for Major Instrument or Voice

30 hours; 1 credit
Study of orchestral, chamber, and solo repertoire for one's major instrument or voice. Students will be expected to speak and write about the works they perform. May be taken each semester the student is enrolled.

Prerequisite: Conservatory-approved audition and acceptance into the Advanced Diploma program in Music Performance.

MUSC 7815X Studio Class

30 hours; 1 credit

Performance training and study of solo repertoire in a masterclass setting. Guided discussion and coaching of instrumental technique, performance practice, and interpretation to enhance performance ability of students preparing for music professions. May be taken for credit each term the student is enrolled.

Prerequisite: permission of the director

MUSC 7816X Practicum in Lyric Diction for Singers

30 hours practicum; 1 credit
Essentials of effective singing diction in English, Italian, French, and German. Review of the International Phonetic Alphabet (IPA) and its applications with Italian, French, German, Spanish, and English. Thorough study of standard lyric pronunciation in two European languages, with fundamentals of their respective phonetics and the rules governing their pronunciation. Supervised singing of solo vocal repertoire with clarity and expression. Languages of focus will rotate from term to term. (May be taken twice for credit, provided that the languages of focus are different.)

MUSC U7840X Seminar in Performance Practices

45 hours; 3 credits
Study of documents and instruments concerning the authentic performance practice of music from the seventeenth century through the twentieth century. Topic to be announced. May be repeated for credit with a different topic, as indicated in the class schedule and approved by the director.

Prerequisite: Music U7400G [740G] or the equivalent.

MUSC 7850X Ethnomusicology

45 hours; 3 credits
Instruction in ethnomusicological research techniques through study of a special culture or group. May be repeated for credit with a different topic, as indicated in the class schedule and approved by the director.

Prerequisite: Music U7400G [740G] or the equivalent.

MUSC 7851X Music of the World's People

45 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.

Prerequisites: Permission of the Director.

MUSC 7855X Global Improvisation

45 hours, 3 credits
Survey techniques used in improvisation throughout the world. Approaches in scale organization as well as metric and rhythmic concepts. Integration of global improvisation and established jazz techniques.

Prerequisite: Permission of the Director

MUSC 7860X History of Jazz I

45 hours; 3 credits
Survey of styles, genres, and forms of jazz from its origin to 1950. Analysis of selected works.

Prerequisite: Music U7400G [740G] or the equivalent.

MUSC 7861X History of Jazz II

45 hours; 3 credits
Survey of styles, genres, and forms of jazz from 1950 to the present. Analysis of selected works.

Prerequisite: Music U7400G [740G] or the equivalent.

MUSC 7870X Sonic Arts Capstone Seminar

45 hours; 3 credits
Opportunity for Sonic Arts majors to develop their MFA capstone projects in a workshop setting under the guidance of a member of the Sonic Arts faculty. Composition, research, design, technical development, critical writing, and oral presentations. Assignment of readings, listenings, and analysis of works as models, as deemed appropriate by the faculty. Expectation of significant progress towards completion of the MFA capstone project, for performance or exhibition

Prerequisite: Permission of director.

MUSC 7871X Media Scoring Capstone I

45 hours; 3 credits
Development of Scoring for Media capstone project, to be completed in Media Scoring Capstone II. Close mentoring by faculty member.

Prerequisite: MUSC 7343X

MUSC 7872X Media Scoring Capstone II

45 hours; 3 credits
Completion of Scoring for Media capstone project begun in Media Scoring Capstone I. Close mentoring by faculty member.

Prerequisite: MUSC 7871X.

MUSC 7873X Music Production Workshop I

45 hours: 3 credits
Allows composers in the Scoring for Media program to work through the processes of a film production, to understand the sequence of events, roles of participants, and timeline of work.

Prerequisite: Permission of director.

MUSC 7874X Music Production Workshop II

45 hours: 3 credits
Allows composers in the Scoring for Media program to work through the processes of a film production, to understand the sequence of events, roles of participants, and timeline of work. Continuation of Music Production Workshop I.

Prerequisite: MUSC 7873X

MUSC 7875X Sonic Arts Capstone II

45 hours; 3 credits
This course guides Sonic Arts majors to the completion of their MFA capstone projects in a workshop setting under the guidance of a member of the Sonic Arts faculty. Composition, research, design, technical development, critical writing, and oral presentations. Assignment of readings, listenings, and analysis of works as models, as deemed appropriate by the faculty. Expectation of completion or significant progress towards completion of the MFA capstone project, for performance or exhibition.

Prerequisite: Music 7870X

MUSC 7881X Music Internship

45 hours fieldwork; 1 credit
Supervised on- or off-campus work at least three hours per week in an office or classroom of a business, educational facility, or other agency providing professional experience in music, music performance, music education, 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 7881X [788.1X], 7882X [788.2X], and 7883X [788.3X] toward a degree.

Prerequisite: permission of the director of the Conservatory of Music. Permission requires advance approval from the internship site.

MUSC 7882X Music Internship

90 hours fieldwork; 2 credits
Supervised on- or off-campus work at least six hours per week in an office or classroom of a business, educational facility, or other agency providing professional experience in music, music performance, music education, 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 7881X [788.1X], 7882X [788.2X], and 7883X [788.3 X] toward a degree.

Prerequisite: permission of the director of the Conservatory of Music. Permission requires advance approval from the internship site.

MUSC 7883X Music Internship

135 hours fieldwork; 3 credits
Supervised on- or off-campus work at least nine hours per week in an office or classroom of a business, educational facility, or other agency providing professional experience in music, music performance, music education, 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 7881X [788.1X], 7882X [788.2X], and 7883X [788.3 X] toward a degree.

Prerequisite: permission of the director of the Conservatory of Music. Permission requires advance approval from the internship site.

MUSC U7911X Independent Study

Hours to be arranged; 1 credit
Reading and research supervised by a faculty member.

Prerequisite: permission of the director.

MUSC U7912X Independent Study

Hours to be arranged; 2 credits
Reading and research supervised by a faculty member.

Prerequisite: permission of the director.

MUSC U7913X Independent Study

Hours to be arranged; 3 credits
Reading and research supervised by a faculty member.

Prerequisite: permission of the director.

MUSC U7920T Master's Music Education Project

Hours to be arranged; 3 credits
Substantial project in music education supervised by a faculty member. Students register for this course only once. Credit is not earned until the completed project is accepted.

Prerequisite: approval of plan of work by music education coordinator or permission of the director

MUSC U7930X Thesis Research

Hours to be arranges; 3 credits
Research for master's thesis supervised by faculty member. Students register for this course only once. Credit is not earned until the thesis is accepted.

Prerequisite: permission of the director.

MUSC U7940G Master's Composition Project

Hours to be arranged; 3 credits
Completion of a substantial composition project supervised by a faculty member.

Prerequisite: approval of plan of work by student's graduate committee.

MUSC U7950G Master's Recital

Hours to be arranged; 3 credits
Preparation of a master's recital supervised by a faculty member.

Prerequisite: approval of program and level of work by the student's graduate committee.
Corequisite: an ensemble course (Music 7700X [770X]-7781X [778.1X]) as assigned through audition and permission of the director.

Seminars

MUSC 7420G New Music Seminar

3 hours, 3 credits
The course explores contemporary trends in new music through discussion, presentations, guest artists, and new works written for guest ensembles. Extended techniques, notation, historical precedents, improvisation, performance strategies, and our place(s) in the new music community will be examined. New compositions will be created, realized, and collectively critiqued over the course of the seminar. A final paper on a topic approved by the instructor is required.

Music education

MUSC 6505T Seminar on Teaching Methods of Music Education

30 hours plus conference; 2 credits
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. Not open to students who have taken EDUC 6505T.

Prerequisite: permission of the director of the Conservatory of Music.
Completion of all coursework for the Advanced Certificate in Music Education (MUSC 6510T, 6581T, 6582T, 6583T, three courses from MUSC 6601T, 6661X, and MUSC 7201X).
Corequisite: MUSC 6506T and MUSC 6507T.

MUSC 6506T Student Teaching

300 hours student teaching; 4 credits
Supervised teaching of music in schools. Students spend the equivalent of forty days in schools, during which time they engage in daily, supervised student teaching as appropriate to the certificate.

Prerequisite: Permission of the director of the Conservatory of Music, and the Chairperson or Deputy of the Department of Secondary Education. Completion of all coursework for the Advanced Certificate in Music Education (MUSC 6510T, 6581T, 6582T, 6583T, three courses from MUSC 6601T-6661X, and MUSC 7201X).
Corequisite: MUSC 6505T and MUSC 6507T.

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

MUSC 6040T Music for the Classroom Teacher

MUSC 6201T Musicianship for the Elementary School Specialist I

MUSC 6202T Musicianship for the Elementary School Specialist II

MUSC 7121X Instrumental Workshop: Strings

MUSC 7122X Instrumental Workshop: Woodwinds and Brass

MUSC 7150T General Music in Elementary and Secondary Schools

MUSC 7202X Advanced Conducting Seminar

MUSC 7310X Compositional Techniques

MUSC 7750X Collegium Musicum

MUSC 7761X String Orchestra

MUSC 7762X Theater Orchestra

MUSC 7821X Accompanying at the Keyboard I

MUSC 7822X Accompanying at the Keyboard II

MUSC U7010T Music Education Research Methods

Performance and Interactive Media Arts

Department office: 505s Whitehead Hall
Phone: 718.951.5000 x1188

The graduate programs in Performance and Interactive Media Arts (PIMA) provide students with theoretical and practical experience in the conceptualization and production of collaborative, multi-disciplinary artworks presented in performance. Students learn to use technology as a means of extending their personal artistic practice and facilitating cross-disciplinary artistic collaborations. Students with diverse academic, artistic, professional, and cultural backgrounds enter the program and work in collaborative groups with close mentoring by faculty members. Most students come to the program with an established career or career goal in an arts field, and generally continue in that field after completing a PIMA degree, utilizing the degree for advancement, skills development, or as an entree into academia. PIMA is a collaborative effort of the Brooklyn College Departments of Art, Computer and Information Science, Film, Television and Radio, and Theater, and the Conservatory of Music. The faculty is drawn from its contributing departments.

M.F.A. degree program in performance and interactive media arts
HEGIS code 1099; SED program code 31062

PIMA is a four-semester full-time graduate degree program providing students with training in theoretical, technical and practical experience in the conceptualization and production of collaborative, multi-disciplinary artworks presented in a performance setting. Students learn to use technology as a means of extending their personal artistic practice and facilitating cross-disciplinary artistic collaborations. Students with diverse academic, artistic, professional, and cultural backgrounds enter the program and work in collaborative groups throughout the course of study, with close mentoring by faculty members. Most students come to the program with an established career or career goal in an arts field, and generally continue in that field after completing the PIMA degree, utilizing the degree for advancement, skills development, or as an entrée into academia. In the second year a major collaborative thesis production is created and presented in a professional venue. The program is a cooperative effort of the Brooklyn College Departments of Art, Computer and Information Science, Film, Television, Radio & Emerging Media, and Theater, and the Conservatory of Music. The faculty is drawn from its contributing departments.

Matriculation requirements

Applicants must offer a graduate or undergraduate degree from an accredited college or university completed with a grade point average of 3.00 or higher. Applicants must also offer a portfolio of creative work (which may consist of work in any medium including computer software), letters of recommendation, and TOEFL score of at least 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test, if required. An interview with a member of the selection committee is strongly recommended.

Applicants must obtain and file an application form with the program director in addition to the regular college admission application; both are available online.

Selection of applicants will be based on a faculty committee review of the following: the applicant's creative portfolio, evidence of the applicant's interest in collaborative creative production, letters of reference indicating significant artistic promise, artistic background and experience, and the applicant's interview (if conducted).

A committee chaired by the Program Director will review all applications and make admission decisions based on the criteria stated above.

Students should note additional requirements found in the sections "Graduate Admission" and "Academic Regulations and Procedures."

Degree requirements

Students pursuing the M.F.A. will complete a total of 46 credits and a significant thesis production which is a collaboration with at least one other matriculated student.

The following courses are required:
PIMA 7010G, PIMA 7020G, PIMA 7030G, PIMA 7210G, PIMA 7220G, PIMA 7230G, PIMA 7240G, PIMA 7321G, PIMA 7322G, PIMA 7741G, PIMA 7742G.
Three additional credits of independent projects are required, taken under course numbers: PIMA 7110G, PIMA 7120G, PIMA 7130G.
Nine additional credits shall be chosen from selected PIMA elective courses offered by: the PIMA program; the departments of Art, Computer and Information Science, the Feirstein Graduate School of Cinema, Television, Radio and Emerging Media, Theater; and the Conservatory of Music. Permission of the PIMA director is required

To receive the Master of Fine Arts in Performance and Interactive Media Arts, students will be required to complete the program with a grade point average of 3.00 or better.

Courses

PIMA 7010G Sound, Image, Space, and Performance; Interactive Media Programming I
30 hours lecture, 45 hours lab; 3 credits
Combines performance/electronic media production, collaboration theory, and lab in interactive media programming. Projects include collaborative performing arts production, and interactive programming projects. Open only to PIMA students.

PIMA 7020G Artistic Process and Contemporary Community: Interactive Media Programming II
30 hours lecture, 45 hours lab; 3 credits
Combines community-based arts theory, collaborative performing arts production in a community venue, and a lab in interactive media programming. Projects include collaborative community production and interactive programming projects. Open only to PIMA students.

Prerequisite: PIMA 7010G [701G] or permission of the director.

PIMA 7030G Collaborative Interactive Media Performance
45 hours; 3 credits
Development, realization, and documentation of culminating collaborative PIMA project.

Prerequisite: PIMA 7020G [702G] or permission of the director.

PIMA 7040G Independent Investigations in Interactive Media
45 hours; 3 credits
Directed study in advanced electronic media research or production. Permission of the director of PIMA (and the chair of the instructor's department if the instructor is not PIMA faculty) required. This course may be repeated for credit.

Prerequisite: PIMA 7010G [701G] or permission of the director.

PIMA 7110G Independent Projects

75 hours, meetings plus independent work; 1 credit
Directed study in advanced electronic media research or production. Permission of the director of PIMA (and the chair of the instructor's department if the instructor is not PIMA faculty) required. This course may be repeated for credit.

Prerequisite: permission of the director.

PIMA 7120G Independent Projects

10 hours plus 60 hours independent work; 2 credits
Directed study in advanced electronic media research or production. Permission of the director of PIMA (and the chair of the instructor's department if the instructor is not PIMA faculty) required. This course may be repeated for credit.

Prerequisite: permission of the director.

PIMA 7130G Independent Projects

15 hours, meetings plus independent work; 3 credits
Directed study in advanced electronic media research or production. Permission of the director of PIMA (and the chair of the instructor's department if the instructor is not PIMA faculty) required. This course may be repeated for credit.

Prerequisite: permission of the director.

PIMA 7210G History, Theory, and Criticism

45 hours; 3 credits
Overview of the history, theory, and criticism of contemporary collaborative perfromance media, including music, theater, dance, radio, performance art, and other forms. Emphasis on investigation of collaborative process, community involvement, and use of technology. Both the creation and presentation of the works will be studied. Extensive research, interviews, and field work.

Prerequisite or corequisite: PIMA 7010G [701G] or permission of the director.

PIMA 7220G Teaching Practicum

30 hours lecture, 45 hours practical training; 3 credits
Immersive practical university-level teaching course designed for students in terminal degree programs. Syllabus and course schedule design, development of assignments, research, preparation for lectures, and preparation of class materials. Evaluation and outcomes assessment, development of teaching style and classroom personality.

Prerequisite or corequisite: PIMA 7010G [701G] or permission of the director.

PIMA 7230G Thesis Seminar I

45 hours; 3 credits
Pre-production of collaborative M.F.A. thesis project, including collaborative group formation, script and/or score development, research, design, technical development documentation planning, and venue research. Community outreach, web presence, grant writing, and publicity.

Prerequisite or corequisite: PIMA 7020G [702G] or permission of the director.

PIMA 7240G Thesis Seminar II

45 hours lecture plus 135 hours independent work; 6 credits
Production of collaborative M.F.A. thesis project, including production planning and scheduling, rehearsals, design realization, technical realization, documentation, publicity, venue relationship development, community outreach, and personnel management.

Prerequisite or corequisite: PIMA 7230G [723G].

PIMA 7321G Performance Art

30 hours rehearsal plus independent work; 2 credits
Development of collaborative experimental, performative ensemble creations including artists from all media. The course is dedicated to creating, rehearsing, and performing works by its members, and developing a repertoire of experimental multimedia works. At least one public performance per semester. Permission of the director of PIMA required. This course may be repeated for credit.

Prerequisite or corequisite: PIMA 7010G [701G] or permission of the director.

PIMA 7322G Performance Art II

30 hours rehearsal plus independent work; 2 credits

Development of collaborative experimental, performative ensemble creations including artists from all media. The course is dedicated to creating, rehearsing, and performing works by its members, and developing a repertoire of experimental multimedia works. At least one public performance per semester. Permission of the director of PIMA required. This course may be repeated for credit.

Prerequisite or corequisite: PIMA 7010G [701G] or permission of the director.

PIMA 7332G Experimental Performance Ensemble Direction
30 hours rehearsal, plus ensemble direction; 3 credits
Direction of, participation in, and contribution of new works to an ensemble consisting of artists from all performance media dedicated to creating, rehearsing, and performing works by its members, and developing a repertoire of experimental multimedia works. At least one public performance per semester. Permission of the director of PIMA required. This course may be repeated for credit.

Prerequisite or corequisite: permission of the director.

PIMA 7741G Dynamic and Interactive Media Performance I
30 hours lecture and 30 hours lab; 3 credits
In-depth study of tools and techniques for designing dynamic and interactive multimedia systems for use in live performance situations. Emphasis will be on student creation of custom computer software to realize interactive projects. Video, audio, three-dimensional computer images, and alternative computer-human interfaces will be addressed. Extensive instruction in graphical computer programming; no experience required.

Prerequisite: PIMA 7010G [701] or permission of the director.

PIMA 7742G Dynamic and Interactive Media in Performance II
30 hours lecture and 30 hours lab; 3 credits
Continuation of PIMA 7741G. In-depth study of tools and techniques for designing dynamic and interactive multimedia systems for use in live performance situations. Emphasis will be on student creation of custom computer software to realize interactive projects. Video, audio, three-dimensional computer images, and alternative computer-human interfaces will be addressed. Extensive instruction in graphical computer programming.

Prerequisite or corequisite: PIMA 7741G [774.1] or permission of the director.

PIMA 7990G Special Topics in Performance and Interactive Media
45 hours lecture; 3 credits
Special topics in performance and interactive media research or production. Course descriptions vary by semester. This course can be repeated for credit. Permission of the director of PIMA required.

Prerequisite: permission of the director.

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

PIMA 7311G Experimental Performance Ensemble

PIMA 7312G Experimental Performance Ensemble

PIMA 7331G Experimental Performance Ensemble Direction

Philosophy

Department office: 3308 Boylan Hall
Phone: 718.951.5311

Full-time Faculty

Professors: Campos, Khader, Lurz, Moore, Nuzzo, Steinberg, Trivedi
Associate Professors: Arlig, Gotlib, Menser, Shottenkirk, Vitrano
Assistant Professor: Lindauer
Lecturers: Maumus, Repetti

The Department of Philosophy acquaints students with the variety of viewpoints in historical and current philosophical literature on fundamental, perennial questions concerning morality, ethics, knowledge, and aesthetics as well as the concepts, theories, methodologies, and moral issues of the natural sciences, social sciences, arts, and professional areas, and the areas of logic, epistemology, and metaphysics.

CUNY Ph.D.

The City University of New York offers a master of arts degree program in philosophy and a doctoral program in philosophy. General information about CUNY Ph.D. programs is in the chapter “Support for Academic Success in Graduate School.” Philosophy Department courses may be credited toward the CUNY doctoral degree with permission of the executive officer of the doctoral program. For information, students should consult the deputy chairperson of the Philosophy Department and the executive officer of the doctoral program. The following courses are offered as electives for students in other fields.

Courses

Students may apply graduate or undergraduate courses toward fulfillment of prerequisites.

PHIL 7805G Special Studies in Ethics, Aesthetics, or Philosophy of Law, History, the State or Religion
30 hours plus conference; 3 credits
Topics vary from term to term.

Prerequisite: a course in philosophy.

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

PHIL 7316X **Bioethics**

PHIL 7325X **Values in the Modern World**

PHIL 7512X **Philosophy of Music**

PHIL 7820G **Seminar in Ethics, Aesthetics, or Philosophy of Law, History, the State or Religion**

Physics

Department office: 3438 Ingersoll Hall
Phone: 718.951.5418

Full-time Faculty

Professors: Boutis, Giovambattista, Nakarmi, Shum, Suarez, Tomkiewicz, Tung
Associate Professors: Miyano, Sandeman

The Department of Physics prepares students to enter into the mainstream of contemporary physics by providing them with an opportunity to pursue original research. Students in the program receive a sound background in the fundamentals of physics through intensive course work in core subjects as well as an opportunity to develop individual interests through a selection of modern electives.

CUNY Ph.D. in physics

The City University of New York offers a doctoral program in physics. General information about CUNY Ph.D. programs is in the chapter "Support for Academic Success in Graduate School."
The Physics Department at Brooklyn College is a full participant in the Ph.D. program. It offers a complete Physics sequence of courses that are creditable toward the CUNY doctoral degree, and a wide range of research opportunities in fulfillment of the doctoral dissertation requirements for that degree. For information about the courses, students should consult the graduate deputy chairperson of the Physics Department and the executive officer of the Ph.D. program in physics.

Honor Society

Sigma Xi, the Scientific Research Society, encourages original investigation in the natural sciences, pure and applied. The fields of activity of the society include the physical sciences, the life sciences, the earth sciences, and mathematics. The Brooklyn College Chapter elects students to associate membership in the society on the basis of academic excellence and marked aptitude for research in one of the fields listed above.

Courses

Unless a prerequisite is specific, students may apply graduate or undergraduate courses toward fulfillment of that prerequisite.

PHYS 7110G Thesis Research

30 hours; 2 credits
Research for master's thesis supervised by a faculty member. No more than 4 credits may be counted toward the degree. Credit is not earned until the thesis is accepted.

PHYS 7120G Thesis Research

30 hours; 2 credits
Research for master's thesis supervised by a faculty member. No more than 4 credits may be counted toward the degree. Credit is not earned until the thesis is accepted.

PHYS U7210X Mathematical Methods in Physics I

45 hours plus conference; 4 credits
Topics in complex variables. Perturbation and variational methods for solution of differential equations. Green's functions. Eigenfunction expansions. Integral transforms. Integral equations. Differential equations. Linear algebra. Hilbert space. Tensor analysis. Group theory. Higher algebra. Numerical methods for solving equations.

Prerequisite: a course in analytical mechanics.

PHYS U7310X Analytical Dynamics

45 hours plus conference; 4 credits
Linear vector spaces. Small oscillations. Rigid bodies, including Euler's angles. Hamiltonian theory, including Hamilton's principle, Hamilton's equations, contact transformations. The Hamilton-Jacobi method; infinitesimal contact transformations; further development of transformation theory; special applications. Continuous media and fields. Introduction to special relativity theory.

PHYS U7350X Electromagnetic Theory I

45 hours plus conference; 4 credits
Electrostatics, magnetostatics, boundary value problems. Maxwell's equations. Multipole radiation. Radiation from accelerated charges. Scattering theory. Special theory of relativity.

Prerequisite: Physics U7210X [701X] and U7310X [U711X]; or an introductory course in electromagnetic theory.

PHYS U7410X Quantum Mechanics I

45 hours plus conference; 4 credits
Historical foundations. The Schrodinger formulation. Wave packets and uncertainty principle. Harmonic oscillator and potential barrier problems. WKB approximation. Operators and eigenfunctions. Central forces and orbital angular momentum. Scattering: Born approximation, partial waves. Linear vector spaces. The Heisenberg formulation. Spin and total angular momentum. Perturbation theory: bound state, time dependent.

Systems of identical particles. Introduction to relativistic quantum mechanics.

Prerequisite: a course in mathematical methods in physics.

PHYS U7420X Quantum Mechanics II

45 hours plus conference; 4 credits
Continuation of Physics U7410X [725X].

Prerequisite: Physics U7410X [725X].

PHYS 7450X Statistical Mechanics

60 hours; 4 credits
Topics include Laws of Thermodynamics; Relationship between Statistics and Thermodynamics; Ensemble Theory; Microcanonical, Canonical, and Grand Canonical Ensembles; Quantum Statistics; Boltzmann Statistics, Fermi-Dirac Statistics, and Bose-Einstein Statistics; the ideal gas in the "classical" limit; Ising model; and Critical Phenomena.

PHYS U7560X Solid-state Physics

45 hours plus conference; 4 credits
Principles of crystallography: crystal structure, lattice vibrations, band theory, defects. Ionic crystals; dielectrics; magnetism; free electron theory of metals and semiconductors.

Prerequisite: Physics U7410X [725X].

PHYS U7580X Astrophysics

45 hours plus conference; 4 credits
Interstellar medium. Gaseous nebulae and dust clouds. Stellar atmosphere and stellar interiors. Stellar spectra, energy transfer, opacity. Nuclear reactions and matter under extreme conditions. Stellar evolution; synthesis of chemical elements; neutrino processes; radio astronomy.

Prerequisite: an introductory course in modern physics.

PHYS 7650X Physics and Society

45 hours; 3 credits
Technical quantitative study of topics related to society such as Gini Coefficients, tipping points, climate sensitivity, demographic distribution, frequency of extreme events; nuclear energy, prospects in fission and fusion; environmental problems; renewable energy sources, such as solar and wind power, energy storage.

Prerequisites: Good standing in the Physics Master's program or permission of the chairperson.

PHYS U7710X Graduate Physics Laboratory

45 hours; 2 credits
Advanced experimental work in one or more fields of physics. Planning experiments. Design and construction of apparatus. Evaluation of experimental results in the fields of optics and X rays, electronics, atomic and nuclear physics. Students may take this course twice but may not repeat topics. (Not open to students who have completed the same topic in Physics U772X.)

PHYS 7810X Advanced Study

30 hours; 2 credits
Tutorial study with a faculty member in an area in which formal course work is not offered.

Prerequisite: permission of the deputy chairperson.

PHYS 7820X Advanced Study

30 hours; 2 credits
Tutorial study with a faculty member in an area in which formal course work is not offered.

Prerequisite: permission of the deputy chairperson.

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

PHYS 7011T Physics for Junior High School I

PHYS 7012T Physics for Junior High School II

PHYS 7013T Physics for Junior High School III

PHYS 7020T Concepts and Theories of Modern Physics

PHYS 7025T Modern Topics in Physical Science

PHYS 7030X Biomechanics

PHYS 7035X Electronics

PHYS 7040X Advanced Optics

PHYS 7750X Introductory Laboratory Research

PHYS 7755X Introductory Laboratory Research

PHYS U7220X Mathematical Methods in Physics II

PHYS U7360X Electromagnetic Theory II

PHYS U7510X Atomic Physics

PHYS U7520X Nuclear Physics

PHYS U7530X Particle Physics

Political Science

Department office: 3413 James Hall
Phone: 718.951.5306

Full-time Faculty

Distinguished Professors: Robin, Theoharis
Professors: Currah, Johnson, Ness, Okome, Su, Ungar
Associate Professors: Alonso, Arnold, Estey, Law, Path
Lecturer: Koru

M.A. degree program in political science
HEGIS code 2207; SED program code 02108

The concentration in urban policy and administration of this program is currently not accepting applications.

The political science master's program offers students a choice of two concentrations: International Affairs and Global Justice or Urban Policy and Administration.

The International Affairs and Global Justice concentration is designed to prepare students for careers in international affairs, development, government, international organizations, non-profits, public education, and the private sector - or to move on to law school or doctoral programs in the social sciences. With small classes and opportunities to work closely with faculty, this two-year program offers a broad range of courses in comparative politics, international relations, and global justice. To foster professional preparation, the faculty also helps students with publication of their work, internship placements, and study abroad opportunities.

In the Urban Policy and Administration concentration, students develop skills to understand politics and policy processes in the US metropolis, including New York City. This program champions the collaborative production of theoretical work and real-world practice, and students are expected to be intellectual leaders in policy-relevant fields in urban settings: labor, race, ethnicity, immigration, urban planning, elections, and education.

Matriculation requirements

Admission is highly competitive; decisions are based on GPA, recommendation letters, personal statement, and relevant experience. General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Degree requirements (30-33 credits)

Students choose one of the following two concentrations: I. International Affairs and Global Justice, or II. Urban Policy and Administration.

I. International Affairs and Global Justice: This is a two-year program, with 15 credits to be completed each year. The requirements are:

(1) Courses: Ten 7000-level courses (30 credits) with the following distribution:
1. Four Required Courses, which are to be taken during the first year:
POLS 7610 International Relations
POLS 7720 Comparative Politics
POLS 7960 Professional Development
POLS 7001 Research Methods

2. Six Electives, chosen from the following courses:

POLS 7000 Statistics in Political Science
POLS 7060 Biopolitics
POLS 7070 The Politics of Race and Nation
POLS 7080 Sexual Orientation, Gender Identity and Human Rights
POLS 7181 Religion and Politics
POLS 7620 Global Governance
POLS 7630 International Law
POLS 7640 Global Gender Politics
POLS 7650 Human Rights: Theory and Practice
POLS 7665 Political Economy of Migration
POLS 7680 The Politics of Climate Change
POLS 7712 Politics of East Asia
POLS 7713 Politics of the Middle East and North Africa

POLS 7714 Politics of Africa South of the Sahara
POLS 7715 African Gender Politics
POLS 7716 Politics of Latin America
POLS 7730 Postcommunist Politics
POLS 7735 Global Cities
POLS 7740 Violence, Security and Politics
POLS 7750 Democratization and Global Justice
POLS 7780 Political Development
POLS 7745 Comparative Participatory Democracy and Social Movements
POLS 7760 Comparative Social Policy
POLS 7810 Genocide and Ethnic Conflict
POLS 7811 Genocide and Transitional Justice: The Case of Cambodia
POLS 7910 Masters Thesis
POLS 7940 Internship and Independent Study 1
POLS 7950 Internship and Independent Study 2

With department approval, up to 12 credits (four courses) from other departments or graduate programs may substitute for any of the electives above.

(3) Examinations: Students take a pass/fail comprehensive exam.

II. Urban Policy and Administration: The requirements for the concentration are:

(1) Courses: Eleven 7000-level courses (33 credits) with the following distribution:
1. Political Science 7000X, Statistics in Political Science
2. Political Science 7400X, Public Administration
3. Political Science 7480X, Planning for Metropolitan Areas
4. Political Science 7510X, Government of New York City/Urban Politics
5. Political Science 7570X, Racial and Ethnic Politics in the United States
6. One of the following three choices, a)- c):
a) Political Science 7450G, Fieldwork/Internship
b) Political Science 7910G, Master's Thesis
c) Political Science 7940X, Independent Study
7. Five electives: any courses from the political science graduate program.

With department approval, a maximum of nine 9 credits from other departments or graduate programs may substitute for any requirement (s) above.

(2) Examinations: Students take a pass/fail comprehensive exam.

CUNY Ph.D.

The City University of New York offers a doctoral program in political science. General information about CUNY Ph.D. programs is in the chapter “Support for Academic Success in Graduate School.” Political Science Department courses may be credited toward the CUNY doctoral degree with permission of the executive officer of the doctoral program. For information, students should consult the deputy chairperson of the Political Science Department and the executive officer of the doctoral program.

Courses

Registration for courses numbered 7000 and higher requires matriculation in the Political Science M.A. program, a nonmatriculated or provisional status in the Political Science Program, or permission of the chairperson or deputy chairperson.

POLS 7000X Statistics in Political Science

45 hours; 3 credits
Overview of statistical analysis in political science. Application of probability theory, inferential statistics, and use of statistical techniques in such areas as public opinion, voting and legislative behavior, and comparative politics. Regression analysis and quantitative applications of social science census data on issues such as class, labor, and race.

POLS 7001X Research Methods

30 hours plus conference, 3 credits
Introduces analytic approaches and research methods related to various topics in political science. Research strategies will vary from term to term, including both qualitative and quantitative methods.

POLS 7060X Biopolitics

30 hours plus conference; 3 credits
Investigation into the state’s role in fostering the safety and welfare of its population. Examination of technologies of power for governing the life, health, and death of populations. Exploration of the 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.

POLS 7070X The Politics of Race and Nation

30 hours plus conference, 3 credits
Theoretical approaches to the study of race, nation, and the racial state. Cross-national and trans-national approaches to the study of racial politics. Neoliberal politics and processes of racialization. The role of race and racial politics in International Affairs.

POLS 7080X Sexual Orientation, Gender Identity and Human Rights

30 hours plus conference; 3 credits
LGBT rights in an international perspective. Study of various approaches to describing rights and advocating for claims based on sexual orientation and gender identity. Overview of violence, discrimination, marriage and family policy, sex classification in a variety of regions. Examination of relation between sexual rights and gender justice, tensions between universalist constructions of gay/trans identities and local formations of sexual and gender non-conformity, legacies of colonialism. Study of key international and regional instruments as well as local strategies.

POLS 7160X Methodology: Empirical Political Science

30 hours plus conference; 3 credits
Uses of quantitative methods in political research. Methodological issues such as factor analysis, interview design, survey research, content analysis, probability theory, simulation, and game theory. Implications for theory building in political science.

POLS 7181X Politics and Religion

30 hours plus conference, 3 credits
Critical examination of major issues in politics and religion including the relationship between religion and/or church and state, theories of modernity and secularization, law, morality, social justice, various conceptions of the public and the private. The role of religion in domestic and world politics. Study of methodological approaches to relationship of politics and religion, empirical and normative.

POLS 7182X Islam and Modernity

30 hours plus conference, 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.

POLS 7200X U.S. Constitutional Law I

30 hours plus conference; 3 credits
Relation of the judicial process and constitutional law to the political process in the United States. Judicial review; federalism. Separation and delegation of powers.

POLS 7210X U.S. Constitutional Law II

30 hours plus conference; 3 credits
Civil liberties; civil rights; due process; equal protection of the laws.

POLS 7360X The Politics of the American Labor Movement

30 hours plus conference; 3 credits
The influence that trade unions have in the political process (elections, parties, the legislature, and the courts) and the importance of state intervention to union organization and political power. Leading theories on union goals and relationship to the political system will be analyzed. Also covered will be specific policy objectives pursued by unions: e. g., health, safety, and welfare policies; employment security and labor relations policies; affirmative action and economic restructuring policies.

POLS 7400X Public Administration

30 hours plus conference; 3 credits
Theories and practice of public administration. The political context of public service. Policy implementation. Organizational design. Management techniques. Budgeting. Personnel administration. Evaluation. Union administration and management, mentor servicing, labor law, public sector collective bargaining. Labor unions and local, state, and federal administrative processes.

POLS 7450G Fieldwork / Internship

120 to 150 hours weekly plus seminar; 3 credits
Students spend eight to 10 hours a week in a government or non-governmental agency and attend weekly seminars dealing with issues raised in their fieldwork assignments. The seminar is supervised jointly by an agency staff member and Brooklyn College faculty. Students write a paper on their work.

POLS 7480X Planning for Metropolitan Areas

30 hours plus conference; 3 credits
The planning process in metropolitan governments. Administrative policies and machinery for dealing with regional problems. Planning problems of the New York metropolitan area.

POLS 7510X Government of New York City/Urban Politics

30 hours plus conference; 3 credits
The politics, government, administration of New York City in the context of the changing field of urban politics. Political economy; population changes; geographic differences; impact of the states and the federal government.

POLS 7570X Racial and Ethnic Politics in the United States

30 hours plus conference; 3 credits
Framework for analyzing racial and ethnic politics in the United States, including historical, economic, social, as well as political factors. Topics include the civil rights movement, immigration policy, urban poverty, and contemporary debates involving racial and ethnic issues.

POLS 7600X U.S. Foreign Policy

30 hours plus conference; 3 credits
Historical development of United States foreign policy. Policies toward each world region. Ideological and political debates over specific policies and the use of power. Domestic factors affecting the determination and conduct of U.S. foreign policy.

POLS 7610X Modern International Politics

30 hours plus conference; 3 credits
Analysis of the basic factors shaping contemporary international politics; theories and approaches to the study of international politics; patterns of relations among states and non-state actors; sources and uses of power in the global arena.

POLS 7620X Global Governance

30 hours plus conference; 3 credits
This course analyzes the fast-changing arena of global governance, ranging from international organizations such as the United Nations to grassroots movements at the local level.

POLS 7630X International Law

30 hours plus conference; 3 credits
The nature, sources, development of international law. Role and function of law in international society.

POLS 7640X Global Gender Politics

30 hours plus conference; 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.

Prerequisite: None

POLS 7650X Human Rights: Theory and Practice

30 hours plus conference; 3 credits
Study of human rights problems and the international community's approaches to them. Examination of theory and history of human rights, the functioning of human rights organizations, the relationship between human rights and political systems, and patterns of rights violations against different ethnic, racial, religious, gender, and other groups.

POLS 7665X Political Economy of Migration

30 hours plus conference; 3 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.

POLS 7670X North-South Relationships in World Politics

30 hours plus conference; 3 credits
Political and economic relationships between the wealthy countries of the global north and the poorer countries of the global south. Study of trade, debt, war, history, rights, nationalism, identity, labor, environment, immigration, and the world's approaches to these problems.

POLS 7680X The Politics of Climate Change

30 hours plus conference; 3 credits
Examination of how international law, organizations, and relations respond to climate change. Critical analysis of national interests, the global commons, and policy impacts.

POLS 7712X Politics of East Asia

30 hours plus conference; 3 credits
Study of processes of political and economic change of East Asia. Governments and institutions,
political cultures, state-society relations, a nd political leadership in East Asian countries, including
China, Japan, and Korea. Differing patterns of development, foreign policy, and security issues of
region's countries.

POLS 7713X Politics of the Middle East and North Africa

30 hours plus conference; 3 credits
Study of processes of political and economic change of the Middle East and North Africa.
Comparative analysis of governments, historical change, state-society relations, conflict, political
parties, religious and ethnic politics, social movements, and leadership .

POLS 7714X Politics of Africa South of the Sahara

30 hours plus conference; 3 credits
Study of processes of political and economic change of African countries south of the Sahara.
Comparative analysis of governments, historical change, state-society relations, conflict, foreign policy, social movements, and leadership .

POLS 7716X Politics of Latin America

30 hours plus conference; 3 credits
Study of processes of political and economic change of Latin America. Comparative analysis of
governments, historical change, state-society relations, security, economic development, social
movement, the environment, and human rights .

POLS 7717X African Gender Politics

30 hours plus conference, 3 credits
Critical examination of major issues on African women and feminism. Debates in politics of feminism and multiple expressions of women's power in Africa. Critiques of patriarchy and gender specific injustices, privileges, and oppression. African women scholars' critiques of feminism as a hierarchical construct that privileges western thought and experiences.

Consequences of debate to gender relations on the African continent.

POLS 7720X Comparative Politics

30 hours plus conference; 3 credits
Introduction to the nature and methodology of comparative political research. Comparative study of governments from each world region. Cross-national analysis of major dimensions of the political processes, political structures, and state activities in Asia, Africa, the Americas, and Europe. Examination of the major themes of comparative politics such as democratization, nation building, ethnic conflicts, and social movements.

POLS 7730X Postcommunist Politics

30 hours plus conference; 3 credits
Examination of the history and politics of the postcommunist societies of Eastern Europe and Central Eurasia. Analysis of the major puzzles of the region: democratization, the state and revolution, class and poverty, nation-building and disintegration, gender, and globalization.

POLS 7735X Global Cities

30 hours plus conference, 3 credits
Key areas of global cities, such as rural-urban migration, labor, housing and land use, health, and transportation, from a comparative perspective. Spans continents and specific geographical regions. Focus on tensions in urban politics in national and international policy-making contexts.

POLS 7740X Violence, Security and Politics

30 hours plus conference; 3 credits
Examination of violence, security, and conflict in the politics of each world region. Study of civil war, political conflict, civil strife, economic protest, identity-based discrimination, crime, vigilantism, and other forms of violence in countries' development and contemporary conditions. The roles, influences, and power of military, police and other security forces in the politics of countries around the world. Patterns in national and international policies on crime, terrorism, and military conflict.

POLS 7745X Participatory Governance

45 hours, 3 credits
Introduction to the theory and practice of participatory planning, governance and civic engagement relative to the values of sustainability, resilience, environmental, racial, and climate justice; economic democracy; civic engagement; case studies. Ways to shift planning practices and facilitate a "just transition" for building sustainable resilient cities. Same as SUST 7300X.

POLS 7750X Democratization and Global Justice

30 hours plus conference, 3 credits
Examination of the process of democratization, analysis of historical developments, obstacles to consolidation, implementation of judicial reforms, balance of power, violence and conflict, and variations of constitutional rule.

POLS 7770X Violence and Politics

30 hours plus conference; 3 credits
Examination of violence in the politics of each world region. Study of civil war, political conflict, civil strife, economic protest, identity-based discrimination, violent crime, vigilantism, and other forms of violence in the development of countries and their current conditions.

POLS 7780X Political Development

30 hours plus conference; 3 credits
The concept of development as a framework for the study of politics. Basic political concepts common to developing or Third World political systems and highly developed or technologically advanced political systems. Aspects of the process of development. Characteristic problems of societies at various stages of development. Patterns of interaction between developing and industrially advanced societies. Impact of these relationships on world politics.

POLS 7810X Genocide and Ethnic Conflict

30 hours plus conference, 3 credits
Introduction to the most extreme forms of human rights abuses namely genocide and ethnic cleansing, which question the fundamental moral values of humanity. Comparatively examine their causes through in-depth case studies. Explore ways that might prevent them from happening in the future.

POLS 7811X Genocide and Transitional Justice: The Case of Cambodia

35 hours plus 75 hours fieldwork; 4 credits
Introduction to the Cambodian genocide. Analysis of the pros and cons of the United Nations-backed Hybrid Tribunal in light of transitional justice efforts in Cambodia. Introduction to interview-based qualitative research design and practical interview techniques. A three-week trip to Cambodia to conduct interviews with survivors, human rights activists, and government officials in Cambodia. Learn field research skills including archival research and interviews, teamwork etc. in a foreign country.

Prerequisite: This course is open to all Brooklyn College or CUNY graduate and undergraduate students in any major.

POLS 7910G Master's Thesis

30 hours plus conference; 3 credits
Research and writing of a master's thesis supervised by a faculty member. Students should see the graduate chair for guidelines, and must complete the thesis within two semesters.

Prerequisite: 21 credits and department approval.

POLS 7930X Research Tutorial

Hours to be arranged; 1 credit
Practical guidance for students writing Master's Theses in Political Science and International Affairs. Brief introduction to quantitative and qualitative methods employed in these fields. Overview of the process of writing a thesis, including formulating a research question, deciding on a method to collect and analyze information, and developing a credible argument based on logic and evidence. Assistance with goal setting and setting up peer writing groups.

Prerequisite or corequisite: Approval of the graduate deputy and completion of all required course work except the thesis,

comprehensive or foreign language examination.

POLS 7940X Internship and Independent Study 1

Hours to be arranged; 3 credits
This course covers two options. The first is an internship with an organization working on international affairs. Permission for registration is granted after the internship offer is made with a letter by the organization's internship director. The internship has two requirements. The first is work with the organization for the equivalent of at least 14 full work days, with assessment by the internship director at the end. The second, under supervision of a faculty member, is a 20-page paper analyzing the principal issue on which the internship focused. The second option is an independent study of a selected topic developed by a group of 3–6 students and a faculty advisor, with a set of readings, written assignments, and regular meetings.

POLS 7950G Internship and Independent Study 2

Hours to be arranged; 3 Credits
This course covers two options. The first is an internship with an organization working on international affairs. Permission for registration is granted after the internship offer is made with a letter by the organization's internship director. The internship has two requirements. The first is work with the organization for the equivalent of at least 14 full work days, with assessment by the internship director at the end. The second, under supervision of a faculty member, is a 20-page paper analyzing the principal issue on which the internship focused. The second option is an independent study of a selected topic in political science developed by a group of 3–6 students and a faculty advisor, with a set of readings, written assignments, and regular meetings.

POLS 7960X Professional Development in International Affairs

30 hours plus conference, 3 credits
Introduction to the Masters in International Affairs. Development of the research, analytical, and job skills necessary to succeed in the field. Discussion of the key political events of the last four decades and today that shape global politics, through the lenses of comparative politics and international relations, the two major fields of international affairs. Discussion of human rights around the world as well as human rights advocacy.

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

POLS 7010X Ancient and Medieval Political Thought

POLS 7020X Modern Political Thought

POLS 7030X American Political Thought

POLS 7040X Counter-Revolution

POLS 7050X Fear in Politics

POLS 7100X Twentieth-Century Political Thought

POLS 7140X Theory of Anti-Capitalist Movements

POLS 7150X Organization Theory

POLS 7170X Master's Seminar

POLS 7180X Ethics and Politics

POLS 7190X Selected Topics in Political Theory

POLS 7220X Criminal Justice and Public Policy

POLS 7240G Computer Applications in Political Science

POLS 7300X U.S. Party System

POLS 7310X Policy Formulation in U.S. Government

POLS 7320X The Presidency in the United States

POLS 7330X The Legislative Process in the United States

POLS 7340X Policy Analysis

POLS 7350X Politics and Public Opinion Formation

POLS 7370X Policy Evaluation

POLS 7380X Politics of Technology

POLS 7420X Law and the Behavioral Sciences

POLS 7470X Metropolitan Areas and Community Power Analysis

POLS 7491X Selected Topics in American Government

POLS 7492X Selected Topics in American Government

POLS 7550X Health Care Politics

POLS 7660X Globalization and International Cooperation

POLS 7691X Selected Topics in International Relations

POLS 7715X Political Systems in Developing Areas: Regional Analysis: North Africa

POLS 7760X Comparative Social Policy

POLS 7790X Postindustrial Politics and the State

POLS 7891X Selected Topics in Comparative Politics

Psychology

Department office: 5401 James Hall
Phone: 718.951.5601

Full-time Faculty

Professors: Abramov, Brauner, Crump, Delamater, Gao, Hainline, Hardin, Kozbelt, Kuhlman, Osman, Rabin, Snadowsky, Walder
Associate Professors: Carmichael, Chanowitz, Chua, Drake, Grasso, Kacinik, Krishnan, Kurylo, Niwa, Reigada, Shane, Weston
Assistant Professors: Gantman, Kuchirko, Miles, Nam, Seidman
Lecturer: Volz

M.A. degree program in industrial and organizational psychology - group processes and organizational behavior
HEGIS code 2008; SED program code 90065

This program prepares the student for entry-level analyst and associate positions in firms or departments that offer services in areas such as organizational development, talent management, change management, organizational learning, or research and data analysis. It shares a common core of five courses with other concentrations in industrial and organizational psychology, but places additional emphasis on theory, research, and practice at the level of social structures within organizations, such as organizational development, organizational effectiveness, group processes, team performance, culture, and leadership.

Matriculation requirements

Matriculation requirements
Applicants should offer: (a) an overall GPA of 3.00 or better, (b) a minimum of 12 credits in psychology, and (c) courses both in statistics and in research methods, with a grade of B or better in both courses.

Degree requirements

Students must complete 36 credits and receive a passing grade on the comprehensive examination. The eight required courses include either Psychology 7101G or 7231G; and 7114G, 7105G, 7106G, 7210G, 7121G, 7122G, and 7241G. The remainder of each student's program consists of four elective courses (12 credits) that must be Psychology 7000-level courses within the psychology department. Other courses may be used as electives with prior Graduate Deputy approval. The comprehensive examination is a requirement of the program and students are eligible to take it when they have registered for their 24th credit.

M.A. degree program in industrial and organizational psychology - personnel and human resources
HEGIS code 2008; SED program code 90066

This program prepares the student for entry-level analyst and associate positions in the areas of personnel and human resources in organizations. It shares a common core of five courses with other concentrations in industrial and organizational psychology, but places additional emphasis on theory, research, and practice in areas such as human resource management, job analysis, recruitment, selection, training, compensation, retention, and outplacement.

Matriculation requirements

Matriculation requirements
Applicants should offer: (a) an overall GPA of 3.00 or better, (b) a minimum of 12 credits in psychology, and (c) courses both in statistics and in research methods, with a grade of B or better in both courses.

Degree requirements

Students must complete 36 credits and receive a passing grade on the comprehensive examination. The eight required courses include Psychology 7101G or 7231G; and 7105G, 7106G, 7210G, 7232G, 7236G, 7241G, and 7242G. The remainder of each student's program consists of four elective courses (12 credits) that must be Psychology 7000-level courses within the psychology department. Other courses may be used as electives with prior Graduate Deputy approval. The comprehensive examination is a requirement of the program and students are eligible to take it when they have registered for their 24th credit.

M.A. degree program in mental health counseling
HEGIS code 2104.10; SED program code 30978

The 60-credit master's degree in Mental Health Counseling (MHC) prepares students to work as mental health counselors within medical, community, and private practice settings. Through rigorous academic coursework and clinical internship training, students learn to apply mental health approaches to contemporary practice, assessment, and treatment. The MHC Program provides in-depth exposure to three principal approaches to counseling: psychodynamic, experiential/humanistic, and cognitive-behavioral. In addition to the internship, students perform intake evaluations and psychotherapy at the College's counseling center. The Program focuses primarily on clinical work with adults and families. After 3,000 hours of supervised, post-degree experience students are eligible to take an exam for licensure permitting private and independent practice of counseling.

Matriculation requirements

Applicants must offer a minimum of 15 credits in undergraduate courses in psychology, with at least one course in each of the following areas: child or adolescent (developmental) psychology; general or introductory psychology; abnormal psychology, psychopathology; and statistics or evidence of appropriate comparable background in related fields. Applicants must provide a personal statement, including discussion of related work, internship and/or personal experiences. Applicants must also submit letters of recommendation from individuals familiar with applicants' professional and academic experience. The program invites selected applicants to participate in an interview and to complete an on-site writing sample.

General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Degree requirements

Sixty credits are required for the degree, a minimum of 48 of which must be taken in the Psychology Department. Students must pass a comprehensive examination after completing 48 credits.

Required courses are: Psychology 7410G, 7720G, 7755G, 7421G, 7431G, 7771G, 7441G, 7449G, 7442G, 7443G, 7110G, 7544G, 7591G, 7545G, 7106G, 7592G, 7245G; the remainder of each student's program must be approved by the program director. The program must be completed on a full-time basis.

Failure to earn a grade of B (3.00) or better in any one attempt at Psychology 7431G, 7449G, 7591G or 7592G may result in implementation of a student remediation plan, independent of the overall GPA, as deemed appropriate and according to procedures adopted by the department. Following remediation, failure to earn a grade of B or better in a subsequent attempt at Psychology 7431G, 7449G, 7591G, or 7592G may result in restrictions on registration in the Mental Health Counseling program. In addition, continued enrollment in all clinical practicum and internship courses is also contingent upon the student's adherence to and demonstration of standards of professional conduct and demeanor as deemed appropriate by the psychology department in concurrence with standards codified in the American Psychological Association and American Counseling Association and American Mental Health Counseling Association professional and ethical codes and guidelines and New York State regulations, as well as Brooklyn College standards for student conduct. These standards include, but are not limited to, confidentiality, client welfare, honesty, and academic integrity. Significant and/or repeated violations of these standards may result in dismissal from the Mental Health Counseling program when warranted and in conformity with policies and procedures adopted by the department and the College as appropriate.

New York State Mental Health Counseling Licensing

3,000 hours of supervised post-degree experience are required to be eligible for licensure permitting private practice of mental health counseling. Information about New York State licensing for mental health counseling may be found at: http://www.op.nysed.gov/home.html.

M.S. degree program in psychological research
HEGIS code 2002; SED program code 90064

This faculty-mentored program equips students with advanced data analysis skills and practical psychological research experience and allows students to concentrate in the areas of cognition, learning, perception, cognitive and behavioral neuroscience, developmental psychology, psychopathology, applied psychology, and social psychology. Focus is on preparation for a career in basic or applied research in a variety of settings. This program is also useful for those who wish to enroll in a doctoral program in psychology. For additional program details please visit https://www.brooklyn.edu/academics/programs/psychological-research-ms/

This program is accepting applications for the 2024-2025 academic year.

Matriculation requirements

Applicants should offer: (a) an overall GPA of 3.00 or better, (b) a minimum of 12 credits in psychology or related fields, and (c) courses both in statistics and in research methods, with a grade of B or better in both courses.

All applicants passing a first round of consideration will be interviewed.

General matriculation and admission requirements of Graduate Studies are in the section "Admission" of the Graduate Bulletin.

Degree requirements

Students must complete 36 credits including a thesis. There are three areas of coursework, including 12 credits from psychological science courses, 12 credits from statistics and data-analysis courses, and 12 credits from independent reading and research courses. Required courses include Psychology 7801G and 7802G in the psychological science area, 7705G, 7706G, and 7750G in the statistics and data-analysis area; and one faculty-mentored independent reading (7791G, 7792G) or research course (7795G, 7796G) per semester in the first three semesters, culminating in a thesis 7781G during the final semester. Electives are chosen in consultation with a student's faculty mentor and are taken with permission of the graduate deputy chairperson. Courses offered toward the degree must be 7000-level courses or higher.

Department Recommendations

Students are encouraged to consult the program website for a comprehensive set of recommendations.

CUNY Ph.D.

The City University of New York offers doctoral programs in which Brooklyn College faculty participate. General information about CUNY Ph.D. programs is in the chapter "Support for Academic Success in Graduate School."

Courses

Students may apply graduate or undergraduate courses toward fulfillment of a prerequisite unless otherwise stated.

PSYC 7101G Human Relations Training Seminar I

45 hours; 3 credits
A training-group approach. Participant orientation to group processes; assessment of such relevant interpersonal competences as leadership and assertiveness; observation and analysis of group process; group diagnosis; personal development; improvement of interpersonal skills; intervention analysis.

Prerequisite: Permission of the deputy chairperson.

PSYC 7105G Quantitative Techniques in Industrial and Organizational Psychology

45 hours; 3 credits
This course will focus on the applications of statistics relevant to problems in industrial and organizational psychology. In addition to standard descriptive and inferential statistical procedures, the course will include a wide variety of correlational procedures, nonparametric procedures, chi-square, survey design procedures, and psychological scaling techniques.

Prerequisite: permission of the graduate deputy chairperson.

PSYC 7106G Research and Program Evaluation Methods in Applied Psychology

45 hours; 3 credits
A critical examination of a wide variety of research and program evaluation designs and methods used in applied areas of psychology.

Prerequisite: Permission of the deputy chairperson

PSYC 7109G Special Topics in Group Processes and Organizational Behavior

15-45 hours; 1-3 credits
Topics vary from term to term. This course may be taken up to four times, so long as each involves a different Special Topic.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7110G Theories of Group Process I

45 hours; 3 credits
The conceptual underpinnings and methodological perspectives of group process. The theories that have developed to support the activities that promote learning and change in individuals participating in a small group interactive experience. The relevance of theoretical models and cognitive structures in small groups.

Prerequisite: permission of the graduate deputy chairperson.

PSYC 7112G Intervention Theory and Practice I

45 hours; 3 credits
Analysis of the types of intervention available to the group leader and an evaluation of their effects on learning within the group. Intervention strategies are explored in the context of a variety of potential group situations. The development of individual intervention styles for increasing effectiveness is emphasized.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7113G Intervention Theory and Practice II

45 hours each term; 3 credits each term
Analysis of the types of intervention available to the group leader and an evaluation of their effects on learning within the group. Intervention strategies are explored in the context of a variety of potential group situations. The development of individual intervention styles of increasing effectiveness is emphasized.

PSYC 7114G Psychology of Small Groups I

45 hours; 3 credits
Development of small groups; theories of group development. Study of group processes; factors that enhance or inhibit group effectiveness and productivity; practice in group diagnostic skills; individual skills that increase group effectiveness.

Prerequisite: permission of the graduate deputy chairperson.

PSYC 7115G Psychology of Small Groups II

45 hours; 3 credits
Continuation of Psychology 7114G.

Prerequisite: Psychology 7114G and permission of the deputy chairperson.

PSYC 7121G Assessing Organizational Structure and Design
45 hours; 3 credits
Research and theory on structure and design of organizations. Understanding organizational dynamics, culture, climate, environment, power, and politics over the course of the organizational lifecycle.

Prerequisite or corequisite: Permission of the graduate deputy chairperson.

PSYC 7122G Organizational Diagnosis and Consultation
45 hours; 3 credits
Evaluation of methods of organizational diagnosis; root cause analysis; stages and tasks of consultation cycles. Theory and practice of consultation and organizational development. Roles of change practitioners (internal/external consultant, manager, leader). Essential skills for effective consulting.

Prerequisite: Psychology 7121G and permission of the graduate deputy chairperson.

PSYC 7144G Leadership in Organizations

45 hours; 3 credits
Classic and current theories and research on leadership, such as contingency theory, leader-member exchange theory, behavioral concepts, and shared leadership.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7209G Special Topics in Personnel and Human Resources
15-45 hours; 1-3 credits
Topics vary from term to term. This course may be taken up to four times, so long as each involves a different Special Topic.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7210G Psychological Concepts and Methods: Issues in Industrial and Organizational Psychology
45 hours; 3 credits
Introduction to major psychological concepts applicable to organizations. Includes scientific basis of psychology, professional and ethical standards, relevant topics in social psychology, motivation theory, group theory. Development of research and scientific communication skills.

Prerequisite: Permission of the deputy chairperson.

PSYC 7224G The Psychology of Work

45 hours; 3 credits
An examination of historical, current, and future conditions of work. Human factors engineering; work physiology; stress, strain, and workload. Cognition, decision making, motivation, work performance. Issues in the quality of working life.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7225G Planning and Control System Psychology

45 hours; 3 credits
Organizational and psychological impact of technology-based concepts of strategic and tactical planning, anagement, and operational control systems on personnel issues. System complexity, organizational adaptation, psychology of implementation, and issues of sociotechnical fit. Technology-based changes in the nature of human work.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7226G Psychology of Technology and Information Systems Implementation
45 hours; 3 credits
Case examples of office automation and information systems and their implementation. Assessment of psychological and social systems impact, implementation strategy, and follow-up studies of the technology/productivity relationship.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7228G Workplace Communication in Organizations
45 hours; 3 credits
Introduction to communication skills and strategies that managers need in today's workplace, including leadership communication, 360-degree communication, facilitating meetings, and managing conflict in order to enhance communication effectiveness. This course will also include a review of techniques for giving and receiving feedback, negotiating, listening, and managing conflict.

PSYC 7231G Group Relations Issues in Organizational Psychology
45 hours; 3 credits
Introduction to the major theoretical approaches to analysis of individual, group, and intergroup behavior in organizational settings. Integration of experiential and intellectual learning. Participation in Tavistock small study group experiential sessions to facilitate deeper understanding of group dynamics, group development, and member roles in groups; promoting self-reflection, self-awareness, and feedback on individual behavior.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7232G Training and Development

45 hours; 3 credits
Training-needs analysis and evaluation; determining instruction medium for curriculum and content; build comprehensive curriculum; implement and track effectiveness of training program.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7235G Small Work Group Consultation

45 hours; 3 credits
Practicum experience in small work group consultation. Participants will alternate in consulting to the course as learning enterprise. Supervision will be provided on course consulting experience as well as on field placements.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7236G Job Analysis and Employee Selection

45 hours; 3 credits
This course will cover the following topics: job analysis, job description, job specification, job evaluation, assessment methods, employee screening, employee testing, employee recruitment, employee selection, employee placement. Includes legal issues in employment decisions as well as methodological considerations such as validity and reliability.

Prerequisite: Psychology 7210 and 7241 and 7105.

PSYC 7237G Occupational Health Psychology

45 hours; 3 credits
Psychological factors of work-related well-being, safety, and health. Applying psychological research and theory to improving and promoting a healthy work environment regarding physical attributes (human factors) as well as organizational climate and culture. Science and practice of psychology in the promotion and development of workplace health- and safety-related initiatives. Topics include occupational stress and burnout, work schedules and work-family conflict, negative affectivity, bullying and mistreatment, workplace violence, workplace accidents and safety, and post-traumatic stress. Prevention of occupational accidents and injuries; design and improvement of programs that promote worker wellness, effectiveness, and quality of work life.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7241G The Individual in the Organization

45 hours; 3 credits
Introduction to the major theoretical approaches to analysis of individual behavior in organizational settings. Primary focus is on distinctive interpretations of individual behavior in a group and organizational context. The consequences for organizational behavior and human resource management. Topics: person/role boundary; work systems; nature of leadership and authority; work attitudes (job satisfaction, job involvement, and organizational climate); motivational traits and environments; job performance; ethics.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7242G Human Resources Management Applications

45 hours; 3 credits
Topics in human resource management. Current employment laws. Workforce planning; selection, placement, training, and development; performance appraisals and performance improvement; pay structure, wage and salary administration; benefit programs; collective bargaining.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7243G Labor Relations: Quality of Working Life Issues, Productivity, and Unions

45 hours; 3 credits
Assessment of the relationship between quality of working life, changes in productivity, and the negotiations process. Examination of labor-management cooperation.

Prerequisite: Permission of the deputy chairperson.

PSYC 7245G Career Development

45 hours; 3 credits
Topical approach to issues pertinent to careers and work life as they unfold across adulthood. Research, theories, and concepts from developmental and industrial and organizational psychology. Policy and practice applications.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7246G International Human Resource Management

45 hours; 3 credits
Human resource decisions and practices in an international context. Topics include: recruiting, selection, expatriation, repatriation, training, career management, performance management, compensation, and cross-cultural issues. This course is the same as Business 7250X.

Prerequisite: an undergraduate course in human resource management or permission of the instructor.

PSYC 7247G Managing Diversity in the Global Economy

45 hours; 3 credits
The course will cover the following topics: diversity and individuals; defining diversity in a global context; theoretical perspectives on workplace diversity; diversity legislation in a global perspective; discrimination and fairness in employment; global demographic trends; diversity management; interpersonal relationships in a global context; intercultural communication process; intercultural negotiation process; politico-legal, economic and business environments in selected countries in a comparative perspective with those of the United States; and cultural values, communication patterns and negotiation styles in selected countries. This course is the same as Business 7255X.

PSYC 7248G Gender and the Workplace

45 hours; 3 credits
Introduction to gender issues in the workplace. Includes a review of research in workplace equality between genders; cultural, societal and economic stereotypes of women; variances in communication methods; and organizational improvement.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7410G Foundations of Mental Health Counseling

45 hours; 3 credits
Introduction to mental health assessment, counseling and psychotherapy; counseling and psychotherapy research; professional, ethical, and multicultural issues. This course is the same as SPCL 7410X.

Prerequisite: permission of the graduate deputy chairperson

PSYC 7421G Assessment Techniques

45 hours; 3 credits
Clinical techniques in assessment.

Prerequisite: permission of the chairperson.

PSYC 7431G Assessment Practicum

45 hours; 3 credits
Clinical interviewing and psychological assessment practicum.

Prerequisite: permission of the chairperson. Pre- or co-requisite: Psychology 7421G [788.21G].

PSYC 7441G Social, Linguistic and Cultural Foundations of Counseling

45 hours, 3 credits
Examines the impact of social, linguistic and cultural factors have on case conceptualization and diagnosis, ethical practice, counselor emotional self-knowledge and counseling skills.

Prerequisite: permission of chairperson.
Pre- or co-requisites: Psychology 7410G [744.10G]; Psychology U7720G [720G]; Psychology U7755G [755G]; and Psychology 7421G [788.21G].

PSYC 7442G Psychodynamic Approaches to Counseling and Psychotherapy
45 hours; 3 credits
Introduction to psychodynamic approaches to mental health counseling and psychotherapy.

Prerequisite: permission of chairperson.
Pre- or corequisites: Psychology 7410G [744.10G]; Psychology U7720G [720G]; Psychology U7755G [755G]; and Psychology 7421G [788.21G].

PSYC 7443G Cognitive and Behavioral Approaches to Counseling and Psychotherapy
45 hours; 3 credits
Introduction to cognitive and behavioral approaches to counseling and psychotherapy.

Prerequisite: permission of chairperson.
Pre- or co-requisites: Psychology 7410G [744.10G]; Psychology U7720G [720G]; Psychology U7755G [755G]; and Psychology 7421G [788.21G].

PSYC 7449G Mental Health Counseling Practicum
45 hours; 3 credits
Introductory mental health counseling and psychotherapy practicum; basic counseling techniques.

Prerequisite: Psychology 7431G [788.31G] and permission of the chairperson.

PSYC 7509G Special Topics in Mental Health Counseling
15 - 45 hours; 1 - 3 credits
Topics vary from term to term. This course may be taken up to four times, so long as each involves a different Special Topic.

Prerequisite: Matriculation in the Graduate Program in Mental Health Counseling.

PSYC 7544G Experiential Approaches to Counseling and Psychotherapy
45 hours; 3 credits
Introduction to experiential and humanistic approaches to counseling and psychotherapy.

Prerequisite: permission of chairperson.
Pre- or co-requisites: Psychology 7410G [744.10G]; Psychology U7720G [720G]; Psychology U7755G [755G]; and Psychology 7421G [788.21G].

PSYC 7545G Assessment, Counseling and Psychotherapy with Couples and Families
45 hours; 3 credits
Introduction to counseling and psychotherapy with couples and families; related research.

Prerequisite: permission of chairperson.
Pre- or co-requisites: Psychology 7410G [744.10G]; Psychology U7720G [720G]; Psychology U7755G [755G]; and Psychology 7421G [788.21G]; Psychology 7442G [754.20G].

PSYC 7546G Child and Adolescent Mental Health Counseling
45 hours; 3 credits
Introduction to treatment of children and adolescents in mental health counseling.

Prerequisites: permission of chairperson; completion of Psychology 7442G and 7443G.

PSYC 7551G Biological, Psychological, and Social Aspects of Aging
45 hours; 3 credits
Topics of late-life development including biological, sociological, and psychological theories of aging. Factors affecting the well-being of older adults and the nature and quality of late life, with an emphasis on diversity issues.

PSYC 7552G Psychopathology and Aging
45 hours; 3 credits
Psychopathological conditions affecting older adults with emphasis on accurate diagnosis. Etiology and course of psychiatric disorders, contribution of physical illness to the development and presentation of psychiatric symptoms, ethical and diversity issues in diagnosis, and professional application of diagnostic knowledge.

PSYC 7553G Mental Health Assessment of Older Adults
45 hours; 3 credits
Key themes in the mental health assessment of older adults with emphasis on clinical practice in multidisciplinary settings. Tools and techniques for the evaluation of psychiatric symptoms and the assessment of capacity, competency, and risk.

PSYC 7554G Clinical Perspectives and Psychological Interventions with Older Adults
45 hours; 3 credits
Evidence based treatments for major psychological disorders prevalent in older adults. Treatment application including cognitive behavioral, psychodynamic, and family systems therapy.

PSYC 7555G Geriatric Mental Health Practicum
45 hours; 3 credits
300 hours (at least 120 direct service counseling hours) of supervised internship in a mental health work setting with geriatric clients. Full range of counseling functions supervised by college and on-site supervisors.

PSYC 7562G Parent-Child Dyad Relational Health
45 hours, 3 credits
Foundation of mental health as it relates to the parent-child dyad, beginning prenatally through the first year of life. Consideration given to stress and familial, environmental, and cultural factors that may put the parent-child dyad at risk both in terms of mental and physical health.

Prerequisites: Permission of Graduate Deputy

PSYC 7563G Biopsychosocial Aspects of the Perinatal Period
45 hours, 3 credits
Topics related to biological, psychological, and social theories and variables related to pre-pregnancy and perinatal periods. Factors affecting the well-being of mothers and families during the childbearing period and the nature and quality of this stage of life (with an emphasis on relationships, culture, diversity issues, socioeconomic status, and trauma). Same as ECAE 7563G

Prerequisites: Permission of Graduate Deputy

PSYC 7564G Psychological Health Inequities During the Perinatal Period
45 hours, 3 credits
A focus on the inequities related to ethnicity, socio-economic status, and gender, and their impact on perinatal mental health. Considerations regarding services provided to individuals from underserved ethnicities, low-income communities, and across the gender spectrum. Same as ECAE 7564G

Prerequisites: Permission of Graduate Deputy

PSYC 7566G Psychopathological Conditions during the Perinatal Stage
45 hours, 3 credits
Psychological disorders including mood, anxiety, trauma, obsessive compulsive, eating, and substance use disorders that may affect the perinatal stage, with a focus on accurate diagnoses and etiology of such disorders. Incorporation of professional application of diagnostic knowledge, as well as ethical and diversity issues regarding diagnoses. Same as ECAE 7566G.

Prerequisites: Permission of Graduate Deputy

PSYC 7568G Clinical Assessment and Intervention for Perinatal Mental Health Issues
45 hours, 3 credits
Mental health assessment techniques for the evaluation of psychiatric symptoms with a focus on evidence-based interventions during the perinatal phase. Adaptation of current instruments and/or development of new instruments, with robust evaluation of their psychometric properties. Same as ECAE 7568G.

Prerequisites: Permission of Graduate Deputy

PSYC 7569G Perinatal Mental Health Practicum

45 hours, 3 credits
Supervised clinical work with perinatal clients in a mental health work setting, which must include 120 overall hours with at least 50 of those hours being direct service counseling hours. A full range of counseling functions will be performed, supervised by college and on-site supervisors. Same as ECAE 7569G.

Prerequisites: Permission of Graduate Deputy

PSYC 7571G Neuroscience, Trauma, Psychopharmacology, and Severe Mental Illness in Mental Health Counseling
45 hours; 3 credits
Introduction to treatment of severe mental disorders, trauma, psychopharmacology, and neuroscience in mental health counseling. Applications for diverse populations across lifespan served in variety of mental health settings, including clinics, schools, hospitals, mental health community centers. This course is the same as PSYC 7571X.

Prerequisite: Permission of the graduate deputy chairperson; completion of Psychology 7442G and 7443G.

PSYC 7591G Mental Health Counseling Internship I

270 hours; 6 credits
A term (at least 300 hours, including at least 120 direct service counseling hours) of supervised internship in a mental health work setting similar to that in which the student expects to work as a counselor. Interns are expected to perform a full range of mental health counseling functions supervised by college and site personnel.

For Psychology 7591G and 7592G, interns must complete the two terms of internship at a single (the same) site for both courses or, if this is not possible, no fewer than 7 consecutive months and 450 hours, including 180 direct service counseling hours, at a single (either the original or a new) site in conformity with procedures adopted by the department.
Same as ECAE 7562.

Prerequisite: Permission of deputy chairperson; completion of Psychology 7442G and 7443G..

PSYC 7592G Mental Health Counseling Internship II

270 hours; 6 credits
A term (at least 300 hours, including at least 120 direct service counseling hours) of supervised internship in a mental health work setting similar to that in which the student expects to work as a counselor. Interns are expected to perform a full range of mental health counseling functions supervised by college and site personnel.

For Psychology 7591G and 7592G, interns must complete the two terms of internship at a single (the same) site for both courses or, if this is not possible, no fewer than 7 consecutive months and 450 hours, including 180 direct service counseling hours, at a single (either the original or a new) site in conformity with procedures adopted by the department.

Prerequisite: Permission of deputy chairperson; completion of Psychology 7591G.

PSYC U7700G History of Psychology

45 hours; 3 credits
Historical development of contemporary psychology including origin and status of systematic approaches such as structuralism, functionalism, behaviorism, and Gestalt psychology. Critical review of antecedents that led to the emergence of psychology as a discipline. Philosophy of science as applied to psychological theory.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7701G Professional Development Seminar

45 hours; 3 credits
This course will cover topics pertaining to academic and professional development; ethical conduct in research; and institutional and local resources for thriving in graduate school and conducting research.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC U7703G Design of Psychological Research

45 hours; 3 credits
Consideration of the basic principles of research methodology as involved in the design of psychological research. Attention given to possible and likely sources of confounding in behavioral research and appropriate control procedures for dealing with them.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC U7704G Instrumentation in Experimental Psychology
30 hours lecture, 30 hours laboratory; 3 credits
Lecture and laboratory illustrating the use of physical instruments in the generation of stimuli and measurement of responses. Techniques taught are general rather than specific to any particular area in psychology. No specialized background is assumed. (Not recommended for students with extensive experience in programming psychological equipment.)

Prerequisite: Permission of the graduate deputy chairperson.

PSYC U7705G Statistical Methods in Psychology I

30 hours lecture, 30 hours conference or laboratory; 3 credits
Advanced treatment of basic concepts of probability and inferential statistics. Statistical tests based on binomial, normal, chi-square, t, F distributions.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC U7706G Statistical Methods in Psychology II

30 hours lecture, 30 hours conference or laboratory; 3 credits
Continuation of Psychology U7705G. Complex experimental designs; standard techniques of fitting curves to data; correlation; nonparametric and short-cut methods.

Prerequisite: Psychology U7705G and permission of the graduate deputy chairperson.

PSYC U7707G Multivariate Statistical Methods

45 hours; 3 credits
Detailed analysis of some major multivariate statistical procedures. Multiple regression; discriminant function analysis; multivariate analysis of variance; canonical correlation; factor analysis.

Prerequisite: Psychology U7705G and U7706G and permission of the graduate deputy chairperson.

PSYC 7709G Special Topics in Experimental Psychology
15-45 hours; 1-3 credits
Topics vary from term to term. This course may be taken up to four times, so long as each involves a different Special Topic.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC U7710G Advanced Physiological Psychology I

45 hours; 3 credits
Mechanisms of excitation; synaptic interaction; advanced topics in sensory psychophysiology; rhinencephalon and affective behavior.

Prerequisite: An undergraduate course in physiological psychology and permission of the graduate deputy chairperson.

PSYC U7716G Comparative Psychology

45 hours; 3 credits
Major topics in this field.

Prerequisite: An undergraduate course in comparative psychology and permission of the graduate deputy chairperson.

PSYC U7718G Ethology

30 hours plus conference ; 3 credits
Species-specific behaviors and their physiological and endocrinological bases. Problems of phylogeny, evolution, ontogeny, instinct theory

Prerequisite: A graduate course either in comparative or physiological psychology and permission of the graduate deputy chairperson.

PSYC U7720G Developmental Psychology

45 hours; 3 credits
Survey of cognitive, social, cultural, emotional, biological, and psychological development. Review of major theories and concepts of development as well as influences on development, including social, emotional, economic, cultural, and contextual factors. Examination of variations in development and how they influence subsequent behavior, emotion, and cognition.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC U7730G Psychology of Learning

45 hours; 3 credits
Examination of key empirical phenomena and theories of associative learning. Focus on psychological level analyses as well as underlying neurobiological mechanisms involved in simple forms of Pavlovian and instrumental learning and their interactions in the control of adaptive behavior in non-human animals. Applications to topics such as causal reasoning, predictive learning, substance abuse, and neuropsychiatric disorders in humans.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC U7733G Information and Decision Processes in Human Behavior
45 hours; 3 credits
A graduate course in experimental psychology. A survey of human information processing. Analysis of the role of decision-making and of characteristics and models of human choice behavior.

PSYC U7737G Development of Cognition

30 hours plus conference; 3 credits
Cognition from the development point of view. Comparative studies of animals, children, and normal and abnormal adults examined in terms of cognitive function.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC U7738G Cognitive Psychology

45 hours; 3 credits
Mental phenomena in terms of strategies of information processing. Nature and speed of different stages and types of perceptual and cognitive operations. Cognitive approach to storage and retrieval processes. Conditions that determine generation and evaluation of strategies. Facts and theories concerning attention, imagery, awareness.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC U7743G Psychology of Emotion

45 hours; 3 credits
Survey of emotions from the workings of the brain, body, and mind. Review of emotions from evolutionary, cognitive, physiological, and cultural perspectives; development of emotion.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC U7746G Advanced Social Psychology

45 hours; 3 credits
Advanced topics in social psychology.

Prerequisite: A course in social psychology and permission of the graduate deputy chairperson.

PSYC U7747G Experimental Social Psychology

45 hours; 3 credits
Critical examination of selected areas and relevant research methods in social psychology. Independent or group research on selected problems.

Prerequisite: Psychology U7705G, U7746G and permission of the graduate deputy chairperson.

PSYC 7750G Data Skills for Reproducible Psychological Research

45 hours; 3 credits
Practical introduction to computationally reproducible data analysis and research dissemination techniques for psychological research using software environments, such as the open-source statistical computing language R. Topics include basic scripting, data-wrangling, descriptive and inferential statistics, advanced graphing and data animation, and techniques for creating reproducible manuscripts, slide presentations, websites, and web-books for communicating research.

PSYC U7751G Computer Simulation of Psychological Process

45 hours; 3 credits
Discussion of attempts to simulate complex mental phenomena by computer. Value of making psychological theories explicit using computer models. Analysis of problems in the construction and evaluation of these models; examples from the fields of perception, problem solving, personality.

PSYC U7752G Language and Thought

45 hours; 3 credits
The nature, acquisition, behavioral effects of language. Language is studied in its phonological (phonetic), morphological (grammatical-rhetorical), semiological (semantic) aspects. Nature of semiotics (syntactics, semantics, and pragmatics), ambiguity, metaphor, bilingualism.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC U7753X Foundations of Cognitive Science

45 hours; 3 credits
Bases for intelligent behavior in humans, animals, and machines. Human and machine intelligence are compared with respect to visual perception, speech perception, language comprehension, learning, and other adaptive mechanisms. This course is the same as Computer and Information Science 7400X.

Prerequisite: a course in probability and statistics; and knowledge of such high-level programming languages as Pascal, PL/I, or LISP.

PSYC U7754G Natural-Language Processing

45 hours; 3 credits
The study of natural-language processing including linguistic theory, the formal theory of languages, and psycholinguistic investigations into human natural-language processing, both from the point of view of modeling human processing and of developing practical systems for machine processing of natural-language material.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC U7755G Psychopathology

45 hours; 3 credits
Intensive study of case material in psychological literature of some theoretical and practical problems in the diagnosis, etiology, and dynamics of psychological disorders.

Prerequisite: Permission of the chairperson

PSYC U7763G Psychophysical Methods

45 hours; 3 credits
Systematic study of current psychophysical theory and methods including traditional approaches and more recent developments.

PSYC 7765G Statistical Methods Applications I

22.5 hours; 1.5 credits
Parallel course to Psychology U7705G provides an introduction to statistical software environments for practical data-analysis, advanced simulation techniques, and reproducible reporting for psychological research. Topics and scope, such as choice of software environment, vary from term to term.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7766G Statistical Methods Applications II

22.5 hours; 1.5 credits
Continuation of Psychology U7701G and parallel course to U7706G provides introduction to statistical software environments for analyzing complex experimental designs, curve fitting, and non-parametric methods. Continued training in reproducible reporting for psychological research. Topics and scope, such as choice of software environment, vary from term to term.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC U7771G Ethical and Legal Issues for Psychologists

45 hours; 3 credits
Ethical and legal issues that arise in all aspects of the functioning of psychologists as scientists, academics, and practitioners. Students will be introduced to the ethical principles of the professional and relevant legal issues. Illustrative cases will be drawn from the American Psychological Association publication, Ethical Principles in Psychology, and from other courses. These will be discussed in order to facilitate

the recognition and analysis of ethical problems that arise in a variety of settings, including animal as well as human research, clinical practice, and consultation.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7780G Quantitative Methods in Psychology

45 hours; 3 credits
Emphasis will be placed on the mathematical procedures used in psychological theories and in the theoretical analysis of psychological data. Possible topics are curve-fitting procedures for straight lines, polynomials, and growth functions; regression procedures including multiple regression, ANCOVA, time-series analysis, computer intensive methods, computer simulation and robust methods of analysis.

Prerequisite: PSYC U7705G.

PSYC 7781G Research in Psychology

45 hours; 3 credits
Research for master's thesis supervised by a faculty member. Credit is not earned until the thesis is accepted. Students register for this course only once.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7782G Research Proposal in Psychology

45 hours; 3 credits
Students will develop all components of a research proposal in the area of Psychology. Grant proposals will be developed within a specialized area specific to students' interests.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7791G Independent Reading I

Minimum of 135 hours of independent work and conference; 3 credits
Reading, approved by a faculty adviser, in an area of psychology. One or more written reports or a final examination. (Psychology 7791G [791.1G] is not open to students who have completed Psychology 791G.) This course may be taken up to two times, so long as each involves a different reading project.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7792G Independent Reading II

Minimum of 135 hours of independent work and conference; 3 credits
Reading, approved by a faculty adviser, in an area of psychology. One or more written reports or a final examination. This course may be taken up to two times, so long as each involves a different reading project.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7795G Independent Psychological Research I

Minimum of 135 hours; 3 credits
Research project approved by a faculty member, in an area of psychology. One or more written reports or a final examination. This course may be taken up to two times, so long as each involves a different Research project.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7796G Independent Psychological Research II

Minimum of 135 hours; 3 credits
Research project approved by a faculty member, in an area of psychology. One or more written reports or a final examination. This course may be taken up to two times, so long as each involves a different Research project.

Prerequisite: Permission of the graduate deputy chairperson.

PSYC 7798G Internship in Industrial and Organizational Psychology I

150 hours plus biweekly conference; 3 credits
A minimum of 10 hours a week over the course of 15 weeks. Supervised internship working on issues in industrial and organizational psychology. Professional level work that must be commensurate with typical job descriptions in industrial and organizational psychology. Clerical duties appropriate only if part of generic job description in the field. Expectation to participate in full range of commensurate professional activities. Maintain time and activity log over the course of internship. Site supervisor provides written performance evaluation at the end of the semester. Biweekly conference with faculty supervisor required.

Prerequisite: PSYC 7241G and either PSYC 7105G or PSYC 7106G; and permission of graduate deputy

PSYC 7799G Internship in Industrial and Organizational Psychology II

150 hours plus biweekly conference; 3 credits
Continuation of PSYC 7798G. A minimum of 10 hours a week over the course of 15 weeks. Supervised internship working on issues in industrial and organizational psychology. Professional level work that must be commensurate with typical job descriptions in industrial and organizational psychology. Clerical duties appropriate only if part of generic job description in the field. Expectation to participate in full range of commensurate professional activities. Maintain time and activity log over the course of internship. Site supervisor provides written performance evaluation at the end of the semester. Biweekly conference with faculty supervisor required.

Prerequisite: PSYC 7241G and either PSYC 7105G or PSYC 7106G; and permission of graduate deputy

PSYC 7801G Survey in Psychological Science

45 hours; 3 credits
Students will read primary source materials and become familiar with key concepts and research methods within three different fields of Psychological Science, such as Comparative Psychology, Perception, Learning, Cognition, Behavioral Neuroscience, and/or Cognitive Neuroscience. The course may be team-taught by multiple faculty members.

PSYC 7802G Survey in Psychological Science II

45 hours; 3 credits
Students will read primary source materials and become familiar with key concepts and research methods within three different fields of Psychological Science, such as Social Psychology, Developmental Psychology, Abnormal Psychology, Evolutionary Psychology, Psycholinguistics, Motivation and Emotion. The course may be team-taught by multiple faculty members.

Prerequisites: Permission of the graduate deputy chairperson

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

PSYC 7102G Human Relations Training Seminar II

PSYC 7111G Theories of Group Process II

PSYC 7211G Organizational Psychodynamics

PSYC 7223G Strategies of Intervention in Organizations

PSYC 7227G Human Factors in Design and Engineering

PSYC 7233G Sociotechnical Systems Analysis: Autonomy in Groups

PSYC 7234G Action Research, Psychodynamic Theory, and Group Motivation

PSYC U7711G Advanced Physiological Psychology II

PSYC U7735G Psychology of Perception

PSYC U7736G Sensory Psychology

PSYC U7740G Advanced Psychology of Personality

PSYC U7741G Psychoanalytic Theory I

PSYC U7742G Psychoanalytic Theory II

PSYC U7745G Human Motivation

Puerto Rican and Latino Studies

Department office: 1205 Boylan Hall
Phone: 718.951.5561

Full-time Faculty

Professors: Aja, Pérez y González
Associate Professor: Mitchell
Assistant Professors: España, Mena, Santamaría

The Department of Puerto Rican and Latino Studies, formerly the Department of Puerto Rican Studies, was established in 1970. Engendered by the civil rights movements and student activism, it is an academic unit committed to excellence in teaching and scholarship focusing on to Latinxs*, Puerto Ricans, the Caribbean, and Latin America. The Department promotes transformative education encompassing active citizenship and leadership, providing students with the interdisciplinary knowledge and critical skills to live in a rapidly changing and globally interdependent 21st century.
*x denotes gender neutrality

The department offers courses in conjunction with other College departments and programs, including Africana studies, American studies, Anthropology, Archival Studies (Brooklyn College Library), Management, Marketing and Entrepreneurship, Caribbean studies, Children and Youth Studies, Comparative Literature (English), History, Interdisciplinary Studies (Communications), Studies in Religion, Sociology, and Women's and Gender Studies as well as the Conservatory of Music. Our department also participates in the graduate programs of the Brooklyn College School of Education.

Students are encouraged to utilize the research resources of the Brooklyn College Center for Latino Studies as well as the CUNY Center for Puerto Rican Studies at Hunter College, the CUNY Dominican Studies Institute, and the CUNY Jaime Lucero Mexican Studies Institute at Lehman College.

Courses

PRLS 7145X Bilingualism: Characteristics and Practices
30 hours plus conference; 3 credits
Study of the acquisition of two or more languages with special emphasis on Spanish-English bilingualism in the U.S. Philosophy and general practices related to bilingual programs in U.S. schools. International perspectives on bilingualism with selected case studies. Discussion of language policy and planning in developed and developing countries. Theories, writings, research studies in socio- and psycholinguistics. Application centered on the psycho-sociological background for language development in Puerto Rican and other Latino children. Independent research and professional development workshops.

Prerequisite: at least 3 graduate credits in education, the social sciences, or the humanities or permission of the chairperson.

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

PRLS 7140X Schools and Language Communities

PRLS 7345X Puerto Rican Narrative and Drama

PRLS 7350X Puerto Rican Poetry and Essay

PRLS 7415X Puerto Rican Society

PRLS 7420X Puerto Rican and Latino/a Communities in Urban Areas

PRLS 7450X Summer Seminar

School Psychology, Counseling & Leadership

Department office: 1107 James Hall
Phone: 718.951.5876

Full-time Faculty

Professors: Bloomfield, McCabe, Scharron-del Rio
Associate Professor: Dragowski
Assistant Professors: Baquet, Corbin, De La Cruz, Elizalde-Utnick, Elmadani

M.S. degree program in education: school psychologist
HEGIS code 0826.02; SED program code 01998

The school psychologist graduate program comprises an MSED and an Advanced Certificate in school psychology and consists of a 60-credit curriculum in theory, research, and evidence-based practice. The program is registered with the New York State Department of Education, and has full approval from the National Association of School Psychologists (NASP). Upon completion of the 33 credit MSED and then the 27 credit Advanced Certificate, graduates are eligible to apply for certification in school psychology with New York State and to apply for the Nationally Certified School Psychologist (NCSP) credential with the National Association of School Psychologists (NASP). Students collaborate with faculty, and build professional portfolios that include publications and presentations at local and national conferences.

Applicants are admitted to this program only in the fall; see application deadlines posted on the program website.

Matriculation requirements

Applicants must offer at least 9 credits with a grade of C or higher in psychological tests and measurements, statistics in psychology, and educational psychology or developmental psychology.

Applicants must present 3 credits with a grade of C or higher in an education course in reading instruction or reading disorders.

Applicants must have a minimum undergraduate scholastic index of 3.0 (B) .

Applicants are interviewed and must submit appropriate letters of recommendation. Although not mandatory as a requirement for admission, applicants are encouraged to submit GRE scores (general and/or subject: psychology) as additional evidence to support the application.

Applicants who have not completed all the specific course requirements are given individual consideration and may be admitted with conditions, with the approval of the program head.

Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures" in the Graduate Bulletin.

Thirty-three credits are required for the degree. Students must complete 33 credits selected from the following courses: SPCL 7931T, 7932T, 7903T, 7922T, 7911X, 7900X, 7923X, 7901X, 7910X, 7912X, 7913X, 7920X, 7921X, 7906X, 7907X, 7915X.

Students must maintain a cumulative grade point average of at least 3.0 (B). A student who acquires 6 credits below B- cannot be awarded an M.S. in Education in this program.

The program of study must be approved by the department.

M.S. in Education degree program: educational leadership: school building leader; school district leader
HEGIS code 0827.00; SED program code 33411

This master's degree program prepares students for leadership careers in public, charter, and private Pre-K-12 education. Students who successfully complete the three-semester, 36-credit program become eligible for both the New York State School Building Leader (SBL) and School District Leader (SDL) certificates. The educational leadership program's curriculum is uniquely structured in both scope and sequence to combine small group, cohort-based colloquiums with content in management and instructional leadership along with a comprehensive fieldwork experience typically based at the candidate's regularly assigned school.

Matriculation Requirements

Selection of applicants is based on a faculty committee review of the following requirements: a master's degree from an accredited institution; at least three years of classroom teaching service or pupil personnel service preferred; 2 letters of recommendation from

supervisors; resume or CV; interview; and personal statement addressing your reasons for pursuing a degree in educational leadership, evidence of professional effectiveness in your current position, and your leadership vision and professional goals.

Degree requirements

A minimum of 36 credits is required for the Master's degree. The credits must be completed within three years after admission to the program. Students are required to complete a capstone portfolio project under supervision of a faculty member. Students need to complete 450 hours of fieldwork

Students complete 36 credits in the following courses: SPCL 7751X, 7752X, 7753X, 7762X, 7763X, 7764X, 7754T, 7755T, 7756T, 7757T, 7758T, and 7759T.

M.S. in Education degree program: school counseling
HEGIS code 0826.00; SED program code 41479

The school counseling program prepares prospective school counselors to work with ethnically and racially diverse populations in New York City public and private schools. Working from a holistic approach, candidates are encouraged to develop the necessary skills for engaging all members of the educational community-parents, administrators, teachers, students, and community organizations-in the process of making schools more responsive, equitable, and caring environments that foster life-long learning and growth. Internships and supervised field experiences are an integral part of our course of study.

The master of science in education provides graduates with New York State Initial certification as school counselors. Graduates holding Initial Certification must meet New York State Education Department requirements to obtain Professional Certification. A specialization in bilingual school counseling is also offered. Graduates of our program are sought after by public and private schools where they counsel students from kindergarten through twelfth grade. Instruction methods vary per instructor, but generally consist of lectures, discussions, application exercises, experiential methods and exercises, presentations, supervision, fieldwork, Blackboard assisted instruction, and audiovisual and web resources, among others.

Matriculation requirements

Applicants must obtain and file the College admission form, including the supplemental School of Education admission form. Applicants must also submit letters of recommendation from individuals familiar with applicants' professional and academic experience. The program invites selected applicants to participate in a group interview and to complete an on-site writing sample.

In addition to the above requirements, applicants for the bilingual specialization in school counseling are interviewed in the language presented for competency.

Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures" of the Brooklyn College Bulletin of Graduate Programs.

Degree requirements

Sixty credits are required for the degree. Sixty-six credits are required for the degree with a specialization in bilingual school counseling.

Students must complete 60 credits in the following courses: SPCL 7801X, 7800X, 7806T, 7802T, 7804X, 7803T, 7810T, 7807T, 7808T, 7809T, 7922T, 7811T, 7813X, 7812T, 7814T, 7815T, 7901X, 7818T, 7823T, 7820X.

Students in the bilingual specialization take the following additional courses: SPCL 7914; CBSE 7350.

Students who have the school counseling M.S. degree from another university and wish to complete the bilingual specialization must take the following courses: SPCL 7922; SPCL 7823; SPCL 7914; CBSE 7350; SPCL 7815.

The sequence of the courses will be determined in consultation with the coordinator of the specialization in bilingual school counseling.

Additional requirements for students in the bilingual specialization:
a. all internships in the program must be conducted in a bilingual setting under the supervision of a bilingual school counselor (who possesses the bilingual extension).
b. Students must pass the language proficiency test administered by the NYS Education Department in a second language to be awarded NYS Bilingual Certification. Applicants can matriculate but cannot be certified as bilingual in NYS if the proficiency test is not available in their second language. In order to determine if the language proficiency test is available in applicant's second language, contact NYSTCE or go to the NYSTCE program website.

Full-time students typically take four courses each semester, and part-time students typically take two-to-three courses each semester. Summer courses may be available.

After a student completes approximately 12 credits, the faculty members review the student's progress and potential and recommend continuation or withdrawal. This evaluation is based on criteria described in the "Program Statement of Expectations" made available to students when they enter the program.

Students will develop a professional portfolio.

Students must maintain a cumulative grade point average of at least 3.0 (B). A student who earns 6 credits below B- will not be awarded an M.S. in Education in this program.

Advanced certificate program in mental health counseling
HEGIS code 2104.10; SED program code 42353

Department requirements (18 credits)

The 18-credit advanced certificate bridge Mental Health Counseling (MHC-AC) program focuses on clinical work with children, adolescents and adults. The program is open to students matriculated in the School Psychologist Graduate and the School Counseling Graduate Programs in the department of School Psychology, Counseling, and Leadership (SPCL) or students with comparable 60-credit graduate degrees in school psychology or school counseling from other institutions. In addition to their training to work in schools, students who are accepted into the MHC-AC are also prepared to work as mental health counselors within medical, community, and private practice settings. Through rigorous academic coursework and clinical internship training, students learn to apply mental health approaches to contemporary practice, assessment, and treatment. After acquiring the Advanced Certificate and 3,000 hours of supervised, post-degree experience, students are eligible to take the licensure examination, which if successfully passed permits private and independent practice of mental health counseling in New York State.

Matriculation requirements

Applicants must be matriculated in or graduated from either the School Psychologist Graduate or the School Counseling Graduate Programs in SPCL or present graduate degrees from another accredited institution. Students with 60 or more credits from an accredited school counseling or school psychology graduate program outside of Brooklyn College will have an individual transcript review to determine if additional courses will be required.

In addition to filing a college application, applicants must provide a personal statement, including discussion of related work, personal experiences, and goals. Applicants must also 2 submit letters of recommendation from instructors familiar with applicants' professional and academic experience. The program invites selected applicants to participate in an interview and to complete additional admission assessments as required. A minimum graduate GPA of 3.3 out of 4.0 is required for admission.

Degree requirements

In addition to successful completion of School Counseling or School Psychologist Graduate Programs or evidence of equivalent degrees from an accredited graduate program, eighteen additional credits including internship are required for the Advanced Certificate. Students must complete a full-year 600-hour internship in an approved mental health counseling setting under supervision of a licensed provider. Students must maintain a cumulative grade point average of at least 3.0 (B). A student who acquires 6 credits below B- cannot be awarded the Advanced Certificate. The program of study must be approved by the department.

Students in or graduates from the Brooklyn College School Counseling Program or graduates from equivalent degree programs must complete the following courses.
SPCL 7941X or PSYC 7410G, Foundations of Mental Health Counseling
SPCL 7816T, Counseling in Community Settings
SPCL 7571X or PSYC 7571G, Neuroscience, Trauma, Psychopharmacology and Severe Mental Illness in MHC
SPCL 7924X, Advanced Seminar in Psychotherapy Theory and Practice
SPCL 7591X Mental Health Counseling Internship I
SPCL 7592X Mental Health Counseling Internship II

Students in or graduates from the Brooklyn College School Psychologist Graduate Program or graduates from equivalent degree programs must complete the following courses.
SPCL 7941T or PSYC 7410G, Foundations of Mental Health Counseling
SPCL 7809T, Career and Life Style Development
SPCL 7571X or PSYC 7571G, Neuroscience, Trauma, Psychopharmacology and Severe Mental Illness in MHC
SPCL 7924X, Advanced Seminar in Psychotherapy Theory and Practice
SPCL 7591X Mental Health Counseling Internship I
SPCL 7592X Mental Health Counseling Internship II

Students who graduated from a 60 credit or more equivalent graduate degree program outside of Brooklyn College will have a transcript review, and may require additional coursework beyond the courses above to meet licensing requirements of New York State. This will be articulated in a plan of study upon matriculation.

New York State Mental Health Counseling Licensing

3,000 hours of supervised post-degree experience are required to be eligible for licensure permitting private practice of mental health counseling. Information about New York State licensing for mental health counseling may be found at: http://www.op.nysed.gov/home.html.

Advanced certificate program in play therapy
HEGIS code 0826.02; SED program code 36488

The Program in Play Therapy provides a culturally competent, imagination-based, creative approach to supporting children's development and learning through environmental design, arts and play-based interventions. Play therapy is an applied approach that draws on the connection between emotional, creative and cognitive growth in childhood. It is applicable to a variety of environments with diverse children who present with typical development or with developmental, learning, linguistic, or behavioral concerns. It is the intervention of choice for children and their families who have experienced life disruptions including divorce, loss, dislocation and migration, illness, or trauma, including abuse, neglect, violence, war and natural disasters.

The Program provides graduate-level training for clinicians and graduate students in creative arts therapy, mental health counseling, school counseling, psychology, school psychology, social work, marriage and family therapy, psychoanalysis, medicine/ physician assistant, nursing or other appropriate professions.

Mental health clinicians who complete the Graduate Certificate in Play Therapy may apply for the RPT Registered Play Therapist (RPT) and Supervisor (RPT-S) credentials conferred by the Association for Play Therapy (APT). Brooklyn College's Play Therapy Project, of which the Advanced Certificate Program in Play Therapy is a key component, has been designated by APT as both an Approved Center of Play Therapy Education and an Approved Provider of Play Therapy Continuing Education.

The Advanced Certificate Program in Play Therapy presents a sequence of four courses for a total of 12 credits, structured sequentially to provide background in play therapy and to develop students' proficiency in the practice and supervision of play therapy with diverse populations. The applied emphasis of the program will strengthen students' clinical skills with children and families and enhance their professional opportunities in a variety of settings.

Matriculation requirements

Candidates should hold a graduate degree in a related counseling profession or be an advanced graduate student enrolled in a program that leads to certification or licensure in a counseling, applied psychology, mental health or health related profession. General matriculation and admission requirements of graduate studies are in the section "Admission" of the Graduate Bulletin.

Degree requirements (12 credits)

Twelve credits of coursework completed with a grade point average of B or better are required for the advanced certificate.
Students must complete all of the following courses:
SPCL 7948: Play Therapy Applications for Special Populations
SPCL 7949: Advanced Seminar in Play Therapy Practice and Supervision
SPCL 7950: Introduction to Play Therapy
SPCL 7951: Multicultural and Social Justice Advocacy in Play Therapy

Advanced certificate program: school psychologist
HEGIS code 0826.02; SED program code 79597

The school psychologist graduate program comprises an MSED and an Advanced Certificate in school psychology and consists of a 60-credit curriculum in theory, research, and evidence-based practice. The program is registered with the New York State Department of Education, and has full approval from the National Association of School Psychologists (NASP). Upon completion of the 33 credit MSED and then the 27 credit Advanced Certificate, graduates are eligible to apply for certification in school psychology with New York State and to apply for the Nationally Certified School Psychologist (NCSP) credential with the National Association of School Psychologists (NASP). Students collaborate with faculty, and build professional portfolios that include publications and presentations at local and national conferences.

Applicants are admitted to this program only in the fall; see application deadlines posted on the program website.

Degree requirements (27 credits)

Matriculation requirements

Applicants must present an M.S. in Education degree for school psychologist (or the appropriate equivalent) as well as the requirements described above under the M.S. in Education degree for school psychologist.

Advanced certificate requirements

Twenty-seven credits (beyond the master's degree) are required for the advanced certificate. Students must complete 27 credits selected from the following courses: SPCL 7904T, 7902X, 7905X, 7931T, 7932T, 7923X, 7907X, 7933X, 7934X, 7912X, 7913X, 7920X, and

7921X.

During the first term, students must file a program of study approved by the program coordinator. Students must continuously maintain a cumulative grade point average of at least 3.0 (B). A student who earns 6 credits below B- will not be awarded an advanced certificate.

Completion of the advanced certificate program in addition to the M.S. Ed in school psychology fulfills requirements for provisional certification as school psychologist by the New York State Education Department.

Advanced certificate program: school psychologist, bilingual extension
HEGIS code 0826.02; SED program code 79597

Matriculation requirements

Degree requirements (33 credits)

Applicants are admitted to this program only in the fall; see application deadlines posted on the program website.

Matriculation requirements

Applicants must present an M.S. in Education degree for school psychologist (or the appropriate equivalent) as well as meet the requirements under the M.S. in Education degree for school psychologist. The matriculation process for the bilingual school psychologist specialization will include demonstrated competence in the target language.

Advanced certificate requirements

Thirty-three credits (beyond the master's degree) are required for the advanced certificate with a specialization in bilingual school psychology.

Students must complete 27 credits from the following courses: SPCL 7902X, 7904T, 7905X, 7931T, 7932T, 7923X, 7907X, 7933X, 7934X, 7912X, 7913X, 7920X; and 7921X, plus the bilingual specialization courses SPCL 7823T and 7914X. Students who have not completed the school psychologist M.S. degree at Brooklyn College must also complete SPCL 7922T.

Students must pass the language proficiency test administered by the NYS Education Department in a second language to be awarded NYS Bilingual Certification. Applicants can matriculate but cannot be certified as bilingual in NYS if the proficiency test is not available in their second language. In order to determine if the language proficiency test is available in applicant's second language, contact NYSTCE or go to the NYSTCE program website. During the first term, students must file a program of study approved by the program coordinator. Students must maintain a cumulative grade point average of at least 3.00 (B). A student who earns 6 credits below B- will not be awarded an advanced certificate.

Completion of the advanced certificate program in addition to the M.S. Ed. in school psychology fulfills requirements for provisional certification as school psychologist by the New York State Education Department. Completion of the bilingual specialization fulfills course requirements for the bilingual extension to the certificate.

Courses

College-verified fingerprint clearance may be required for some School of Education courses. Refer to the School of Education website, Fingerprint Verification instructions at https://www.brooklyn.edu/soe/certification/fingerprints/

SPCL 7950X Introduction to Play Therapy

45 hours, 3 credits
This course is an introduction to the basic concepts of child-centered play therapy. Students will learn the attitudes and skills necessary to establish and maintain facilitative relationships with children that encourage their self-expression and facilitate change. This course will examine the role of the play therapist and the critical importance of the therapeutic relationship.
This course will also provide an overview and critical analysis of the history of play therapy. This course uses case material to study multiple theoretical and applied approaches with a diverse child population.

SPCL 7951X Multicultural and Social Justice Advocacy in Play Therapy

45 hours; 3 credits
This advanced play therapy course introduces students to issues related to working with culturally diverse children. In this course, students will gain theoretical and practical knowledge, learn skills, and develop awareness related to cross-cultural play therapy and social justice advocacy. Students will learn how to conduct and evaluate play therapy practice with children with common presenting problems.

School psychology

SPCL 7900X Theories of Human Development

30 hours plus conference; 3 credits
Contemporary theories of child development. Biological, behavioral, social and cultural approaches to the study of human development in multicultural contexts. Dimensions of human identity including race, ethnicity, culture, sex and gender.

Prerequisite: matriculation in the school psychologist program, permission of the program head.

SPCL 7901X Developmental Psychopathology

45 hours; 3 credits
Patterns of child and adolescent adjustment and maladjustment in school environments.
Focus on multifaceted assessment and contextually relevant intervention approaches. Intensive study of illustrative and case material.

Prerequisite: Permission of the program coordinator

SPCL 7902X Crisis Intervention and Prevention Research in Schools

45 hours plus conference, 3 credits
Review of approaches to foster healthy and safe school environments for all in diverse school communities. Mental health focused crisis prevention, preparedness, response, and recovery. Review and critique of research assumptions, methods, design, and ethics in crisis prevention and intervention. Qualitative and/or participatory action research proposal for implementation in SPCL 7905. The proposal will be implemented in SPCL 7905.

Prerequisite: matriculation in the Advanced Certificate in School Psychology and permission of Program Coordinator
Corequisite: SPCL 7933

SPCL 7903T Problems and Practices in School Psychology

30 hours plus conference; 3 credits
History and foundations of school psychology. Role of the school psychologist as related to curriculum, school administration, evaluation, and other issues. Educational policies and their effects on urban, multicultural schools. Ethical, professional and legal standards.

Prerequisite: matriculation in the school psychologist program, and permission of the program head.

SPCL 7904T Research Seminar in School Psychology

30 hours plus conference; 2 credits
Introduction to research design in school psychology. Quantitative and qualitative methods are studied by surveying representative articles in the literature. Critical perspectives on social science research. Students formulate and discuss a research design.

Prerequisite: matriculation in the school psychologist program, permission of the program head/coordinator.

SPCL 7905X Research Seminar and Program Evaluation in School Psychology and Counseling

30 hours plus conference; 2 credits
Continuation of the study of psychological/educational research and methodology culminating in completion of an independent research project related to an area of school psychology and counseling.

Prerequisites: SPCL 7904T, matriculation in the school psychologist program, and permission of the program head.

SPCL 7906X Instructional Interventions in Schools

45 hours; 3 credits
Policies regulating the delivery of instruction and interventions. School-based curriculum and instructional evaluations and models of curriculum-based assessment. Differentiation of instruction and other curriculum modifications for all students, including students with special needs and English Language Learners. Learning strategies and approaches to literacy and behavioral interventions. Single-case design methodology.

Prerequisite: matriculation in the school psychologist program and SPCL 7900X [721.1X] and permission of the program head.

SPCL 7907X Neuropsychology of Learning

30 hours plus conference; 3 credits
This course is designed to review the neurophysiological and neuropsychological bases of behavior as it pertains to developmental disorders. Students will identify functional neuroanatomy, neuroimaging techniques, medications, and various neurological and neuropsychological disorders. Students will apply findings and research to contemporary problems and issues facing school psychologists.

Prerequisite: matriculation in the school psychologist program, SPCL 7900X, and permission of the program head/coordinator.

SPCL 7910X Cognitive and Academic Assessment

45 hours plus 30 hours lab; 4 credits
Assessment of cognitive abilities, aptitude, and achievement. Administration, scoring, and interpretation of standardized and clinical procedures through lecture and laboratory work. Integration of data from assessment with other sources to produce effective educational recommendations. Critical perspectives on psycho-educational assessment including limitations of contemporary instruments, potential adverse effects of assessment policies, and alternative procedures.

Prerequisite: matriculation in the school psychologist program, and permission of the program head/coordinator.

SPCL 7911X Cognitive and Academic Assessment II

30 hours plus 30 hours lab; 3 credits
Theories and research findings regarding children who have difficulty learning in school. Diagnosis, etiology and interventions for children with learning difficulties. Evaluation and interpretation of assessment and contextual factors in learning difficulties.

Prerequisite: matriculation in the school psychologist program, SPCL 7910X [726.6X] with a grade of B- or better, and permission of the program head.

SPCL 7912X Personality, Social and Behavioral Assessment of Individuals and Groups

45 hours plus 30 hours lab; 4 credits
Administration, scoring, and interpretation of measures of personality and behavior designed for individuals and groups. Representative projective techniques, objective personality and behavior assessments, and adaptive behavior measures are introduced and administered. Research findings and critiques pertaining to the most commonly used personality and behavioral assessments are discussed throughout. Field-based assignments are required.

Prerequisite: matriculation in the school psychologist program, SPCL 7910X with a grade of B- or better, 7911X with a grade of B- or better, and permission of the program head/coordinator

SPCL 7913X Integration of Assessment and Report Writing

30 hours plus 30 hours lab; 3 credits
Interpretation and integration of findings from evaluations,

including cognitive, achievement (both standardized and curriculum-based), personality and behavioral assessment. Report writing and formulation of IEP goals are stressed. Field-based assignments are required.

Prerequisite: matriculation in the school psychologist program, SPCL 7910X with a grade of B- or better, SPCL 7911X with a grade of B- or better, SPCL 7912X with a grade of B- or better and permission of the program head/coordinator.

SPCL 7914X Psychological Assessment of Linguistically Diverse Students
45 hours; 3 credits
Psychoeducational assessment of English language learners (ELL) and culturally diverse children and adolescents. Approaches to nonbiased assessment, including testing in the child's native language, bilingual testing, adaptation of standardized instruments and techniques, and dynamic assessment. Students will assess language proficiency and administer psychoeducational assessment batteries to English language learners, interpret test data, and write reports. Field-based assignments.

Prerequisite: matriculation in the school psychologist program and SPCL 7910X, 7911X and 7912X, and permission of the program head/coordinator.

SPCL 7915X Behavioral Assessment and Intervention

30 hours plus conference; 3 credits
This course is designed to provide students with knowledge and understanding of behavioral assessment and intervention strategies. Students will learn and review the fundamentals of human learning, according to behavioral and learning theorists. Students will then apply principles of learning to the classroom, for assessment, intervention, and evaluation purposes. This course prepares students to use collaborative problem solving in the application of behavioral techniques.

Prerequisite: matriculation in the school psychologist program and permission of the program head.

SPCL 7920X Theory and Practice of Counseling

60 hours; 4 credits
Approaches to the theory and practice of mental health counseling in schools. Counseling functions and other mental health practices of the school psychologist. Supervised experiential in-class counseling skills exercises. Field-based experiences are required.

Prerequisite: matriculation in and completion of 15 credits in the school psychologist program and permission of the program head. Corequisite: SPCL 7931T.
Corequisite: SPCL 7931T [704.1T].

SPCL 7921X Group Dynamics and Counseling

60 hours; 4 credits
This course prepares school psychology candidates to counsel youth, groups, and families. Topics to be addressed include: approaches to counseling and intervention modalities, play therapy, group counseling, mental health counseling, and counseling children with special needs; family systems approaches, school-parent interactions, cultural and community factors. Analysis and exploration of diverse family structures. Teacher-parent/s, parent/s-child, sibling-child relations, collaboration, and community resources for the child. Emphasis on urban and cultural perspectives, development of school-parent-community partnerships. Supervised experiential in-class counseling skills exercises. Field-based experiences are required.

Prerequisite: SPCL 7920X, matriculation in and completion of 15 credits in the school psychologist program, and permission of the program head. Corequisite: SPCL 7932T.

SPCL 7923X Consultation in the Schools

30 hours plus 30 hours lab; 3 credits
School-based consultation, with emphasis on a variety of models; acquisition of clinical skills; theoretical bases; exploration of skills and attitudes necessary for working with culturally diverse groups; application of consulting knowledge and skills in both laboratory and field situations; exploration of recent developments, trends, and research in consultation.

Prerequisite: matriculation in the school psychologist program, SPCL 7900X and permission of the program head/coordinator. Corequisite: SPCL 7932T.

SPCL 7924X Advanced Seminar in Psychotherapy

3 hours, 3 credits
Advanced seminar in psychotherapy theory and practice with diverse populations. Study of advanced therapy skills informed by the current developments in the field of clinical mental health practice. Review of contemporary and empirically supported therapeutic theories and their practical application with clients of all ages and in variety of mental health settings, including clinics, schools, hospitals, mental health community centers. Supervised experiential in-class counseling skill practice.

SPCL 7931T Practicum in School Psychology and Counseling I
30 hours plus 100 hours fieldwork; 2 credits
Field experience in the role and functions of the school psychologist with culturally diverse students, groups, and colleagues. Clinical instruction and practice of individual counseling.

Prerequisite: matriculation in the school psychologist program, and permission of the program head/coordinator. Corequisite: SPCL 7920X

SPCL 7932T Practicum in School Psychology and Counseling II
30 hours plus 100 hours fieldwork; 2 credits
Field experience in the role and functions of the school psychologist with culturally diverse children, groups, colleagues, and families in educational and/or clinical settings. Clinical instruction and practice of group and family counseling.

Prerequisite: matriculation in the school psychologist program, SPCL 7931T, and permission of the program head.
Corequisite: SPCL 7921X.

SPCL 7933X Internship in School Psychology I

600 hours fieldwork, plus 15 hours supervision on campus; 3 credits
Supervised experience in the clinical and educational functions of the school psychologist in diverse settings. Field experience provides context for supervised integration of previously acquired competencies and professional approaches to the functions of school psychology.

Prerequisite: matriculation in the school psychologist program, SPCL 7932 with a grade of B or better, and permission of the

program head/coordinator.

SPCL 7934X Internship in School Psychology II

600 hours supervised fieldwork plus 15 hours supervision on campus; 3 credits
600 hours supervised fieldwork plus 15 hours supervision on campus; 3 credits?Supervised experience in the clinical functions of the school psychologist in diverse settings. Field experience provides context for supervised integration of previously acquired competencies and professional approaches to the functions of school psychology.

Prerequisite: matriculation in the school psychologist program, SPCL 7932 with a grade of B or better, SPCL 7933X with a grade of B or better, and permission of the program head/coordinator.

SPCL 7935T Contemporary Issues and Research-Based Practices in Schools
15 hours; 1 credit
Independent study experience focusing on current issues in schools and identifying research-based practices for implementation in schools. Focus on both individual and schoolwide academic, behavioral and social-emotional problems. A final project is required.

Prerequisite: Permission of the Program Coordinator

SPCL 7941X Literacy and Learning Difficulties

45 hours; 3 credits
Theories and research on factors that facilitate and inhibit learning and literacy development. Diagnosis, etiology, and remediation of these difficulties. Principles of consultation with parents, teachers, and other professionals.

Prerequisite: Permission of the program head/coordinator.

SPCL 7945X Independent Study in School Psychology

Hours to be arranged; 3 credits
Independent study and research in a selected area of school psychology supervised by a faculty member. Research paper.

Prerequisite: matriculation in the School Psychologist Program and permission of the program head.

School counseling

SPCL 7800X Leadership and Group Dynamics: Theory and Practice
30 hours lecture, 30 hours laboratory plus conference; 3 credits
Social processes in groups and their impact on individual behavior. Lecture/discussion and membership in an experiential group designed to provide opportunities for learning about group dynamics through an examination of power, authority, leadership, intergroup and interpersonal processes. Application of learning to the practice of effective group leadership and membership in schools.

Prerequisite: SPCL 7803T

SPCL 7801X Foundations of Professional School Counseling
45 hours; 3 credits
Critical introduction to history, philosophy, services, forms of organization, and current issues. Overview of traditional and alternative approaches to school counseling in the context of the U.S. educational system. Personal, social, legal, ethical, and equity challenges of working in urban schools as school counselor.

SPCL 7802T Counseling Theories

45 hours; 3 credits
Critical and comprehensive investigation of counseling theories and practices for school counselors working with diverse children and adolescents in school settings. Consideration of issues and strategies important to work with English language learners and students with special needs.

SPCL 7803T Individual Counseling Skills

30 hours lecture, 30 hours laboratory; 3 credits
Introductory course in counseling skills development designed to increase the qualities of self-awareness and mindfulness. Approaches to intervention. Exploration of specific methods and procedures of individual appraisal. Lecture, demonstration, written assignments, videotape analysis and group practice.

SPCL 7804X Human Development

45 hours; 3 credits
Factors relevant to human growth and development. Theories of child, adolescent, and family development and transitions across the life-span in diverse urban school settings. Consideration of social, cultural, and linguistic contexts. Study of gender identity and sexual orientation. Focus on application of life-span developmental theory in school counseling practice for facilitating optimal development for all students. Attention to issues of students with special needs. Required projects in school or community settings.

SPCL 7806T Schools and Communities

45 hours; 3 credits
Interdisciplinary study of relations between schools and communities and their impact on the quality of education in schools. Theories of community and institutional organization, power relationships, and power structures. The role of the counselor in developing relations between schools and communities. Required projects in school or community settings.

SPCL 7807T Practicum

30 hours lecture, 15 hours supervision, 100 hours fieldwork; 3 credits
Planned program of supervised fieldwork in a setting similar to that in which the student expects to work. Application of individual and group theory to individuals and groups in schools. Students co-lead groups and conduct individual counseling sessions in school setting; group seminar/supervision, case conference, and triadic supervision. One hundred hours of practicum at an approved school: 40 hours of direct counseling services and 60 hours of indirect / collateral services.

Prerequisite: SPCL 7803T and 7800X.

SPCL 7808T Fundamentals of Qualitative and Quantitative Research
45 hours; 3 credits
Descriptive, experimental, case-study, action research and other models of research relevant to counseling and education.

Collection and use of data to identify and address issues affecting the quality of education. Planning and implementing a research project in school or community settings.

SPCL 7809T Career and Educational Counseling

45 hours; 3 credits
Utility and use of career and educational counseling interventions by professional school counselors working with elementary, middle, and high school students. Various career theories and their application in counseling diverse student populations.

SPCL 7810T Educational and Psychological Assessment
45 hours; 3 credits
Critical and historical perspectives on the nature and uses of assessment in schools; portfolios, standardized tests, inventories, case studies, and observations; sociometrics relevant to counseling and appraisal in schools. Consideration of strategies for assessing students with special needs, with attention to the cultural, linguistic, and societal factors involved in their identification, placement, and academic and behavioral performance. Required projects in school or community settings.

SPCL 7811T Internship I

300 hours fieldwork, plus 45 hours on campus; 3 credits
A term of supervised internship in a work setting similar to that in which the student expects to work as a counselor. This course is the first of two required supervised internships in urban school counseling. Counseling interns are required to provide 120 hours of direct counseling/consultation service with clients and 180 hours of indirect collateral service (including staff meetings and on-site supervision) at an approved internship site. Students also participate in weekly group supervision devoted to evaluation of counseling, consultation, advocacy, and leadership drawing on journals, audio or videotapes of counseling sessions, and selected advanced counseling topics.

Prerequisite: SPCL 7807T

SPCL 7812T Working with Families in Schools

45 hours; 3 credits
Discussion of changing nature of families, family systems dynamics and development, and culturally and economically diverse families in urban school context. Working in schools with families, parents, and guardians in the educational and emotional lives of children through family assessments, brief short-term family counseling, parenting workshops, and educational workshops. Consideration of issues and dynamics for the family and child with special needs. Experiential component.

SPCL 7813X Counseling Leadership in Urban Schools

45 hours; 3 credits
In depth exploration of theories and practices related to the professional school counselors' role as a leader, advocate, consultant and collaborator in the urban school environment.

SPCL 7814T Tiered Systems of Support in Urban School Counseling
45 hours; 3 credits
Tiered systems of social-emotional and behavioral support as applied to counseling in urban schools. Promotion of urban schools as caring, healing, growth-enhancing communities that facilitate students' social-emotional learning and emotional and behavioral regulation. Discussion of recent research and practices in counselor self-awareness, mindful classrooms and schools, skills development, and conflict resolution. Consideration of intersecting social identities with respect to urban school issues.

SPCL 7815T Internship II

300 hours fieldwork, plus 45 hours on campus; 3 credits
Continuation of SPCL 7811T [701.03T]. This course is the second of two required supervised internships in urban school counseling. Counseling interns are required to provide 120 hours of direct counseling/consultation service with clients and 180 hours of indirect collateral service (including staff meetings and on-site supervision) at an approved internship site. Students also participate in weekly group supervision devoted to evaluation of counseling, consultation, advocacy, and leadership drawing on self-report, journals, audiotapes of counseling sessions, and selected advanced counseling topics.

Prerequisite: SPCL 7811T

SPCL 7816T Counseling in Community Settings

45 hours; 3 credits
Critical and historical perspectives on community counseling. General principles of community intervention, consultation, education, and outreach. Current methods of practice, including assessment and diagnosis in social context. Role of school counselor in making referrals. Survey of community agencies and organizations. Required projects in school or community setting.

SPCL 7817T Advanced Internship I

150 hours; 3 credits
First of two supervised internships in community counseling. Direct counseling and advocacy with clients and indirect collateral service, including consulting, coordinating, and collaboration, with on-site supervision at an approved internship site. Weekly group supervision devoted to evaluation of students' practice in community settings, using self-report, journals, videotaped counseling sessions, observations, and selected advanced topics related to community counseling. Special section of course for students pursuing specialization in bilingual counseling.

Prerequisite: identified in requirements in the Advanced Certificate program in School Counseling.

SPCL 7818T Urban Trauma: Counseling Issues and Strategies
45 hours; 3 credits
General nature of trauma and post-traumatic stress disorder. Topics include risk and resiliency factors for youth and community, trauma and schools, crisis intervention, diagnosis, and post-trauma individual and group counseling.

SPCL 7819T Advanced Internship II

150 hours; 3 credits
Second of two supervised internships in community counseling. Direct counseling and advocacy with clients and indirect collateral service, including consulting, coordinating, and collaboration, with on-site supervision at an approved internship site. Weekly group supervision devoted to evaluation of students' practice in community settings, using self-report, journals, videotaped counseling sessions, observations, and selected advanced topics related to community counseling.

Prerequisite: identified in requirements in the Advanced Certificate program in School Counseling.

SPCL 7820T College Admissions and Postsecondary Counseling
45 hours; 3 credits
Introduction to college admissions and postsecondary counseling. Explores college and career readiness programs and activities within k-12 school systems. The course integrates human development, social justice, and multiculturalism to support student's successful transition to college and postsecondary opportunities.

SPCL 7823T Psycholinguistics, Bilingualism, & Counseling in Schools
45 hours; 3 credits
Examination of the psycholinguistics of bilingualism and issues and techniques relevant to providing counseling services to culturally and linguistically diverse (CLD) students. Content and activities of the course are organized to meet the needs of practicing school counselors and school psychologists. Theory and experiential activities.

SPCL 7826T Independent Study in Guidance

Hours to be arranged; 3 credits each term
Independent study and research supervised by a faculty member. Written report.

Prerequisite: matriculation in the guidance and counseling program and permission of the program head.

SPCL 7880X Introduction to Mindfulness in Schools

45 hours; 3 credits
Critical introduction to mindfulness and contemplative practices with an emphasis on practices for student mindfulness programs and their relevance to urban school goals including academic success and social-emotional learning. Review and critique of program assumptions, research, methods, risks, and ethics. Consideration of emerging programs that account for emotional, social, moral, developmental, political, and cultural factors.

Prerequisite: Permission of Department

SPCL 7922T Multicultural Counseling and Consultation

45 hours; 3 credits
Critical examination of diversity issues related to intersectionality, privilege, and systemic oppression. This course interrogates the influence of racist, nativist, Eurocentric, individualist, heterosexual, patriarchal, cisgender, ableist, and sizeist dominant discourses on the emotional, social, and behavioral development of persons living within the United States. In-class exercises, Blackboard exercises, videos, discussions, and experiential activities will foster development of cultural humility, critical consciousness, and ability to implement social justice-oriented counseling and consultation strategies.

Educational leadership

SPCL 7751X School-Community Relations

30 hours plus conference; 3 credits
Role of the educational leader in fostering effective and responsive relations between school and community. Practical problems are drawn from the field for analysis and study. This course satisfies the requirement for the human relations course that all New York City teachers must take and is approved as such by the New York City Board of Education.

Prerequisite: permission of the head of the educational leadership program.

SPCL 7752X Supervision of Instruction

30 hours plus conference; 3 credits
Theory and practice of supervision as an aspect of administration.

Prerequisite: permission of the head of the educational leadership program.

SPCL 7753X School Instruction and Curriculum Development, Innovation, and Evaluation
30 hours plus conference; 3 credits
Principles underlying present instructional and curriculum practice and ways of changing instruction and the curriculum. Design and evaluation of instructional and curriculum research.

Prerequisite: permission of the head of the educational leadership program.

SPCL 7754T 7754 Practicum Seminar in Educational Leadership I
15 hours lecture, 75 hours field work plus conference; 3 credits
This course focuses on the analysis and reflection of critical topics, issues and processes that relate to school and district leadership, specifically in regards to the required on-site leadership internship. Students devote 150 hours to supervised internship during the semester.

Prerequisite: permission of the head of the educational leadership program.

SPCL 7755T 7755 Foundations of Educational Leadership: Theory to Practice
15 hours lecture, 75 hours field work plus conference; 3 credits
This course focuses on bridging connections between educational leadership theory and practice through lectures, readings, case analyses, and directed on-site assignments. Students learn how to create and advocate for an educational mission and vision of rigorous, inclusive learning; cultivate a supportive and caring school community for students, teachers, staff, and families; and develop their interpersonal, communication, and collaboration skills. Additionally, students conduct action research in an educational setting, collect and analyze data, and employ context-appropriate strategies for school and self-improvement.

Prerequisite: permission of the head of the educational leadership program.

SPCL 7756T 7756 Practicum Seminar in Educational Leadership II
15 hours lecture, 75 hours field work plus conference; 3 credits
This course focuses on the analysis and reflection of critical topics, issues and processes that relate to school and district leadership, specifically in regards to the required on-site leadership internship. Students devote 150 hours to supervised internship during the semester.

Prerequisite: permission of the head of the educational leadership program.

SPCL 7757T 7757 Educational Research for Continuous Improvement
15 hours lecture, 75 hours field work plus conference; 3 credits
In service of building school communities that promote each student's academic success and well-being, this course focuses on continuous improvement. Students learn how to articulate, advocate, and cultivate core values; identify problems of practice and their likely causes; engage in a continuous improvement process that include the development of theories of improvement and iterative problem-solving models; and explore adaptive approaches that support the development of thriving school communities

Prerequisite: permission of the head of the educational leadership program.

SPCL 7758T 7758 Practicum Seminar in Educational Leadership III
15 hours lecture, 75 hours field work plus conference; 3 credits
This course focuses on the analysis and reflection of critical topics, issues and processes that relate to school and district leadership, specifically in regards to the required on-site leadership internship. Students devote 150 hours to supervised internship during the semester.

Prerequisite: permission of the head of the educational leadership program.

SPCL 7759T 7759 District Leadership and Organizational Transformation
15 hours lecture, 75 hours field work plus conference; 3 credits
This course assists students in cultivating expertise in district level leadership and resource management. It emphasizes the development of strategic thinking, problem-solving, and change management skills to propel district-wide advancement. Additionally, students foster a visionary mindset that aligns with district objectives, underscoring principles of equity and inclusion. Students acquire data-driven methodologies designed to optimize student achievement, promote team cohesion, and facilitate continuous improvement.

Prerequisite: permission of the head of the educational leadership program.

SPCL 7762X Leading for Excellence: Educational Equity, Diversity and Inclusion
30 hours plus conference; 3 credits
Topics include leading to ensure equitable outcomes for all personnel and students in educational systems, interrupt inequitable educational practices, examine biases, create inclusive multicultural school environments for all members of the community, and meet the academic and social-emotional needs of diverse learners.

Prerequisite: Permission of program coordinator

SPCL 7763X Management of Resources: Finance and Personnel
30 hours plus conference; 3 credits
Topics addressed include effective leadership in the management of resources, including finance, budgeting, and personnel functions in school organizations. Understanding the principal's role in determining equitable allocation of resources and the relationship between the allocation of resources and student achievement.

Prerequisite: Permission of program coordinator

SPCL 7764X Education Law and Ethics

30 hours plus conference ; 3 credits
School law and ethics as they affect the policies, organization, and administration of public and private schools.

Prerequisite: permission of the head of the educational leadership program.

SPCL 7828T College Admissions and Postsecondary Counseling
45 hours; 3 credits
Introduction to college admissions and postsecondary counseling. Explores college and career readiness programs and activities within k-12 school systems. The course integrates human development, social justice, and multiculturalism to support student's successful transition to college and postsecondary opportunities.

Prerequisite: Matriculation in the Advanced Certificate in School Counseling and permission of
Program Coordinator

Play therapy

SPCL 7946X Historical, Theoretical and Social Foundations of Play Therapy
45 hours plus conference; 4 credits
Overview and critical analysis of history of play therapy. Case-based approach to study of multiple theoretical and applied approaches with a diverse child population. Explore social and cultural contexts of play therapy; role of the play therapist; therapeutic relationship. Emphasis on working with families. Development of a diversity-sensitive approach to play therapy practice with children and families in school and community settings.

SPCL 7947X Play Therapy Methods and Approaches

45 hours lecture plus conference; 4 credits
Focus on developing applied skills for conducting and evaluating play therapy with diverse populations of typically developing children, and children with autism spectrum disorders in school and community settings. Overview of play therapy interventions with common presenting problems including anxiety, aggression, oppositional behavior. Working with diverse families in play therapy.

SPCL 7948X Play Therapy Applications for Special Populations
45 hours; 3 credits
Study of play therapy interventions with special populations, including diverse children who have experienced loss, trauma, abuse, or neglect. Development of applied skills for conducting

and evaluating play therapy interventions in school and community settings. Emphasis on development of clinical sensitivity to working with diverse children who present with a wide variety of psychological needs, and their families.

SPCL 7949X Advanced Seminar in Play Therapy Practice and Supervision
45 hours; 3 credits
Advanced seminar in play therapy practice with diverse populations; group supervision of play therapy practice. Study of advanced play therapy skills. Review of diagnostic play assessment and child forensic interviewing. Principles of clinical supervision of play therapy; role of play therapy supervisor; impact of vicarious trauma on play therapist. Students are expected to draw on their play-based experiences in the field (work or volunteer) in school or community settings.

Mental health counseling

SPCL 7410X Foundations of Mental Health Counseling

45 hours; 3 credits
Introduction to mental health assessment, counseling and psychotherapy; counseling and psychotherapy research; professional, ethical, and multicultural issues. This course is the same as PSYC 7410X.

Prerequisite: permission of program coordinator

SPCL 7571X Neuroscience, Trauma, Psychopharmacology, and Severe Mental Illness in Mental Health Counseling
45 hours; 3 credits
Introduction to treatment of severe mental disorders, trauma, psychopharmacology, and neuroscience in mental health counseling. Applications for diverse populations across lifespan served in variety of mental health settings, including clinics, schools, hospitals, mental health community centers. This course is the same as PSYC 7571X

Prerequisite: Permission of program coordinator

SPCL 7591X Mental Health Counseling Internship I

45 hours; 3 credits
A term (at least 300 hours, including at least 120 direct service counseling hours) of supervised internship in a mental health work setting similar to that in which the student expects to work as a counselor. Interns are expected to perform a full range of mental health counseling functions supervised by college and site personnel. For SPCL 7591X and 7592X, interns must complete the two terms of internship at the same site for both courses or, if this is not possible, no fewer than 7 consecutive months and 450 hours, including 180 direct service counseling hours, at a single (either the original or a new) site in conformity with procedures adopted by the department.

Prerequisite: Permission of the program coordinator

SPCL 7592X Mental Health Counseling Internship II

45 hours; 3 credits
A term (at least 300 hours, including at least 120 direct service counseling hours) of supervised internship in a mental health work setting similar to that in which the student expects to work as a counselor. Interns are expected to perform a full range of mental health counseling functions supervised by college and site personnel. For SPCL 7591X and 7592X, interns must complete the two terms of internship at the same site for both courses or, if this is not possible, no fewer than 7 consecutive months and 450 hours, including 180 direct service counseling hours, at a single (either the original or a new) site in conformity with procedures adopted by the department.

Prerequisite: Permission of the program coordinator

Other courses

SPCL 7777X Considerations for Interviewing Children and Youth with Disabilities
15 hours, 1 credit
Approaches for interviewing children and youth with disabilities for various purposes, including forensic and clinical contexts. Special focus on knowledge and skills needed for enhanced interviewing success across three areas: Pre-interview data gathering phase; interview preparation; and conducting the interview. Emphasis is placed on assessing personal beliefs, experience and comfort level in relation to engaging with individuals with disabilities. Identification of needed environmental supports and further skill development, including alternative and augmentative communication methods. Analysis of case studies.

Prerequisite: Permission of Chair or Coordinator

SPCL 7930X Practicum in School Psychology

60 hours; 4 credits
Supervised experience in the educational and clinical functions of the school psychologist as a mental health consultant to school personnel and families. Students study urban, multicultural schools and deal with a wide range of typical functions of the school psychologist. Policies and procedures regulating professional practices in schools.

Prerequisite: matriculation in the school psychologist program and SPCL 7903T [715T], and permission of the program head.

SPCL 7940X Personality Theory and Research

30 hours plus conference; 3 credits
Contributions to the understanding of child development and personality including trait theory, psychoanalysis, behaviorism, and humanism. Other contemporary theoretical models and contemporary developments.

Prerequisite: matriculation in the school psychologist program, SPCL 7900X [721.1X] and permission of the program head.

SPCL 7942X Group Process and School Culture

45 hours plus 30 hours conference; 4 credits
Group processes in the school and classroom affecting the learning, behavior, and mental health of pupils. Role of the school psychologist in analyzing behavior in school context and effecting change. Working with groups in crisis intervention. Confronting and reducing bias in schools and classrooms. Experience in participating in and studying a group.

Prerequisite: matriculation in the school psychologist program, SPCL 7900X [721.1X], 7940X [721.2X], 7920X [733X], and 7943X [726.4X], and permission of the program head.
Corequisite: SPCL 7932T [704.2T].

SPCL 7943X Problems of Child and Adolescent Development I
30 hours plus independent work, and conference; 3 credits
Typical and atypical development of children and adolescents in

urban and multicultural contexts, including physiological, neurological, orthopedic, health and sensory challenges, traumatic brain injury and cognitive impairments. Intensive study of illustrative and case material. Biological, psychological, sociological, cultural, and linguistic influences. Assistive technologies and other interventions.

Prerequisite: matriculation in the school psychologist program and permission of the program head.

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

SPCL 7750T Internship Seminar in Educational Administration

SPCL 7760X Administration: Theory and Practice I

SPCL 7761X Administration: Theory and Practice II

SPCL 7766T Practicum in Supervision of Student Teachers

SPCL 7767X The Public Administration of Education

SPCL 7769T Internship in Educational Administration and Supervision I

SPCL 7771X Collective Negotiations in Public Education

SPCL 7824T Seminar in Guidance Practice I, II

SPCL 7825T Seminar in Guidance Practice I, II

SPCL 7827T Independent Study in Guidance

Secondary Education

Department office: 2608 James Hall
Phone: 718.951.5325

Full-time Faculty

Professors: Alexakos, Florence, Meagher, Murrow
Associate Professors: Parmar, Zeng, Zolkower
Lecturer: Blitzer

The Department of Secondary Education at Brooklyn College offers programs in secondary education and special subjects leading either to the master of arts or master of science in education degree. The 30-plus credit programs are registered with the New York State Education Department and lead to initial and/or professional teacher certification in the following subjects: English (grades 7-12); general science teacher (5-9); mathematics (grades 5-9); mathematics (grades 7-12); music (all grades); physical education (all grades); physics (7-12); social studies (7-12); modern languages (French, Spanish) (grades 7-12). The Secondary Education department also offers two master of arts in teaching (M.A.T.) programs: the M.A.T. in Adolescence Science Education (grades 7-12), with specialization in biology, chemistry, earth science or physics teacher, and the M.A.T. in Earth Science Teacher (grades 7-12).

The Department of Secondary Education is committed to urban education and serving the needs of our city's teachers. We are proud that almost 80 percent of Brooklyn's high school teachers are graduates of our programs. Our courses are particularly sensitive to the rich diversity of New York's population and we continue to forge links with the borough's schools.

The graduate programs in secondary education and special subjects are responsive to the needs and experiences of those individuals who have chosen to devote themselves to teaching. Our programs offer experienced and beginning teachers opportunities to develop their classroom practice and to expand their knowledge of their particular discipline and the field of education as a whole. Courses are taught by nationally known scholars who have had experience teaching at elementary and secondary levels. Our programs combine rigorous and rewarding study in each discipline with intensive study of curriculum, pedagogy, and schools.

Graduates of our programs are trained in their specific discipline, in research methodologies, and in the critical analysis of curriculum, pedagogy, school culture, and the sociopolitical dimensions of schooling. The requirements below contain both general and program-specific information about these programs.

To obtain Initial Certification in the appropriate content area, candidates must complete a minimum of 300 hours of student teaching. Candidates who have already obtained a full-time position teaching the appropriate content area and the appropriate grade levels, as verified by a school official, must still register for at least 150 hours of the minimum 300 hours required for student teaching, depending on the specific program. Please consult specific department listings for further information about these programs and matriculation requirements.

Master's degrees are offered in the following subject areas:

Secondary Education (grades 7-12):
- M.A., English teacher HEGIS code 1501.01; SED code 26811
- M.A., French teacher HEGIS code 1102.01; SED code 26797
- M.A., Mathematics teacher HEGIS code 1701.01; SED code 26734
- M.A., Social studies teacher HEGIS code 2201.01; SED code 26753
- M.A., Spanish teacher HEGIS code 1105.01; SED code 26800
- M.A.T. Adolescence science education (grades 7-12) HEGIS code 0834.00; SED codes 32663(Conc. A) & 32662(Conc. B)
- M.A.T. Earth science teacher HEGIS code 1917.01; SED code 33640 (Conc.A) & 33641 (Conc. B)

Special Subjects (all grades):
- Advanced Certificate, music education HEGIS code 0832; SED code 26817
- M.S., Physical education teacher HEGIS code 0835; SED code 26745

Middle school subject areas (grades 5-9):
- M.A. General science teacher HEGIS code 0804.04; SED codes 26821 & 26820
- M.S., Middle childhood education teacher, mathematics specialist HEGIS code 0804.03; SED code 26723

In addition, Brooklyn College, in conjunction with the New York City Department of education, offers an Alternative Certification program for qualified individuals who attend the college under a contractual arrangement with the Department of Education. After completing a pre-service preparation program at the college, individuals are recommended by the Department of Education of for a Transitional B Certificate, which validates the individual's service in a public school while completing the masters degree program. The masters degree program requirements in each subject area, as registered with the State Education Department under criteria set for Alternative Certification, differ from requirements set for individuals who are not holders of Transitional B Certificates and are not part of the NYC DOE/Brooklyn College collaboration. Not all programs operate all years.

M.A. degree program in education: English teacher (7-12)
HEGIS code 1501.01; SED program code 26811 (Options A and B); 26810 (Option C)

The M.A. programs in English education leading to Initial Certification and/or Professional Certification for English teachers grades 7-12 are designed for students who plan to teach or are currently teaching. The programs offer experienced and beginning teachers opportunities to develop their classroom practice and to expand their knowledge of English education and the field of education as a whole. Courses are taught by nationally known scholars, many of whom have had experience teaching at secondary levels. Our programs combine rigorous and rewarding study in literature and composition with intensive study of curriculum, pedagogy, and schools.

The profession of teacher education is licensed by the New York State Education Department. Therefore, program requirements are subject to change. All students should consult with the Department of Secondary Education for the current requirements.

Matriculation requirements

Applicants must offer at least 15 credits in advanced courses in English. Applicants must also offer (a) or (b) or (c):
(a) New York State Initial Certification in teaching English for grades 7-12; or courses in education that meet the New York State standards for the pedagogical core. These courses include study of the following: history of education and philosophy of education or principles of education or educational sociology; educational psychology or developmental psychology or psychology of adolescence or adolescent development; classroom management; teaching students with special needs and English language learners; 6 credits in literacy and language acquisition; curriculum development and methods of assessing student learning; uses of technology in the classroom; methods of teaching English at appropriate age levels; 100 hours of fieldwork; 300 hours or 40 full days of student teaching English at appropriate grade levels, or one year of full-time teaching English at appropriate grade levels, and passage of a New York State-approved Teacher Performance Assessment.

(b) an undergraduate degree with a major in English, or appropriate coursework in English;

(c) an undergraduate major in English, the Content Specialty Test CST, an approved 200 hours preparation program and a position at an approved public school through which students can accrue on-the-job training to substitute for student teaching.

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum average of 3.00 in graduate courses is required to maintain matriculation.

Applicants who have not completed all the specific course requirements are given individual consideration and may be admitted with conditions, with the approval of the head of the program in English education and the chair or graduate deputy of the English Department.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 650 on the paper-based test or 280 on the computer-based test or 114 on the internet-based test, before being considered for admission.

Students should note additional requirements found in the sections "Admission" and "Academic Regulations and Procedures" in the Graduate Bulletin.

Each student is evaluated individually based upon prior experiences. Based upon this evaluation and current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Program Coordinator.

Degree requirements

Option (A): 30 credits English (18 credits):
Students who possess Initial Certification in teaching English or its equivalent must complete the following courses in English: English 7010X and 7011X.

In addition, and with advisement from the chair or graduate deputy of the English department, students must complete courses in four of the six areas of study listed under the M.A. in English in the Bulletin. Each of the four courses must come from a different area.

Education (12 credits):
Students must also complete 12 credits in courses in Education as follows:.

Research in English Education: SEED 7602T; Literacy in English Education: SEED 7604T; Mindfulness: SEED 7504X; Development and SEL: SEED 7507X.

Option (B): 30-40 credits English (15 credits):
Students who do not possess Initial Certification in teaching English or its equivalent must complete the following courses in English: English 7010X, and English 7011X.

In addition, and with advisement from the chair or graduate deputy of the English department, students must complete courses in three of the six areas of study listed under the M.A. in English in the Bulletin.: Each of the three courses must come from a different area. .

Education Core (12 credits):
The following four education courses are required unless candidates have taken one or more as part of previous coursework. Foundations: SEED 7500X; Literacy in English Education: SEED 7604T; Special Education: SEED 7671X; Development and SEL: SEED 7507X.

Student Teaching (4 credits):
The following student teaching courses are required unless candidates have a New York State waiver: SEED 7541X, SEED 7542T, and SEED 7543T. (SEED 7500X and SEED 7600T must be completed before student teaching). SEED 7543T is not required if the candidate is teaching English full-time at an appropriate grade level.

Students teaching with a New York State Internship Certificate must be enrolled in either SEED 7542T or SEED 7001T during every semester that they are teaching under the certificate.

English Education (9 credits):
The following English education courses, or English education courses approved by the program coordinator, are required unless candidates have taken one or more as part of previous coursework: SEED 7600T, SEED 7601T, SEED 7602T.

Option (C): 36 credits English (18 credits):
Students who are teaching or have secured a position teaching English and who hold an Alt B Certificate must complete the following courses in English: English 7010X, and English 7011X.

In addition, and with advisement from the chair or graduate deputy of the English department, students must complete courses in four of the six areas of study listed under the M.A. in English in the Bulletin, as follows: Each of the four courses must come from a different area.

Students pursuing an Alt B Certificate may substitute their teaching job for student teaching but upon consultation with their advisor must still register for SEED 6002T and must take SEED 7500X, SEED 7600T, SEED 7601T, SEED 7602T, SEED 7671X, and SEED 7507X.

All students must pass a written comprehensive examination administered by the English Department at the end of their program. Information about the comprehensive examination is in the section of the "Academic Regulations and Procedures."

Courses in the English Department and the School of Education offered toward the degree must be 7000-level courses.

Students pursuing an M.A. English Teacher must have taken or must take courses that meet the New York State and National Council of Teachers of English NCTE English standards. Transcript review will determine what appropriate course work students must take.

M.A. degree program in education: French teacher (7-12)
HEGIS code 1102.01; SED program code 26797

The Department of Modern Languages and Literature in conjunction with the Department of Secondary Education, offers a master of arts degree in education for French teachers (grades 7-12). The New York State Education Department licenses graduates of registered teacher education programs who meet the state requirements for teachers. All students should consult with the Department of Secondary Education for current requirements.

This master of arts program provides students with an introduction to the French/Francophone literature. At the same time, the focus on language and culture fully prepares students for employment as foreign language teachers at the middle and high school levels.

Coursework is divided between the Department of Modern Languages and Literatures and the Department of Secondary Education. The courses required by the Department of Secondary Education vary depending on the entry qualifications of students. The profession of teacher education is licensed by the New York State Education Department. Therefore, program requirements are subject to change.

Matriculation requirements:
Applicants must offer at least 15 credits in advanced courses in French. Applicants must also offer (a) or (b):

(a) New York State Initial Certification in French teacher grades 7-12 or courses in education that meet the New York State standards for the pedagogical core. These courses include study of the following: history of education and philosophy of education or principles of education or educational sociology; educational psychology or developmental psychology or psychology of adolescence or adolescent development; classroom management; teaching students with special needs and English language learners; 6 credits in literacy and language acquisition; curriculum development and methods of assessing student learning; uses of technology in the classroom; methods of teaching French in grades 7-12; 100 hours of fieldwork; 40 full days or 300 hours of student teaching of French in grades 7-12; or one

year of full-time teaching French at appropriate grade levels, and passage of a New York State-approved Performance Assessment.

(b) an undergraduate degree with a major in French or appropriate course work in French.

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum average of 3.00 in graduate courses is required to maintain matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of at least 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test, before being considered for admission.

Applicants who have not completed all the specific course requirements are given individual consideration and may be admitted with conditions, with the approval of the chairperson of the Department of Secondary Education and the chairperson of the Department of Modern Languages and Literatures.

General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Each student is evaluated individually based upon prior experiences. Based upon this evaluation and current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Program Coordinator.

Degree requirements

Option (A): 30 credits French (18 credits):
Students who possess Initial Certification in teaching French or the equivalent must complete the following courses in French:
French 7010X; 7510X or 7520X; 12 credits of electives as approved by the chairperson or deputy chairperson of the Modern Languages and Literatures Department.

Students must also complete a substantial final project, which may take the form of a thesis in French, or may consist of a "teaching unit" completed under the co-direction of the Department of Modern Languages and Literatures and the School of Education. The writing of the thesis or completion of the teaching unit may take place during a three-credit tutorial, French 7900X, taken as the final course of the student's program. French 7900X, however, is not a required course for the degree.

Courses in the Modern Languages and Literatures Department and the School of Education offered toward the degree must be 7000-level courses. The program of study must be approved early in the first semester by the chairperson or deputy chairperson of the Modern Languages and Literatures Department and the chairperson of the Department of Secondary Education.

Education (12 credits):
Students must also complete 12 credits in courses in Education as follows:
Research in Modern Languages Education: SEED 7622T; Literacy: SEED 7503X; Mindfulness SEED 7504X; Development and SEL: SEED 7507X.
Option (B) 40 credits.
French (15 credits):
Students who do not possess Initial Certification in teaching French or the equivalent must complete the following courses in French:
French 7010X; 7510X or 7520X; 9 credits of electives as approved by the chairperson or deputy chairperson of the Modern Languages and Literatures Department.

Students must also complete a substantial final project, which may take the form of a thesis in French, or may consist of a "teaching unit" completed under the co-direction of the Department of Modern Languages and Literatures and the School of Education. The writing of the thesis or completion of the teaching unit may take place during a three-credit tutorial, French 7900X, taken as the final course of the student's program. French 7900X, however, is not a required course for the degree.

Courses in the Modern Languages and Literatures Department and the School of Education offered toward the degree must be 7000-level courses. The program of study must be approved early in the first semester by the chairperson or deputy chairperson of the Modern Languages and Literatures Department and the chairperson of the Department of Secondary Education.

Education Core (12 credits):
The following four education courses are required unless candidates have taken one or more as part of previous coursework.
Foundations: SEED 7500X; Literacy: SEED 7503X; Special Education: SEED 7671X; Development and SEL: SEED 7507X.

Student Teaching (4 credits):
The following student teaching courses are required unless candidates have a New York State waiver: SEED 7541X, SEED 7542T, and SEED 7543T. (SEED 7500X and SEED 7620T must be completed before student teaching). SEED 7543T is not required if the candidate is teaching French full-time at an appropriate grade level.

Students teaching with a New York State Internship Certificate must be enrolled in either SEED 7542T or SEED 7001T during every semester that they are teaching under the certificate.

French Education (9 credits):
The following French education courses, or French education courses approved by the program coordinator, are required unless candidates have taken one or more as part of previous coursework: SEED 7620T, SEED 7621T, SEED 7622T.

M.A. degree program in education: mathematics teacher (7-12)
HEGIS code 1701.01; SED program code 26734

The Mathematics Department, in conjunction with the Department of Secondary Education, offers a master of arts degree in education for mathematics teachers (grades 7-12). The New York State Education Department licenses graduates of registered teacher education programs who meet the state requirements for teachers. Applicants must consult matriculation requirements for adolescence education and special subjects in the Department of Secondary Education section of the Bulletin, and should see the chairperson of the Department of Secondary Education for counseling.

The department also participates in a master of science degree program for middle childhood education specialists in math (grades 5-9), with extensions for gifted education at initial and professional certification levels.

This program leads to the M.A. in Education and both New York State Initial and Professional Certification in Adolescence Education in teaching mathematics for grades 7-12.

Matriculation requirements
Applicants must have an undergraduate degree in mathematics, mathematics education grades 7-12, or 18 credits in advanced mathematics including the following: multivariable calculus, linear algebra, abstract algebra, geometry, analysis/advanced calculus, probability and statistics, as approved by the chairperson of the mathematics department and the advisor of the mathematics education (7-12) program.

Applicants must have a minimum undergraduate grade point average of 3.00 for matriculation. A minimum average of 3.00 in graduate courses is required to maintain matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of at least 500 on the paper-based test, or 173 on the computer-based test, or 61 on the internet-based test before being considered for admission.

Applicants who do not meet all of the specific requirements will be given individual consideration and may be admitted with conditions, with the approval of the Program Coordinator of Mathematics Education 7-12 and the Graduate Deputy of the Mathematics Department.

Applicants must consult matriculation requirements for adolescence education and special subjects in the School of Education section of the Bulletin, and should see the Department of Secondary Education for advisement. General matriculation and admission requirements of Graduate Studies are in the section "Admission".

Each student is evaluated individually based upon prior experiences. Based upon this evaluation and current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Program Coordinator.

Degree requirements

Option A: 30 credits
This option leads to New York State Professional Certification in Adolescence Education in teaching mathematics for grades 7-12.

Matriculation requirements
Applicants must hold a New York State Initial Certification in Adolescence Education in teaching mathematics for grades 7-12.

Degree requirements
Thirty credits are required for the degree.
Mathematics Education (12 credits):
The following mathematics education courses, or mathematics education courses approved by the program coordinator, are required in the stated sequence: SEED 7482X, SEED 7483X, SEED 7484T, SEED 7485T.

Mathematics (12 credits):
The following 4 mathematics courses, or mathematics courses approved by the mathematics department chair or Graduate Deputy are required: MATH 7305T, MATH 7307T, MATH 7309T, MATH 7313T.

Education Core (6 credits)
The following education class: Development and SEL: SEED 7507X.

One of the following elective education courses, or an education course approved by the program coordinator, is required:
SEED 7465X, SEED 7503X, SEED 7504X, SEED 7545X, SEED 7671X.

Option B: 30-40 credits
This option, for students without certification to teach, leads to both New York State Initial and Professional Certification in Adolescence

Education in teaching mathematics for grades 7-12.

Degree requirements
Thirty to forty credits are required for the degree.

Education Core (12 credits):
The following four education courses are required unless candidates have taken one or more as part of previous coursework. Foundations: SEED 7500X; Literacy: SEED 7503X; Special Education: SEED 7671X; and Development and SEL: SEED 7507X.

Student Teaching (4 credits):
The following student teaching courses are required unless candidates have a New York State waiver: SEED 7541X, SEED 7542T, and SEED 7543T. (SEED 7500X and SEED 7483T must be completed before student teaching). SEED 7543T is not required if the candidate is teaching mathematics full-time at an appropriate grade level.

Students teaching with a New York State Internship Certificate must be enrolled in either SEED 7542T or SEED 7001T during every semester that they are teaching under the certificate.

Mathematics Education (12 credits):
The following mathematics education courses, or mathematics education courses approved by the program coordinator, are required in the stated sequence unless candidates have taken one or more as part of previous coursework: SEED 7482X, SEED 7483X, SEED 7484T, SEED 7485T.

Mathematics (12 credits):
The following 4 mathematics courses, or mathematics courses approved by the mathematics department chair or Graduate Deputy, are required: MATH 7305T, MATH 7307T, MATH 7309T, MATH 7313T.

Option C: 30-39 credits
This option leads to both New York State Initial and Professional Certification in Adolescence Education in teaching mathematics for grades 7- 12.

Matriculation Requirements:
Applicants must hold a New York State Transitional B Certificate in Adolescence Education in teaching mathematics for grades 7-12.
Degree requirements:

Degree requirements
Thirty to thirty-nine credits are required for the degree.

Education Core (15 credits):
The following six courses in education are required unless candidates have taken one or more as part of previous coursework: Foundations: SEED 7500X; Literacy: SEED 7503X; Mindfulness; SEED 7504X; Special Education: 7671X; Development and SEL: SEED 7507X; Teacher Performance Assessment: SEED 7541X.

Mathematics Education (12 credits):
The following mathematics education courses, or mathematics education courses approved by the program coordinator, are required in the stated sequence unless candidates have taken one or more as part of previous coursework: SEED 7482X, SEED 7483X, SEED 7484T, SEED 7485T.

Mathematics (12 credits):
The following 4 mathematics courses, or mathematics courses approved by the mathematics department chair or Graduate Deputy, are required: MATH 7305T, MATH 7307T, MATH 7309T, MATH 7313T

M.A. degree program in education: social studies teacher (7-12)
HEGIS code 2201.01; SED program code 26753, trans B 26752

This program leads to New York State Initial or Professional Certification to teach social studies, grades 7-12. The length of the program depends on the individual's prior preparation.

The profession of teacher education is licensed by the New York State Education Department. Therefore, program requirements are subject to change. All students should consult with the Department of Secondary Education for the current requirements.

New York State Certification requires the completion of a minimum of 30 credits of History and/or Geography, including coursework at both the undergraduate and graduate level.

Matriculation requirements
Applicants must offer a distribution approved by the social studies program coordinator of at least 15 credits in upper division undergraduate or graduate courses in one or more of the following: economics, geography, history, sociology, and/or political science, 9 credits in history.

Applicants must also offer (a) or (b):

(a) New York State Initial Certification in teaching social studies for grades 7¬12; or courses in education that meet the New York State standards for the pedagogical core. These courses include study of the following: history of education and philosophy of education or principles of education or educational sociology; educational psychology or developmental psychology or psychology of adolescence or adolescent development; classroom management; teaching students with special needs and English language learners; 6 credits in literacy and language acquisition; curriculum development and methods of assessing student learning; uses of technology in the classroom; methods of teaching social studies in grades 7-12; 100 hours of fieldwork; 40 full days or 300 hours of student teaching of social studies in grades 7-12 or one year of full- time teaching of social studies in grades 7-12; and passage of a New York State-approved Teacher Performance Assessment

(b) An undergraduate degree with an appropriate major or appropriate course work in the appropriate subject areas.

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum average of 3.00 in graduate courses is required to maintain matriculation. Applicants who have not completed all the specific course requirements are given individual consideration and may be admitted with conditions, with the approval of the chairperson of the Department of Secondary Education in the School of Education and the program coordinator of social studies.
International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a minimum score of 650 on the paper-based test or 280 on the computer-based test or 114 on the internet-based test, before being considered for admission.

General matriculation and admission requirements of Graduate Studies are in the section "Admissions" of the Graduate Bulletin. Degree requirements
Each student is evaluated individually based upon prior experiences. Based upon this evaluation and current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Program Coordinator.

Option (A): 30 Credits Social Studies (18 credits):
Students who possess Initial Certification in teaching social studies, 7-12 or the equivalent must complete the following courses in Social Studies: 15 credits from the field(s) of Social Studies: History, Political Science, Economics, Sociology.
3 credits from the field(s) of Social Studies: History, Political Science, Economics, Sociology or SEED 7613X: Teaching Concepts of Geography in Middle and High School

Education (12 credits):
Students must also complete 12 credits in courses in Education as follows:
Research in Social Studies Education: SEED 7612T; Literacy: SEED 7503X; Mindfulness SEED 7504X; Development and SEL: SEED 7507X.

Option (B) 30-40 credits Social Studies (15 credits):
Students who do not possess Initial Certification in teaching social studies, 7-12 or the equivalent must complete the following courses in Social Studies:
12 credits from the field(s) of Social Studies: History, Political Science, Economics, Sociology.
3 credits, depending on previous coursework in History, from the field(s) of Social Studies: History, Political Science, Economics, Sociology or SEED 7613X: Teaching Concepts of Geography in Middle and High School

Education Core (12 credits):
The following four education courses are required unless candidates have taken one or more as part of previous coursework.
Foundations: SEED 7500X; Literacy: SEED 7503X; Special Education: SEED 7671X; Development and SEL: SEED 7507X.

Student Teaching (4 credits):
The following student teaching courses are required unless candidates have a New York State waiver: SEED 7541X, SEED 7542T, and SEED 7543T. (SEED 7500X and SEED 7610T must be completed before student teaching). SEED 7543T is not required if the candidate is teaching Social Studies full-time at an appropriate grade level.

Students teaching with a New York State Internship Certificate must be enrolled in either SEED 7542T or SEED 7001T during every semester that they are teaching under the certificate.

Social Studies Education (9 credits):
The following Social Studies education courses, or Social Studies education courses approved by the program coordinator, are required unless candidates have taken one or more as part of previous coursework: SEED 7610T, SEED 7611T, SEED 7612T.

M.A. degree program in education: Spanish teacher (7-12)
HEGIS code 1105.01; SED program code 26800

The Department of Modern Languages and Literature in conjunction with the Department of Secondary Education, offers a master of arts degree in education for Spanish teachers (grades 7-12). The New York State Education Department licenses graduates of registered teacher education programs who meet the state requirements for teachers. All students should consult with the Department of Secondary Education for current requirements.

This master of arts program provides students with an introduction to the Peninsular/Latin American literature. At the same time, the focus on language and culture fully prepares students for employment as foreign language teachers at the middle and high school levels.

Coursework is divided between the Department of Modern Languages and Literatures and the Department of Secondary Education. The courses required by the Department of Secondary Education vary depending on the entry qualifications of students.

The profession of teacher education is licensed by the New York State Education Department. Therefore, program requirements are subject to change. All students should consult with the School of Education for the current requirements.

Matriculation requirements
Applicants must offer at least 15 credits in advanced courses in Spanish. Applicants must also offer (a) or (b):
(a) New York State Initial Certification in teaching Spanish grades 7-12 or courses in education that meet the New York State standards for the pedagogical core. These courses include study of the following: history of education and philosophy of education or principles of education or educational sociology; educational psychology or developmental psychology or psychology of adolescence or adolescent development; classroom management; teaching students with special needs and English language learners; 6 credits in literacy and language acquisition; curriculum development and methods of assessing student learning; uses of technology in the classroom; methods of teaching Spanish in grades 7-12; 100 hours of fieldwork; 40 full days or 300 hours of student teaching of Spanish in grades 7-12; or one year of full-time teaching Spanish at appropriate grade levels, and passage of a New York State-approved Performance Assessment.

(b) an undergraduate degree with a major in Spanish or appropriate course work in Spanish.

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum average of 3.00 in graduate courses is required to maintain matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of at least 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test, before being considered for admission.

Applicants who have not completed all the specific course requirements are given individual consideration and may be admitted with conditions, with the approval of the chairperson of the Department of Secondary Education and the chairperson of the Department of Modern Languages and Literatures.

General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Each student is evaluated individually based upon prior experiences. Based upon this evaluation and current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Program Coordinator.

Degree requirements

Option (A): 30 credits Spanish (18 credits):
Students who possess Initial Certification in teaching Spanish or the equivalent must complete the following courses in Spanish: Spanish 7010X, 7510X or 7520X; a course in Latin American literature; and a course in Peninsular Spanish literature and 6 credits of electives as approved by the chairperson or deputy chairperson of the Modern Languages and Literatures Department.

Students must also complete a substantial final project, which may take the form of a thesis in Spanish, or may consist of a "teaching unit" completed under the co-direction of the Department of Modern Language and Literatures and the School of Education. The writing of the thesis or completion of the teaching unit may take place during a three-credit tutorial, Spanish 7790G, taken as the final course of the student's program. Spanish 7790G, however, is not a required course for the degree.

Courses in the Modern Languages and Literatures Department and the School of Education offered toward the degree must be 7000-level courses. The program of study must be approved early in the first semester by the chairperson or deputy chairperson of the Modern Languages and Literatures and the Department of Secondary Education.

Education (12 credits):
Students must also complete 12 credits in courses in Education as follows:
Research in Modern Languages Education: SEED 7622T; Literacy: SEED 7503X; Mindfulness SEED 7504X; Development and SEL: SEED 7507X.
Option (B) 40 credits.
Spanish (15 credits):
Students who do not possess Initial Certification in teaching Spanish or the equivalent must complete the following courses in Spanish: Spanish 7010X, 7510X or 7520X; a course in Latin American literature; and a course in Peninsular Spanish literature and 3 credits of electives as approved by the chairperson or deputy chairperson of the Modern Languages and Literatures Department.

Students must also complete a substantial final project, which may take the form of a thesis in Spanish, or may consist of a "teaching unit" completed under the co-direction of the Department of Modern Language and Literatures and the School of Education. The writing of the thesis or completion of the teaching unit may take place during a three-credit tutorial, Spanish 7790G, taken as the final course of the student's program. Spanish 7790G, however, is not a required course for the degree.
Courses in the Modern Languages and Literatures Department and the School of Education offered toward the degree must be 7000-level courses. The program of study must be approved early in the first semester by the chairperson or deputy chairperson of the Modern

Languages and Literatures and the Department of Secondary Education.

Education Core (12 credits):
The following four education courses are required unless candidates have taken one or more as part of previous coursework. Foundations: SEED 7500X; Literacy: SEED 7503X; Special Education: SEED 7671X; Development and SEL: SEED 7507X.

Student Teaching (4 credits):
The following student teaching courses are required unless candidates have a New York State waiver: SEED 7541X, SEED 7542T, and SEED 7543T. (SEED 7500X and SEED 7620T must be completed before student teaching). SEED 7543T is not required if the candidate is teaching Spanish full-time at an appropriate grade level.

Students teaching with a New York State Internship Certificate must be enrolled in either SEED 7542T or SEED 7001T during every semester that they are teaching under the certificate.

Spanish Education (9 credits):
The following Spanish education courses, or Spanish education courses approved by the program coordinator, are required unless candidates have taken one or more as part of previous coursework: SEED 7620T, SEED 7621T, SEED 7622T.

M.A. degree program in middle childhood education (5-9) - general science teacher - generalist with a concentration in general science
HEGIS code 0804.04; SED program code 26820, trans B 26819

Informed by the National Science Education Standards for the professional development of science educators, the program involves teachers in learning science content using the process of inquiry. The program is also committed to expanding the classroom to include the local environment and science-rich community resources such as zoos, parks, museums, nature centers and gardens. The program introduces future educators to scientific literature, media and technological resources that expand their science knowledge and their ability to access further knowledge.

This program does not lead to certification to teach Regents level science.

General matriculation requirements

Applicants must have 15 credits in science. Students deficient in science credits may be accepted on condition that they complete additional coursework as recommended by the program coordinator of science education.
Applicants for initial certification take the Multi-subject New York State Content Specialty Test.

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate courses is required to maintain matriculation.

International applicants whose first language is not English and who did not receive the equivalent of a four-year U.S. undergraduate education from an institution where English is the official language of instruction, must take the Test of English as a Foreign Language (TOEFL) and arrange to have official score reports sent to the Office of Admissions. See the section, "Additional admission requirements for students with international credentials," in the Graduate Bulletin or the program web page for more updated and complete information on minimum passing score requirements. At the discretion of the program, additional English courses may be required as a condition for admission.

General matriculation and admission requirements of the Division of Graduate Studies are in the section "Admission" of the Graduate Bulletin.

General degree requirements

Thirty to 45 credits are required for the degree depending on applicants' qualifications.

Students must complete 15 credits in courses in biology, chemistry, earth and environmental science, physics, and general science.

The program of study must be approved by the Program Head of Middle Childhood Science.

All required education courses and some education electives require permission for registration as indicated in the Schedule of Classes.

Each student is evaluated individually based upon prior experiences. Based upon this evaluation and current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Coordinator of General Science.

Middle childhood education generalist with a concentration in general science
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This program leads to a Master of Arts in Education and a New York State Professional Certificate in Middle Childhood Education Generalist (grades 5-9).

Matriculation requirements for all three options below include 15 credits of science.

Option (A): 30 credits.

Matriculation requirements

Applicants must hold a New York State Initial Certificate in Middle Childhood Education (grades 5-9) or its equivalent.

Degree requirements

Thirty credits are required for the degree.

In addition to Secondary Education 7314X, 7315X, 7324X, 7320T, and 7321T, the following courses are required: 15 credits in graduate courses in: biology, chemistry, physics, earth and environmental science, and general science.

Option (B): 30 credits

This program leads to the Professional Certificate in Middle Childhood Education generalist (grades 5-9).

Matriculation requirements

Applicants must hold a New York State Initial Certificate in Childhood Education (grades 1-6) or its equivalent or a New York State Initial Certificate in Adolescence Education (grades 7-12) or its equivalent.

Degree requirements

Thirty credits are required for the degree.

In addition to Secondary Education 7314X or 7324X, 7315X, 7381T, 7320T, and 7321T, the following courses are required: 15 credits in graduate courses in: biology, chemistry, physics, earth and environmental science, and general science.
Secondary Education 7541X with student teaching practicum in grades 7-8 for those with Initial Certification in Childhood Education or grades 5-6 for those with Initial Certification in Adolescence Education or mentored teaching in middle childhood for full time teachers.

Option (C): 30-43

This program leads to both New York State Initial and Professional Certificates in Middle Childhood Education generalist (grades 5-9).

Degree requirements

Thirty to 43 credits are required for the degree.

Students must complete Secondary Education 7314, 7315, 7324, 7380, 7381, 7383, 7541X, 7320T, and 7321T, and Secondary Education 7542T or (if Teaching Fellow) SEED 7001T. Students must obtain departmental permission to register for these courses. SEED 7541X must be taken together with the student teaching practicum.

In addition to the above, the following courses are required: Secondary Education 7671T, as well as 15 credits in graduate courses in: biology, chemistry, physics, earth and environmental science, and general science.

All required education courses and some education electives require permission for registration as indicated in the Schedule of Classes.

Each student is evaluated individually based upon prior experiences. Based upon this evaluation and current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Coordinator of General Science.

M.A. degree program in middle childhood education (5-9) - general science teacher - specialization in biology, chemistry, physics, or earth science
HEGIS code 0804.04; SED program code 26820, trans B 26819

Informed by the National Science Education Standards for the professional development of science educators, the program involves teachers in learning science content using the process of inquiry. The program is also committed to expanding the classroom to include the local environment and science-rich community resources such as zoos, parks, museums, nature centers and gardens. The program introduces future educators to scientific literature, media and technological resources that expand their science knowledge and their ability to access further knowledge.

Certification requires the completion of a minimum of 30 credits within one science discipline including coursework at both the undergraduate and graduate level. This program leads to certification to teach Regents level science.

General matriculation requirements

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate courses is required to maintain matriculation.
International applicants whose first language is not English and who did not receive the equivalent of a four-year U.S. undergraduate education from an institution where English is the official language of instruction, must take the Test of English as a Foreign Language (TOEFL) and arrange to have official score reports sent to the Office of Admissions. See the section, "Additional admission requirements for students with international credentials," in the Graduate Bulletin or the program web page for more updated and complete information on minimum passing score requirements. At the discretion of the program, additional English courses may be required as a condition for admission.
General matriculation and admission requirements of Graduate Studies are in the section "Admission."

General degree requirements

Thirty to 40 credits are required for the degree depending on applicants' qualifications. Students must complete 15 credits in courses in biology, chemistry, earth and environmental science, physics, and general science.

Students who have not already completed 30 credits in the science discipline of specialization upon admission must take courses in that discipline until the 30 credit requirement has been met. Once the thirty credit requirement has been met, students may take additional coursework in a science other than the discipline of specialization.

The program of study must be approved by the Program Head of middle school science education.

All required education courses and some education electives require permission for registration as indicated in the Schedule of Classes.

Each student is evaluated individually based upon prior experiences. Based upon this evaluation and current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Program Head of middle school science education.

Middle childhood education with a specialization in biology, chemistry, physics, or earth science
leads to a Master of Arts in Education and a New York State Professional Certificate in Middle Childhood Education with a specialization in biology, chemistry, physics, or earth science (grades 5-9). Matriculation requirements for all three options below include an undergraduate major in biology, chemistry, physics, or earth and environmental science or the equivalent.
The profession of teacher is licensed by the New York State Education Department. Therefore, program requirements are subject to change. All students should consult with the School of Education for the current requirements.

Option (A): 30 credits.
Matriculation requirements

Applicants must hold a New York State Initial Certificate in Middle Childhood Education (grades 5-9) or its equivalent.

Degree requirements

Thirty credits are required for the degree.
Secondary Education 7314X, 7324X, 7315X and 7507T; and Secondary Education 7320T and 7321T. In addition, the following courses are required: 15 credits in graduate courses in one of the following: Biology and/or any course numbered general science 7030T-7039T and 7053T,
Or,
Earth and environmental science, and/or any GSCI course numbered 7041T-7059T.

Option (B): 30-33 credits
Matriculation requirements

Applicants must hold a New York State Initial Certificate in Childhood Education (grades 1-6) or its equivalent or a New York State Initial Certificate in Adolescence Education (grades 7-12) or its equivalent.

Degree requirements

Thirty to thirty-three credits are required for the degree.
Secondary Education 7314X, 7324X, 7315X, 7507T, 7320T and 7321T.

In addition to the above, the following courses are required: 15 credits in graduate courses in one of the following:
Biology and/or any course numbered General Science 7030T-7039T and 7053T
Or,
Earth and environmental science, and/or any GSCI course numbered 7041T-7059T

Option (C): 30-40 credits

This program leads to both New York State Initial and Professional Certificates in Middle Childhood Education with a specialization in biology, chemistry, physics, or earth science (grades 5-9).
Degree requirements
Thirty to 40 credits are required for the degree.
Students must complete Secondary Education 7314X, 7315X, 7324X, 7380T prior to student teaching,. and
Must also complete:
SEED 7381T, 7383T, 7542T and 7541X 7543T.
Secondary Education 7320T, 7671X,
Students must obtain permission from the Program Head of middle school science education to register for these courses.
In addition to the above, the following courses are required: 15 credits in graduate courses in one of the following:
Biology and/or any course numbered general science 7030T-7039T and 7053T
Or,
Earth and environmental science, and/or any GSCI course numbered 7041T-7059T

Option (D): 30-39 credits
Matriculation requirements
Applicants must hold a New York State Transitional B Certificate in Middle Childhood Education: Biology, Chemistry, Earth Science, or Physics (grades 5-9). Requirements for the Transitional B Certificate are determined by the New York State Education Department.
This program leads to both New York State Initial and Professional Certificates in Middle Childhood Education with a specialization in biology, chemistry, physics, or earth science (grades 5-9).
Students teaching under a Transitional B Certificate, are required to be registered for Supervised Practicum in Teaching (such as SEED 7001T) every semester until degree completion.
Degree requirements
Thirty to 39 credits are required for the degree.
Students must complete Secondary Education 7314X, 7315X, 7324X, 7507T, 7320T, 7671X, 7381T, 7383T, 7541T, and 7321T. Students must obtain permission from the Program Head of middle school science education to register for these courses.
In addition to the above, the following courses are required: 15 credits in graduate courses in one of the following:
Biology and/or any course numbered general science 7030T-7039T and 7053T
Or,
Earth and environmental science, and/or any GSCI course numbered 7041T-7059T

M.A.T. degree program in adolescence science education (grades 7-12)
HEGIS code 0834.00; SED program code 32663 (Concentration A); 32662 (Concentration B)

This program leads to the Master of Arts in Teaching (M.A.T.) degree, Adolescence Science Education (7-12), with specializations for biology teacher, chemistry teacher, earth science teacher, and physics teacher.
There are two concentrations: concentration A (SED program code 32663) leads to Professional Teacher Certification only; concentration B (SED program code 32662) leads to Initial and Professional Teacher Certification.
The profession of teacher is licensed by the New York State Education Department. Therefore, program requirements are subject to change. All students should consult with the School of Education for the current requirements.

Matriculation requirements

Applicants must submit two appropriate letters of recommendation and are interviewed.
Applicants to concentration A must submit scores on the Content Specialty Test (CST) in the discipline of specialization and a copy of their NYS teacher certification. Applicants must have a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate courses is required to maintain matriculation.
Concentration A requires a New York State Initial Certificate in Adolescence Science Education in a content area or its equivalent for admission.
Concentration B (pre-service) requires student teaching and is for applicants without NYS certification but possessing 30 or more credits in the discipline of certification.
Each student is evaluated individually based upon prior experiences. Based upon this evaluation and the current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the program coordinator. For transfer credits see the section, "Rules about transfer courses and credits," in the Graduate Bulletin for more updated and complete information.
International applicants whose first language is not English and who did not receive the equivalent of a four-year U.S. undergraduate education from an institution where English is the official language of instruction, must take the Test of English as a Foreign Language (TOEFL) and arrange to have official score reports sent to the Office of Admissions. See the section, "Additional admission requirements for students with international credentials," in the Graduate Bulletin or the program web page for more updated and complete information on minimum passing score requirements. At the discretion of the program, additional English courses may be required as a condition for admission.

Degree requirements
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30 to 37 credits are required for the degree depending on the applicant's previous coursework, teaching experience, and the certificate(s) the applicant holds. Each candidate will be evaluated individually and a program of study will be prescribed. In addition, students must

complete a research project under advisement of a faculty member in Secondary Education 7321T.
Concentration (A): 30-33 credits (for in-service teachers)
HEGIS code: 0834.00; SED program code 32663
This concentration leads to a New York State Professional Teaching Certificate in Adolescence Science Education (7-12), with specializations in either biology teacher, chemistry teacher, earth science teacher, or physics teacher. Applicants must hold a New York State Initial Teaching
Certificate in Adolescence Science Education in a content area or its equivalent.
Students electing this concentration must complete the following requirements:
Secondary Education 7507T, 7504X or 7671X, 7314X, 7320T, 7315X, 7324X, 7321T, six (6) credits in science content, including general science, and three (3) additional elective credits in Education or science or , general science, to be determined in consultation with and approval of the head of the program in adolescence science education.
Concentration (B): 30-37 credits (for pre-service teachers)
HEGIS code: 0834.00; SED program code 32662
This concentration leads to both New York State Initial and Professional Teaching Certification in Adolescence Science Education (7-12), with specializations in either biology teacher, chemistry teacher, earth science teacher, or physics teacher, and is designed for candidates who do not have Initial New York State Teaching Certification in Science.
Students electing this concentration must complete the following requirements:
Secondary Education 7507T, 7671X, 7314X, 7320T, 7315X, 7324X, 7321T, 7380T, 7381T, 7383T, 7542T, 7541X. and six (6) credits in science content, including general science, to be determined in consultation with and approval of the head of the program in adolescence science education. SEED 7541X must be taken together with the student teaching practicum, SEED 7542T.
Any additional New York State certification requirements.

M.A.T. degree program: earth science teacher (grades 7-12)
HEGIS code 1917.01; SED program code 33640 (Concentration A); 33641 (Concentration B)

The Department of Earth and Environmental Sciences in conjunction with the Department of Secondary Education, offers a Master of Arts in Teaching Earth Science, and New York State Teaching Certificate in Adolescent Science Education with a specialization in earth science in grades 7-12. Concentration A is designed for in-service teachers of any subject who wish to obtain certification in Earth science. Concentration B is designed for teacher candidates with a background in Earth science seeking initial certification.

This master of arts in teaching program provides students with courses linking content and pedagogy across the content areas in Earth science required to teach the New York State Earth science curriculum. The program places a special emphasis on place-based instruction using the cultural and natural resources of New York City and State.

Applicants should consult matriculation requirements for adolescence education and special subjects in the Department of Secondary Education section of the Bulletin, and should contact the Program Coordinator for advisement.

Students deficient in science credits may be accepted on condition that they complete additional coursework as recommended by the program coordinator of science education.

Matriculation requirements

Each candidate will be evaluated individually. Based upon this evaluation and certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Program Head of middle school science education.

Applicants to Concentration A must have completed a minimum of six credits in earth and environmental science or in cognate sciences including chemistry and physics.
Applicants to Concentration B must have completed a minimum of 9 credits in earth science and six credits in cognate sciences including chemistry and physics. Students deficient in science credits may be accepted on condition that they complete additional coursework as recommended by the Program Head of middle school science education.

This program leads to a Master of Arts in Teaching Earth Science, and a New York State Professional Teaching Certificate in Adolescent Science Education with a specialization in earth science in grades 7-12.

Applicants must have a minimum undergraduate grade point average of 3.00. A minimum grade point average of 3.00 in graduate courses is required to maintain matriculation.

International applicants whose first language is not English and who did not receive the equivalent of a four-year U.S. undergraduate education from an institution where English is the official language of instruction, must take the Test of English as a Foreign Language (TOEFL) and arrange to have official score reports sent to the Office of Admissions. See the section, "Additional admission requirements for students with international credentials," in the Graduate Bulletin or the program web page for more updated and complete information on minimum passing score requirements. At the discretion of the program, additional English courses may be required as a condition for admission.
General matriculation and admission requirements of Graduate Studies are in the "Admission" section.

Degree requirements

Thirty to thirty-seven credits are required for the degree depending on the applicants' previous coursework, teaching experience and the

certificates the applicant holds.

Concentration (A): 30-34 credits (for in-service teachers)
This program leads to a New York State Professional Teaching Certificate in Adolescent Earth Science and General Science Education for inservice science teachers. Applicants must hold a New York State Initial Certification in classroom teaching and a minimum of six credits in earth and environmental science or in cognate sciences including chemistry and physics.
The following required courses:
Earth Science and Environmental Science 7013T, 7040T, 7044T, and either 7006T or 7042T.
Twelve additional credits in Earth Science and Environmental Science numbered 7000T or higher, or 7100 or higher with permission of the chairperson, or GSCI 7014T, 7041T.
Other GSCI courses may include any GSCI 7040-49s, and/or Water (GSCI 7053T), and/or The Ocean System (GSCI 7054T), and/or Climate Change (GSCI 7059T), or other GSCI courses with permission of the Program Coordinator.
Secondary Education 7314X or 7324X, 7320T and 7321T.

Concentration (B): 30-37 credits (for pre-service teachers)
This option leads to both New York State Initial and Professional Teaching Certificates for pre-service science teachers. Applicants must have completed a minimum of 9 credits in Earth Science and six credits in cognate sciences including chemistry and physics.
Fifteen credits in Earth and Environmental Sciences numbered 7000T or higher, or 7100 or higher with permission of the chairperson, or GSCI 7014T, 7041T.
Other GSCI courses may include any GSCI 7040-49s, and/or Water (GSCI 7053T), and/or The Ocean System (GSCI 7054T), and/or Climate Change (GSCI 7059T), or other GSCI courses with permission of the Program Coordinator.
All of the following courses in education: Secondary Education 7314X or 7324X, 7315X, 7320T, 7380T and 7671X.

Other requirements that must be met include 100 hours of field experience, and 70 days of student teaching at appropriate grade levels including Secondary Education 7381T, 7383T, 7541X and 7542T and any additional New York State requirements. SEED 7542T and 7541X must be taken in the same semester.

M.S. degree program in education: physical education teacher (all grades)
HEGIS code 0835; SED program code 26745

This Master of Science degree program will prepare, develop and advance the skills of both aspiring and practicing physical education teachers (P-12). The Physical Education Teacher major offers three tracks leading to either Intial, Professional or Transitional B New York State teacher certification.

The profession of teacher education is licensed by the New York State Education Department. Therefore, program requirements are subject to change. All students should consult with the Department of Secondary Education for the current requirements.

Degree Matriculation Requirements (30-49 credits)
Each student is evaluated individually based upon prior experiences. Based upon this evaluation and current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the program coordinator.

The Professional Track - (Option A) - Enhances teaching skills for students who have their NYS initial certification in teaching physical education (P-12). Graduates of this Track will be prepared to supplement their instructional, evaluative, and supervisory skills in their positions as teachers, coaches, athletic directors, administrators, and other education related roles. Applicants must hold an undergraduate degree in Physical Education and NYS initial teacher certification in physical education prior to enrollment. The professional track leads to New York State Professional certification.

The Pre-Professional Track (Option B) is designed for students who come to the field from a background outside of the allied health professions or teacher education and seek initial certification to teach in New York State. The pre-professional track leads to New York State Initial and, after 3 years of full time teaching, Professional certification.

The TransB Track (Option C) is designed for candidates enrolled in a DOE Collaborative program.

Applicants to the Professional Track (Option A) and the Pre-Professional Track (Option B) and TransB Track must have a minimum undergraduate grade point average of 3.0.
A minimum average of 3.00 in graduate courses is required to maintain matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a minimum score of 650 on the paper-based test or 280 on the computer-based test or 114 on the internet-based test, before being considered for admission.

Students should note additional requirements found in the sections of "Admission" and "Academic Regulations and Procedures" in the Graduate Bulletin.

Degree requirements

Option (A): 30 credits
Students who possess Initial Certification will complete the following:

SEED 7630T Seminar in Pedagogy and Curriculum P-12: Physical Education P-5
SEED 7633T Advanced Seminar II in Pedagogy and Curriculum P-12: Physical Education P-12
SEED 7636X Physical Education Curriculum in Elementary and Secondary Schools
SEED 7637X School Based Social Emotional and Curriculum Leadership Skills for PE
SEED 7638X Advancing Instructional Practices in Physical Education
SEED 7639X Administration, Leadership and Supervision in Physical Education
SEED 7642T Seminar in Educational Research Inquiry: Physical Education
SEED 7504X Mindfulness in Teaching and Learning

In addition to the above: 6 Graduate credits of program coordinator approved electives.

Option (B): 30-49 credits
This track is designed to accommodate candidates who do not have NYS initial teacher certification. Undergraduate transcripts will be reviewed and assessed for undergraduate preparation that may count toward the prerequisites for the Master's degree. Students who do not have significant preparation will be required to take 15 credits in undergraduate physical education prerequisites before being fully matriculated as graduate students.

Required Prerequisite courses: (15 cr.)
These courses must be completed in the first 2 semesters of enrollment, prior to full matriculation into the graduate program. Students may co-enroll in pre-reqs and graduate coursework.

SEED 3020 Applied Concepts of Fitness and Health
SEED 3030 Team Sports
SEED 3040 Dual and Lifetime Sports and Physical Activity
SEED 3050 Adapted Physical Education
SEED 3060 Measurement and Assessment in Physical Education

Required for Master's (30-34 cr.) Students will complete the following:

Physical Education (27 credits):
The following nine education courses are required unless candidates have taken one or more as part of previous coursework.
SEED 7630T Advanced Seminar in Pedagogy and Curriculum P-12: Physical Education P-5
SEED 7631X Seminar in Pedagogy and Curriculum: Physical Education 6-12
SEED 7633T Advanced Seminar II in Pedagogy and Curriculum P-12: Physical Education P-12
SEED 7634T Seminar with Student Teaching: Physical Education
SEED 7635X Motor Learning and Development P-12
SEED 7637X School Based Social Emotional and Curriculum Leadership Skills for PE
SEED 7639T Administration Leadership and Supervision in Physical Education
SEED 7642T Seminar in Educational Research Inquiry: Physical Education
SEED 7643X Physical Education P-12: Standards Guided Planning for Instruction & Assessment

Education Core (3 credits):
The following education course is required unless candidates have taken one or more as part of previous coursework.
SEED 7503X Teaching Writing Across the Curriculum

Student Teaching (4 credits):
The following student teaching courses are required unless candidates have a New York State waiver:
SEED 7541X Teacher Portfolio Assessment
SEED 7542T Student Teaching Practicum I
SEED 7543T Student Teaching Practicum II (co-requisite SEED 7542)
(SEED 7630X and SEED 7637X must be completed before student teaching). SEED 7543T is not required if the candidate is teaching Physical Education full-time at an appropriate grade level.

Students teaching with a New York State Internship Certificate must be enrolled in either SEED 7542T or SEED 7001T during every semester that they are teaching under the certificate.

Students completing the Pre-Professional Track will graduate with a master's degree and be eligible to apply for initial certification provided they complete NYS mandated certification requirements.

Option (C): 36 credits
The Master of Science Trans B Certificate degree program is designed to develop and advance the skills of novice physical education teachers (P- 12).

Brooklyn College, in conjunction with the New York City Department of Education, offers an Alternative Certification program for qualified individuals who attend the college under a contractual arrangement with the Department of Education. Students must meet Brooklyn College admissions criteria. After completing a pre-service preparation program at the college, individuals are recommended for a Transitional B Certificate, which validates the individual's service in a public school while completing the master's degree program.

Students pursuing a TransB Certificate will substitute their teaching job for student teaching but will still register for SEED 6002T. Students will complete the following:

Physical Education (24 credits):
The following eight education courses are required unless candidates have taken one or more as part of previous coursework.
SEED 7630T Advanced Seminar in Pedagogy and Curriculum P-12: Physical Education P-5
SEED 7631X Seminar in Pedagogy and Curriculum: Physical Education 6-12
SEED 7632T Advanced Seminar I in Pedagogy and Curriculum P-12: Physical Education P-12
SEED 7633T Advanced Seminar II in Pedagogy and Curriculum P-12: Physical Education P-12
SEED 7635X Motor Learning and Development P-12
SEED 7636X Physical Education Curriculum in Elementary and Secondary Schools
SEED 7638X Advancing Instructional Practices in Physical Education
SEED 7643X Physical Education P-12: Standards Guided Planning for Instruction & Assessment

Education Core (12 credits):
The following four education courses are required unless candidates have taken one or more as part of previous coursework.
SEED 7503X Teaching Writing Across the Curriculum
SEED 7504X Mindfulness in Teaching and Learning
SEED 7507X Development and Social and Emotional Learning
SEED 7541X Teacher Portfolio Assessment
SEED 7671X Children and Youth with Special Needs

M.S. in Education degree program: health and nutrition sciences: health teacher (P-12)
HEGIS code 0837; SED program code 27318

The master of science degree in education, health teacher program serves New York metropolitan area residents, many of whom are professionals practicing in the field of education and come to Brooklyn College for advanced training and professional growth and development. Graduates typically find or continue employment in public and private schools and other community settings. NYS Dept of Education recommends that Health education in the junior and senior high school grades be taught by teachers holding a certificate to teach health. The profession of teacher is licensed by the New York State Education Department. Therefore, program requirements are subject to change. All students should consult with the School of Education for the current requirements.

Matriculation requirements
Applicants must offer 18 credits in courses in the health sciences or equivalent courses in other fields. Applicants must also offer (a) or (b) or (c):
(a) New York State Initial Certification in teaching physical education or health for all grades;
(b) Courses in education that meet the New York State Education Department standards for the pedagogical core. These courses include study of the following: history of education and philosophy of education or principles of education or educational sociology; educational psychology or developmental psychology or psychology of adolescence or adolescent development; classroom management; teaching students with special needs and English language learners; 6 credits in literacy and language acquisition; curriculum development and methods of assessing student learning; uses of technology in the classroom; methods of teaching health for all grades; current NYSED requirement for field experience.
(c) an undergraduate degree with an appropriate major or appropriate course work (including introduction to health, human physiology, health counseling, health appraisal or the physiology of health and disease, occupational health or first aid, evaluation or statistics, human sexuality, health and human ecology or environmental health, and drugs and society.
Applicants must have a minimum undergraduate grade point average of 3.00. A minimum average of 3.00 in graduate courses is required to maintain matriculation.
International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a score of 550 on the paper-based test or 213 on the computer-based test or 79 on the internet-based test before being considered for admission.
Applicants who have not completed all the specific course requirements are given individual consideration and may be admitted with conditions, with the approval of the HNSC and SEED Health Teacher Program Coordinators.
General matriculation and admission requirements of the Division of Graduate Studies are in the "Admission" section.
General matriculation and admission requirements can be found in the "Admission" section of the Graduate Bulletin.

Degree requirements
A minimum of 30 credits is required for the degree.
Students must complete 6-18 credits in health sciences in the Department of Health and Nutrition Sciences.
Students must also complete 12 - 24 credits in courses in the School of Education. Students take different education courses and sequences of courses depending on their previous course work, teaching experience, and the certificates they hold.

Option A
Students with initial certification to teach health or physical education must take
(a) SEED 7512T or 7314X, 7525T or 7320T, and 6 -12 elective credits in Education from among the following: SEED 7504X, SEED 7315X, SEED 7507T or SEED 7325X SEED 7324X, SEED 7321T, or an education elective approved by the SEED Health Teacher program coordinator
and
(b) 12-18 credits in HNSC or related subjects at the graduate level with permission of the HNSC and SEED Health Teacher Program Coordinators.

Option B
Students with initial certification to teach in an area other than health or physical education must take
(a) SEED 7512T or 7314, and 7525T or 7320, and 9 additional credits in Education from among the following: SEED 7507T, SEED 7504X, SEED 7315X, SEED 7324, or an education elective approved by the SEED program coordinator
and
(b) 12 -18 credits in HNSC or related subjects at the graduate level with permission of the HNSC and SEED Health Teacher Program Coordinators,

Option C
Students who already have a master's degree in health or an allied field but no initial certification in teaching health must take all of the following:
(a) SEED 7315X, and SEED 7507T or SEED 7325X
(b) SEED 7380T,
(c) SEED 7503X or SEED 7314X and CBSE or SEED 7671X,
(d) SEED 7512T or 7324X,
(e) SEED 7541X, SEED 7542T SEED 7543T, and SEED 7381T and SEED 7383T,
(f) SEED 7525T or SEED 7320T,
Students must also take 6 credits in HNSC or related subjects or in education at the graduate level with permission of the HNSC or SEED Health Teacher Program Coordinators.
All students must take SEED 7525T or SEED 7320T, preferably in the final semester of study.
The program of study must be approved by the HNSC and SEED Health Teacher Program Coordinators.

M.S. in Education degree program: middle childhood education teacher, mathematics specialist (grades 5-9)
HEGIS code 0804.03; SED program code 26723

This program leads to the M.S. in Education and both New York State Initial and Professional Certificates in Middle Childhood Education with a specialization in teaching mathematics (grades 5-9).

Matriculation requirements
Applicants must present 18 credits of mathematics, including two semesters of calculus before they can begin to take graduate mathematics courses.

Applicants must have a minimum undergraduate grade point average of 3.00 for matriculation. A minimum grade point average of 3.00 in graduate courses is required to maintain matriculation.

International applicants for whom English is a second language are required to pass the Test of English as a Foreign Language (TOEFL) with a minimum score of 500 on the paper-based test or 173 on the computer-based test or 61 on the internet-based test before being considered for admission.

Students should note additional requirements found at the beginning of this section as well as in the sections "Admission" and "Academic Regulations and Procedures."

Each student is evaluated individually based upon prior experiences. Based upon this evaluation and current certification requirements of the New York State Education Department, courses in education or another department may be substituted for required courses with permission of the Program Coordinator.

Degree requirements Option (A): 30 credits
This option leads to New York State Professional Certification in Middle Childhood Education with a specialization in teaching mathematics (grades 5-9) or to Professional Certification for holders of Initial Certification in another area.

Matriculation requirements
Applicants must hold a New York State Initial Certificate in Middle Childhood Education (grades 5-9) or its equivalent or be seeking Professional Certification through attainment of a Masters Degree. Applicants must present 18 credits of mathematics, including two semesters of calculus before they can begin to take graduate mathematics classes.

Degree requirements
Thirty credits are required for the degree. Mathematics Education (12 credits):
The following mathematics education courses, or mathematics education courses approved by the program coordinator, are required in the stated sequence: SEED 7452X, SEED 7453X, SEED 7454T, and SEED 7455T.

Mathematics (12 credits):
Four of the following mathematics courses, or mathematics courses approved by the mathematics department chair or Graduate Deputy are required: MATH 7271T, MATH 7273T, MATH 7274T, MATH 7275T, MATH 7276T, MATH 7277T, MATH 7278T

Education Core (6 credits):
The following education class: Development and SEL: SEED 7507X.

One of the following elective education courses, or an education course approved by the program coordinator, is required: SEED 7465X, SEED 7503X, SEED 7504X, SEED 7545X, SEED 7671X.

Option (B): 32 credits
This option leads to both New York State Initial and Professional Certification in Middle Childhood Education with a specialization in teaching mathematics (grades 5-9).

Matriculation requirements
Applicants must hold a New York State Initial Certificate in Childhood Education (grades 1-6) or its equivalent or a New York State Initial Certificate in Adolescence Education (grades 7-12) or its equivalent and be seeking certification in Grades 5-9. Applicants must present 18 credits of mathematics, including two semesters of calculus before they can begin to take graduate mathematics courses.

Degree requirements
Thirty to thirty-two credits are required for the degree.

Mathematics Education (12 credits):
The following mathematics education courses, or mathematics education courses approved by the program adviser coordinator, are required in the stated sequence unless candidates have taken one or more as part of previous coursework: SEED 7452X, SEED 7453X, SEED 7454T, and SEED 7455T.

Mathematics (12 credits):
Four of the following mathematics courses, or mathematics courses approved by the mathematics department chair or Graduate Deputy are required: MATH 7271T, MATH 7273T, MATH 7274T, MATH 7275T, MATH 7276T, MATH 7277T, MATH 7278T.

Education Core (6 credits):
The following education class: Development and SEL: SEED 7507X.

One of the following elective education courses, or an education course approved by the program coordinator, is required: SEED 7503X, SEED 7465X, SEED 7504X, SEED 7671X.

Student Teaching (2 credits):
One semester of student teaching in grades 7-8 for those with Initial Certification in Childhood Education (Grades 1-6) or one semester of student teaching in grades 5-6 for those with Initial Education Certification in Adolescence Education (Grades 7-12): SEED 7542T. Also required: SEED 7541X Teacher Portfolio Assessment.

Option (C): 30-40 credits
This option leads to both New York State Initial and Professional Certificates in Middle Childhood Education with a specialization in teaching mathematics (grades 5-9).

Matriculation requirements
Applicants must present 18 credits of mathematics, including two semesters of calculus before they can begin to take graduate mathematics classes.

Degree requirements
Thirty to forty-five credits are required for the degree.

This option, for students without certification to teach, leads to both New York State Initial and Professional Certification in Adolescence Education in teaching mathematics for grades 5-9.

Education Core (12 credits):
The following four education courses are required unless candidates have taken one or more as part of previous coursework. Foundations: SEED 7500X; Special Education: SEED 7671X; Literacy: SEED 7503X; Development and SEL: SEED 7507X

Student Teaching (4 credits):
The following student teaching courses are required unless candidates have a New York State waiver: SEED 7541X, SEED 7542T, and SEED 7543T. (SEED 7500X and SEED 7453T must be completed before student teaching) SEED 7543T is not required if the candidate is teaching mathematics full- time at an appropriate grade level.

Students teaching with a New York State Internship Certificate must be enrolled in either SEED 7542T or SEED 7001T during every semester that they are teaching under the certificate.

Mathematics Education (12 credits):
The following mathematics education courses, or mathematics education courses approved by the program coordinator, are required in the stated sequence unless candidates have taken one or more as part of previous coursework: SEED 7452X, SEED 7453X, SEED 7454T, and SEED 7455T.

Mathematics (12 credits):
Four of the following mathematics courses, or mathematics courses approved by the mathematics department chair or Graduate Deputy,

are required: MATH 7271T, MATH 7273T, MATH 7274T, MATH 7275T, MATH 7276T, MATH 7277T, MATH 7278T.

Option (D): 30-39 credits
This option leads to both New York State Initial and Professional Certificates in Middle Childhood Education with a specialization in teaching mathematics (grades 5-9).

Matriculation requirements
Applicants must hold a New York State Transitional B Certificate in Middle Childhood Education (grades 5-9) or its equivalent.

Applicants must present 18 credits of mathematics, including two semesters of calculus before they can begin to take graduate mathematics classes.

Degree requirements
Thirty to thirty-nine credits are required for the degree.

Education Core (15 credits):
The following six courses in education are required unless candidates have taken one or more as part of previous coursework: Foundations: SEED 7500X; Literacy: SEED 7503X; Mindfulness; SEED 7504X; Special Education: 7671X; Development and SEL: SEED 7507X; Teacher Performance Assessment: SEED 7541X.

Mathematics Education (12 credits):
The following mathematics education courses, or mathematics education courses approved by the program coordinator, are required in the stated sequence unless candidates have taken one or more as part of previous coursework: SEED 7452X, SEED 7453X, SEED 7454T, and SEED 7455T.

Mathematics (12 credits):
Four of the following mathematics courses, or mathematics courses approved by the mathematics department chair or Graduate Deputy, are required: MATH 7271T, MATH 7273T, MATH 7274T, MATH 7275T, MATH 7276T, MATH 7277T, MATH 7278T.

Courses

College-verified fingerprint clearance may be required for some School of Education courses. Refer to the School of Education website, Fingerprint Verification instructions at https://www.brooklyn.edu/soe/certification/fingerprints/

SEED 6002T Issues and Strategies in Education

15 hours each term; 1 credit each term.
Timely issues, strategies, and techniques of modern educational practice. Course content varies from term to term. This course is not creditable toward the degrees in education. May be repeated for credit.

Prerequisite: license or certificate to serve as teacher, paraprofessional, or supervisor in day care center, kindergarten, or elementary or secondary school.

SEED 7001T Supervised Practicum in Teaching

30 hours, 1 credit
College supervised internship for 14 weeks of full time teaching with Transitional B certification or Internship license in teaching or in private schools. Informal and formal observations of teaching practice. Alignment of teacher practices with the New York State Teaching Standards. May be repeated for up to 6 credits.

Prerequisite: Full time employment in teaching and departmental permission.

SEED 7002T Seminar on Issues and Strategies in Adolescence Education

15 hours; 1 credit
Seminar on timely issues, strategies, and techniques of modern educational practice. Course content varies from term to term. This course is creditable toward degrees in education. May be repeated for credit.

Prerequisite: Open only to graduate students in Secondary Education.

SEED 7038X Special Topics in Education

45 hours; 3 credits
Selected topics or recent advances in education that reflect current interests, professional needs, and educational problems of teachers and other school personnel. Topics vary from term to term. Not open to all students who have taken EDUC 7038X

Prerequisite: license or certificate to serve as teacher, paraprofessional, or supervisor in day care center, kindergarten, elementary, or secondary school. Additional prerequisites may be required for a specific topic.

SEED 7039X Special Topics in Education

45 hours; 3 credits
Selected topics or recent advances in education that reflect current interests, professional needs, and educational problems of teachers and other school personnel. Topics vary from term to term. Not open to all students who have taken EDUC 7039X.

Prerequisite: license or certificate to serve as teacher, paraprofessional, or supervisor in day care center, kindergarten, elementary, or secondary school. Additional prerequisites may be required for a specific topic.

SEED 7040X Special Topics in Education

45 hours; 3 credits
Selected topics or recent advances in education that reflect current interests, professional needs, and educational problems of teachers and other school personnel. Topics vary from term to term. Not open to students who have taken EDUC 7040X.

Prerequisite: license or certificate to serve as teacher, paraprofessional, or supervisor in day care center, kindergarten, elementary, or secondary school. Additional prerequisites may be required for a specific topic.

SEED 7041T Honors Seminar in Education I, II

30 hours each term; 2 credits each term
Individual study and research supervised by a faculty member. A written report is required. Not open to students who have taken EDUC 7041T.

Prerequisite: 12 credits in graduate courses including at least two education courses; and evidence of superior scholarship, high professional promise, and capacity for self-directed study; and permission of the deputy for graduate studies.

SEED 7042T Honors Seminar in Education I, II

30 hours each term; 2 credits each term
Individual study and research supervised by a faculty member. A written report is required. Not open to students who have taken EDUC 7042T.

Prerequisite: 12 credits in graduate courses including at least two education courses; and evidence of superior scholarship, high professional promise, and capacity for self-directed study; and permission of the deputy for graduate studies.

SEED 7310T Methodology in Middle Childhood and Adolescence Science Teaching I
45 hours plus conference, 15 hours field experience; 3 credits
Implementation, adaptation, and assessment in practice of research validated science curricula for middle childhood with an emphasis on the life and environmental sciences. Approaches to integrating language arts and social sciences in teaching and learning science; development of reading, oral and written communication skills in the sciences. Adapting pedagogy to the needs of English language learners and students with diverse learning styles. Examination of environmental ethics and issues. Field trips will be required. Not open to students who have taken EDUC 7310.

Prerequisite: matriculation in middle childhood science education.

SEED 7311T Methodology in Middle Childhood and Adolescent Science Teaching II
45 hours plus conference, 15 hours field experience; 3 credits
Continuation of Education 7310 [714.25]T. Methods of integrating science with math and technology in the middle school with an emphasis on physical and earth science. Developing quantitative and critical thinking skills. Design and assessment of inquiry- and problem-based curriculum integrating quantitative reasoning. Adapting methods to the needs of students with disabilities, and students with diverse learning styles. Purposes and types of student assessment. Field trips will be required. Not open to all students who have taken EDUC 7311T.

Prerequisite: SEED 7310T [714.25]T.

SEED 7312T Seminar I in Pedagogy and Curriculum, Middle Childhood and Adolescence Education: Science
45 hours, plus conference; 3 credits
Seminar concerning problems and issues in the organization of subject matter. Introduction to methods of instruction, curriculum development and assessment, classroom management, and developing school-community relationships. Focus on 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. Preparation in literacy and language acquisition. Attention given to particular needs and interests of students and methods of integrating technology into the classroom. Role of materials and resources applied to teaching science at grade levels appropriate for state certification requirements. Not open to students who are enrolled in or have completed Secondary Education 7540T. Not open to all students who have taken EDUC 7312T.

Corequisite: SEED 7542T [764.5T].

SEED 7314X Physical and Life Science Instruction and Learning I, Middle Childhood and Adolescence
45 hours seminar plus conference; 3 credits
Introductory content and methods course and differentiated instruction in physical and life sciences. Provides new and practicing teachers the opportunity to examine, discuss, create and revise the knowledge they need to become successful science teachers. Common themes in physical and life sciences and design curricula that enhance students' science investigative skills and critical thinking using principles of constructivism to guide the design and implementation process, and teaching practices. Addressed are creative writing and literacy, methods of inquiry, national, NYS and NYC Science Standards, science laboratory safety and skills, the scientific method, use of technology and web resources, science literacy, forms of assessment, scientific misconceptions, science in the community, and the teaching and learning of science in multicultural and diverse classrooms. Field experience (25 hours) required. Not open to all students who have taken EDUC 7314X.

SEED 7315X Historical, Philosophical, and Social Foundations of Education and Science
45 hours seminar plus conference ; 3 credits
Historical, philosophical, social and legal foundations of education. History of Western and non-Western science; history of science education. Cultural embeddedness of science; issues in science and science education. Not open to all students who have taken EDUC 7315X

SEED 7317T Human Tracks in the Urban Landscape: A practicum in art, technology and the environment
45 hours; 3 credits
Exploration of the visual arts and the natural sciences as complementary forms of active inquiry. Investigation of representational codes, epistemologies, and habits of mind common to the artistic and scientific endeavors. Construction of site-specific, artistic installations and digital imagery as strategies for observation, documentation, and reflection upon contemporary environmental and aesthetic issues. Introduction to designing interdisciplinary curriculum, instruction, and evaluation of learning across visual art and environmental science content areas. Pedagogical focus on Pre-K-12 students from diverse cultural and linguistic backgrounds; including gifted and talented and students with disabilities. Topics include affordances of natural and man-made materials, tools, and resources; digital image technology; place-based instruction, theories and research-validated pedagogical methodology. Studio and on-site field work required. This course is the same as ECAE 7546T and CBSE 7317T.

Prerequisites and/or corequisites: Matriculation in the MA or Advanced Certificate Program in Teaching Art (PK-12); the MS in Childhood Education Teacher of Science and Environmental Education (1-6); the M.A.T in Adolescence Science Education (grades 7-12), or post-graduate, in-service teachers of Art or Science.

SEED 7320T Research Seminar in Teaching: Science and Environmental Education I
45 hours, plus conference; 3 credits
Educational research as applied to analysis of teaching and learning with an emphasis on science and environmental education. Discussion of a range of research methodologies including action research and uses of technology to access and process information in educational research to analyze functioning of teachers in urban schools with children of diverse abilities and backgrounds.

SEED 7321T Research Seminar in Teaching and Learning: Science and Environmental Education II
45 hours, plus conference; 3 credits
Advanced concepts of educational research, including research study design and utilization of data. Application of techniques of educational research, using materials relevant to science and environmental education. Design and implementation of an original action research project in the school setting.

SEED 7324X Physical and Life Science Instruction and Learning II, Middle Childhood & Adolescence
45 hours plus conference; 3 credits
Advanced content and methods course and differentiated instruction in physical and life sciences. Provides new and practicing teachers the opportunity to examine, discuss, create and revise the knowledge they need to become successful science teachers. Its central goals are to examine common themes in physical and life sciences and design curricula that enhance students; literacy, science investigative skills and critical thinking using principles of constructivism to guide the design and implementation process, and teaching practices. Topics in physical and life science curriculum and standards, methods of inquiry, the scientific method, science laboratory safety and skills, use of technology and web resources, science literacy, forms of assessment, science in the community, and teaching and learning science in multicultural and diverse classrooms. Development of science reading and writing skills, graphic organizers, literacy for students with special needs. Field experience (25 hours) required. Not open to all students who have taken EDUC 7324X

Prerequisite: SEED 7314X [711.04X].

SEED 7325X Middle Childhood and Adolescence Development, Culture, Cognition, and Language in Science Learning and Teaching
45 hours seminar plus conference; 3 credits
Developmental, psychological, and educational approaches to understanding and nurturing scientific curiosity and learning in middle childhood, and adolescent years. Exploration of learning theories, culture, race, gender, role of language and literacy; and implications for practice. Applying these considerations to science learning and teaching. Motivation and assessment. Considerations for learners with special needs, and diverse and gifted learners. Field experience (25 hours) and field study required. Not open to students who have taken EDUC 7325X.

SEED 7326T Seminar II in Pedagogy and Curriculum, Middle Childhood and Adolescence Education: Science
45 hours, plus conference; 3 credits
Advanced theories and methods of teaching science at grade levels appropriate for New York State certification requirements; focus on developing reflective practitioners and research based instruction; analysis of New York State Learning Standards in science; teaching science to all students, including students with special needs and English language learners; integrating technology into the classroom; developing, implementing, and evaluating the science curriculum in urban classrooms. Students enroll in workshops in identifying, reporting, and responding to child abuse and in substance abuse, fire and arson prevention and safety education. Not open to students who have taken EDUC 7326T.

Prerequisite: SEED 7500X [742X], 7501X [792.1X] and permission of the chairperson of the major department and the head of the program in adolescence science education.
Prerequisite or corequisite: SEED 7312T [763.04] and 7542T [764.5].
Corequisite: 7543T [764.51].

SEED 7330T Middle Childhood Science Education: Seminar and Student Teaching Practicum I
30 hours seminar, 150 hours or 20 days of supervised student teaching in Middle Childhood Education grades 5-6; 3 credits
Supervised field work in teaching middle childhood science education. Emphasis on the development of an interdisciplinary approach to teaching pre-adolescents from diverse backgrounds, those who are English language learners, and those with special needs. Integration of instructional technology and topics required by New York State standards in Professional certification. Not open to students who have taken EDUC 7330T.

Prerequisite: initial Certification in Early Childhood Education or in a Special Subject or 12 credits in education including SEED 7500X [742X], 7501X [792.1X], 714.25T, 7311T [715.25T] and permission of the Program Head.

SEED 7332T Middle Childhood and Adolescence Science Education: Seminar and Student Teaching Practicum II
30 hours seminar, 150 hours or 20 days of supervised student teaching in Middle Childhood Education grades 7-9; 3 credits
Supervised field work in teaching middle childhood science education. Emphasis on teaching young adolescents from diverse backgrounds, those who are English language learners, and those with special needs. Integration of disciplinary curriculum, instructional technology, and topics required by New York State standards in Professional certification. Not open to all students who have taken EDUC 7332T.

Prerequisite: initial certification or SEED 7500X [742X], 7501X [792.1X] and permission of the Program Head.

SEED 7340T Seminar in Educational Research: Science
45 hours seminar, plus conference; 3 credits
Advanced concepts of educational research compared and contrasted with modes of inquiry in the science disciplines; emphasis on qualitative and quantitative research methods and possible uses of research. Analysis of research relevant to teaching the sciences. Formulation, development, and realization of an original research project relevant to teaching and learning science. Not open to all students who have taken EDUC 7340T.

Prerequisite: Completion of all program conditions and SEED 7502T, 7327T, and 3 credits of an approved elective course or 6 credits in middle childhood education and permission of the head of the program in adolescence science education .

SEED 7380T Methods of Instruction in Adolescence Science Teaching
45 hours seminar plus conference; 3 credits
Methods of instruction and lesson planning, curriculum development and assessment, classroom management, and developing school-community relationships; analysis of New York State science curriculum, and local and national standards in science. Focus on developing self-reflective teaching styles and assessment procedures and research based instruction to address the learning needs of a diverse student population, students with special needs, English language learners; developing, implementing, and evaluating the science curriculum in urban classrooms; backwards design. Attention given to particular needs and interests of students and methods of integrating technology into the classroom. Role of materials and resources applied to teaching science at grade levels appropriate for state certification requirements. Observing, studying, and developing curriculum in light of classroom observations. Field experience of a minimum of 25 hours is required.

SEED 7381T Science Student Teaching Seminar I
45 hours seminar plus conference; 3 credits
Seminar for administration, guidance, and instruction for the student teaching field experience in science education. Each class meeting will be used to "debrief" and reflect on student teaching experiences, review of State certification requirements, discuss teaching and learning of science in light of student teaching experiences and observations. Students enroll in appropriate NYS certification exams and required workshops. Curriculum development, instructional planning, and multiple research-validated instructional strategies for teaching students within the full range of abilities -- and skill in designing and offering differentiated instruction that enhances the learning of all students in the content area(s) of the certificate. Formal and informal methods of assessing student learning and the means of analyzing one's own teaching practice -- and skill in using information gathered through assessment and analysis to plan or modify instruction, and skill in using various resources to enhance teaching. Distribution and collection of student teaching evaluations and timesheets. Development of portfolios. Students will be engaged in the completion of appropriate NYS certification, workshops and examination requirements.

Prerequisite: SEED 7380

SEED 7383T Science Student Teaching Seminar II
30 hours seminar plus conference; 2 credits
Advanced seminar for administration, guidance, and instruction for the student teaching field experience in science education. Each class meeting will be used to "debrief" and reflect on student teaching experiences, review of State certification requirements, discuss teaching and learning of science in light of student teaching experiences and observations. Students enroll in appropriate NYS certification exams and required workshops. Curriculum development, instructional planning, and multiple research-validated instructional strategies for teaching students within the full range of abilities -- and skill in designing and offering differentiated instruction that enhances the learning of all students in the content area(s) of the certificate. Formal and informal methods of assessing student learning and the means of analyzing one's own teaching practice -- and skill in using information gathered through assessment and analysis to plan or modify instruction, and skill in using various resources to enhance teaching. Distribution and collection of student teaching evaluations and timesheets. Students will complete all appropriate NYS certification and examination requirements. Completion of e-portfolios.

Prerequisite: SEED 7380T
Prerequisite/Corequisite: SEED 7542T and SEED 7541T

SEED 7451X Teaching Mathematics in Middle Childhood
45 hours plus conference, 20 hours supervised field experience; 3 credits
Objectives, methods, and materials for teaching middle childhood mathematics. Creating classroom and school environments to support the mathematics learning of all students in grades 5-9, including students with special needs and English language learners. Overview of the NCTM Principles and Standards and analysis of the New York State Learning Standards for mathematics in grades K-12. Overview of the 5-9 curriculum strands (number, algebra, probability, and data analysis). Uses of technological tools in the math classroom. Planning lessons according to the New York City 5-9 pacing calendars. Role of problem solving and higher order thinking in mathematics instruction. Workshops in identifying, reporting, and responding to child abuse and substance abuse, fire and arson prevention and safety education. Not open to students who have taken EDUC 7451X.

Prerequisite: Open only to students in program MCHES-MSED

SEED 7452X Methods for Teaching Number and Algebra in Grades 5 through 9
45 hours plus conference, 20 hours supervised field experience; 3 credits
Overview of the number and operations 5-9 grades curriculum strand: ways of representing numbers, relationships among numbers, and number systems; meanings of and relationships among operations; fluent mental and written computation and reasonable estimation. Overview of the algebra 5-9 grade curriculum strand: patterns, relations, and functions; representing and analyzing mathematical situations and structures using algebraic symbols; modeling and solving contextualized problems using various representations, such as graphs, tables, and equations; using graphs to analyze the nature of changes in linear relationships. Using graphing calculators. Using diagnostic techniques and differentiating materials and methods for teaching number and operations and algebra. Not open to students who have taken EDUC 7452X.

Prerequisite: Open only to students in program MCHES-MSED

SEED 7453X Methods for Teaching Geometry and Measurement, Probability and Data Analysis in Grades 5 to 9
45 hours plus conference, 20 hours supervised field experience; 3 credits
Overview of the Geometry and Measurement strands in 5-9 grades: Spatial visualization and geometric modeling; use of transformations and symmetry to analyze mathematical situations; Coordinate geometry. Overview of the Probability and Data Analysis strand in 5-9 grades: Selection and use of appropriate statistical methods to analyze data; Development and use of diagrams as tools for organizing data and solving

probability and data analysis problems; Developing and evaluating inferences and predictions based on data. Basic probability concepts for testing conjectures. Effective strategies for guiding interaction in diverse classrooms. Integrating technology in the teaching of geometry, probability, and data analysis. Diagnostic techniques and differentiation of materials and methods for teaching geometry, measurement, probability and data analysis in inclusion and linguistically and culturally diverse classrooms. Not open to students who have taken EDUC 7453X.

Prerequisite: SEED 7452X

SEED 7454T Advanced Topics in Grades 5 to 9 Mathematics Instruction
45 hours plus conference; 3 credits
Advanced topics in the teaching and learning of number, algebra, geometry, probability and data analysis. Teaching mathematics through non-routine problems. Functions of symbols and models. Designing units that interconnect mathematics curriculum strands. Thematic instruction: Planning interdisciplinary projects that link mathematics to literacy, sciences, visual arts, and social studies. Using technological tools in the teaching of algebra, geometry, probability, and data analysis. Techniques for analyzing classroom data. Language and mathematics: Attention to the linguistic demands of math teaching and learning; improving instruction through the analysis of classroom interaction. Using diagnostic techniques and differentiating materials and methods for teaching in inclusion and linguistically and culturally diverse classrooms. Not open to students who have taken EDUC 7454T.

Prerequisite: SEED 7453X.

SEED 7455T Seminar in Applied Theory and Research in Middle School Mathematics Education
45 plus conference; 3 credits
Formulation, development, and implementation of an original action research or teaching experiment project that includes review of related research, detailed documentation of the experimental lessons, analysis and interpretation of findings, and reflection on the implications of these for improving classroom practice. Connecting action research results to improving instruction, with particular focus on developing fluency in mathematical language (spoken, written, and diagrammatic) in inclusion and culturally and linguistically diverse classrooms. Current issues, professional development, and leadership in mathematics education. Not open to all students who have taken EDUC 7455T.

Prerequisite: SEED 7454T

SEED 7481T Methods and Content 7-12: Number, Operations, and Algebra
45 hours plus conference, 20 hours field experience; 3 credits
Integration of theory and practice in the teaching and learning of mathematics in grades 7-12. Methods and materials for teaching key topics in number and operations, and algebra. Role of problem solving and higher order thinking skills in mathematics instruction. Focus on the contexts of urban schools, including English Language Learning or special needs students. Assessment techniques. Preparation in literacy and language acquisition as it relates to the teaching of mathematics. Development of critical self-reflection. Not open to students who have taken SEED 7461T or EDUC 7461T.

Prerequisite: Only open to students in program MATHTCH-MA

SEED 7482T Seminar I in Pedagogy and Curriculum, Middle Childhood and Adolescence Education: Mathematics
45 hours, plus conference; 3 credits
Methods of instruction, curriculum development and assessment, with a focus on algebra and geometry. Classroom management and developing school-community relationships. Focus on 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. Preparation in literacy and language acquisition as it relates to the teaching of mathematics. Attention given to particular needs and interests of students. Role of materials and resources applied to teaching mathematics at grade levels appropriate for state certification requirements. Not open to students who are enrolled in or have completed Education 7540T [763.32T]. Also not open to students who have taken SEED 7462T or EDUC 7462T.

Prerequisite: Only open to students in program MATHTCH-MA

SEED 7483T Methods & Content 7-12: Data Analysis, Probability and Trigonometry
45 hours seminar, plus conference; 20 hours field experience; 3 credits
Course concerning theories and methods of teaching mathematics, curriculum development and assessment at grade levels appropriate for New York State certification requirements with a focus on data analysis and probability and trigonometry. Focus on developing reflective practitioners and research based instruction; analysis of New York State Learning Standards in mathematics; teaching mathematics to all students, including students with special needs and English language learners; integrating technology into the classroom; developing, implementing, and evaluating the mathematics curriculum in urban classrooms. Role of materials and resources applied to teaching mathematics at grade levels appropriate for state certification requirements. Not open to students who have taken SEED 7463T or EDUC 7463T.

Prerequisite: SEED 7482X

SEED 7484T Advanced Seminar in Pedagogy and Curriculum Middle Childhood and Adolescence Education: Mathematics
45 hours seminar, plus conference; 3 credits
Expansion of the student's knowledge and skills in mathematics to develop individual approaches to effective teaching in different classroom situations. Improving teaching methods through review of relevant research, reflection on self-as-teacher, analysis of classroom interactions, discourse, and effective teaching and learning environments. Introduction to methods of educational research. Analysis of modes of communication in the classroom. Examination of the specialized discourses of the discipline and implications for teaching. Not open to students who have taken SEED 7544T or EDUC 7544T.

Prerequisite: SEED 7483X

SEED 7485T Seminar in Educational Research: Mathematics
45 hours seminar, plus conference; 3 credits
Advanced concepts of educational research compared and contrasted with modes of inquiry in the discipline; emphasis on qualitative and quantitative research methods and possible uses of research. Analysis of research relevant to teaching mathematics. Formulation, development, and realization of an

original research project relevant to teaching and learning mathematics. Not open to all students who have taken SEED 7464T or EDUC 7464T.

Prerequisite: SEED 7484T

SEED 7500X Perspectives on Education: Teaching Children and Adolescents in Cultural Context
45 hours seminar, plus conference, 25 hours field experience; 3 credits
An introduction to the philosophy, psychology, sociology, culture, and history of educating all children and adolescents. Development of children and adolescents in different cultures within American society in relation to existing value systems, with emphasis on the manner in which biological and psychological factors are interpreted in accordance with prevailing values. Focus on relationship between theory and practice. Opportunities through class discussion, portfolio preparation, and field experience for reflection on oneself as teacher, interactions beween school and community, teachers' roles, and issues of diversity and social justice. Not open to students who have taken EDUC 7500X.

SEED 7501X Analysis of Classroom Interaction and Curriculum
45 hours seminar, plus conference, 25 hours field work; 3 credits
Improving teaching methods through techniques of self-analysis and analysis of classroom interactions. Analysis of the instructional settings and instructional strategies with focus on students with special needs and English language learners. Analysis of learning processes and modes of communication in the classroom. Examination of the specialized discourses of the subject disciplines in adolescent, middle, and childhood curricula. Analysis of uses of technology in the classroom. Not open to students who have taken EDUC 7501X.

Prerequisite or corequisite: SEED 7500X.

SEED 7502T Diversity and the Inclusive Classroom
45 hours; 3 credits
Examines the relationships between social identities and curriculum, teaching and the institution of school. Focuses on developing inclusive classrooms and addressing the needs of diverse student populations. Examination of curriculum, textbooks, and journals. Consideration of recent work on identity formation, multicultural education, anti-bias education, and institutional processes of labeling students. Development of materials and teaching methods for the inclusive classroom. Not open to students who have taken EDUC 7502T.

SEED 7503X Teaching Writing across the Curriculum
30 hours plus conference; 3 credits
Examination of the writing process as it may be used in subject areas. Study and application of recent research to classroom practice. Analysis of the relationship between writing, critical thinking, and learning and teaching in the subject area. Not open to students who have taken EDUC 7503X. Same as CBSE 7503X.

SEED 7504X Mindfulness in Teaching and Learning
45 hours seminar, plus conference; 3 credits
Invitation to explore the theory and practice of mindfulness with an emphasis on supporting student academic success and wellbeing in everyday life. Review of the scholarly literature with an emphasis on social-emotional learning. Examination of multi-logical approaches to physical and mental wellness. Engagement in wellness practices that lead to beneficial outcomes related to: education and social and emotional skills, attitudes about self, social and civic engagement.

SEED 7507X Sociocultural and Developmental Approaches to Teaching and Learning in Diverse Classrooms
45 hours seminar, plus conference; 25 hours field experience, 3 credits
Sociocultural, developmental, psychological, and educational approaches to understanding and nurturing motivation, curiosity and learning in middle childhood, and adolescent years. Exploration of theories of social and emotional learning, interpersonal interaction, culture, race, gender, role of language and literacy; implications for teaching and learning practices, planning and assessment. Considerations for learners with special needs, and diverse and gifted learners. Field experience (25 hours) and field study required.

SEED 7508T Advanced Seminar in Pedagogy and Curriculum, Middle Childhood and Adolescence Education: English
45 hours seminar, plus conference; 3 credits
Expansion of the student's knowledge and skills in English to develop individual approaches to effective teaching in different classroom situations. Improving teaching methods through review of relevant research, reflection on self-as-teacher, analysis of classroom interactions, discourse, and effective teaching and learning environments. Introduction to methods of educational research. Analysis of modes of communication in the classroom. Examination of the specialized discourses of the discipline and implications for teaching. Not open to students who have taken EDUC 7508T.

Prerequisite: Initial Certification or SEED 7500X [742X], 7501X [792.1X], 7531T [763.01T], 7542T [764.5T], 7514T [723.01T], and 7543T [764.51T] or equivalents.
Prerequisite or corequisite: SEED 7502T [742.2T].

SEED 7509T Advanced Seminar in Pedagogy and Curriculum, Middle Childhood and Adolescence Education: Social Studies
45 hours seminar, plus conference; 3 credits
Expansion of the student's knowledge and skills in social studies to develop individual approaches to effective teaching in different classroom situations. Improving teaching methods through review of relevant research, reflection on self-as-teacher, analysis of classroom interactions, discourse, and effective teaching and learning environments. Introduction to methods of educational research. Analysis of modes of communication in the classroom. Examination of the specialized discourses of the discipline and implications for teaching. Not open to students who have taken EDUC 7509T.

Prerequisite: Initial Certification or SEED 7500X [742X], 7501X [792.1X], 7532T [763.02T], 7542T [764.5T], 7515T [723.02T], and 7543T [764.51T] or equivalents.
Prerequisite or corequisite: SEED 7502T [742.2X].

SEED 7510T Advanced Seminar in Pedagogy and Curriculum Middle Childhood and Adolescence Education: Modern Languages
45 hours seminar, plus conference; 3 credits

Expansion of the student's knowledge and skills in the language to develop individual approaches to effective teaching in different classroom situations. Improving teaching methods through review of relevant research, reflection on self-as-teacher, analysis of classroom interactions, discourse, and effective teaching and learning environments. Introduction to methods of educational research. Analysis of modes of communication in the classroom. Examination of the specialized discourses of the language and implications for teaching. Not open to students who have taken EDUC 7510T.

Prerequisite: Initial Certification or SEED 7500X [742X], 7501X [792.1X], 7534T [763.11T], 7542T [764.5T], 7516T [723.11T], and 7543T [764.51T] or equivalents.
Prerequisite or corequisite: SEED 7502T [742.2T].

SEED 7512T Advanced Seminar in Pedagogy and Curriculum, Middle Childhood and Adolescence Education: Health and Nutrition Sciences
45 hours seminar, plus conference; 3 credits
Expansion of the student's knowledge and skills in health and nutrition sciences to develop individual approaches to effective teaching in different classroom situations. Improving teaching methods through review of relevant research, reflection on self-as-teacher, analysis of classroom interactions, discourse, and effective teaching and learning environments. Introduction to methods of educational research. Analysis of modes of communication in the classroom. Examination of the specialized discourses of the discipline and implications for teaching.

Prerequisite: Initial Certification or SEED 7500X [742X], 7501X [792.1X], 7542T [764.5T], 7518T [723.16T], 7543T [764.51T], CBSE 7536T, CBSE 7518T or equivalents.
Prerequisite or corequisite: SEED 7502T [742.2T].

SEED 7514T Seminar II in Pedagogy and Curriculum, Middle Childhood and Adolescence Education: English
45 hours, plus conference; 3 credits
Advanced theories and methods of teaching English at grade levels appropriate for New York State certification requirements; focus on developing reflective practitioners and research based instruction; analysis of New York State Learning Standards in English; teaching English to all students, including students with special needs and English language learners; integrating technology into the classroom; developing, implementing, and evaluating the English curriculum in urban classrooms. Students enroll in workshops in identifying, reporting, and responding to child abuse and in substance abuse, fire and arson prevention and safety education. Not open to students who have taken EDUC 7514T.

Prerequisite: SEED 7500X [742X], 7501X [792.1X] and permission of the head of the program in English education..
Prerequisite or corequisite: SEED 7531T [763.01T] and 7542T [764.5T].
Corequisite: 7543T [764.51T].

SEED 7515T Seminar II in Pedagogy and Curriculum: Social Studies
45 hours plus conference; 3 credits
Advanced theories and methods of teaching social studies at grade levels appropriate for New York State certification requirements; focus on developing reflective practitioners and research based instruction; analysis of New York State Learning Standards in social studies; teaching social studies to all students, including students with special needs and English language learners; integrating technology into the classroom; developing, implementing, and evaluating the social studies curriculum in urban classrooms. Students enroll in workshops in identifying, reporting, and responding to child abuse and in substance abuse, fire and arson prevention and safety education. Not open to students who have taken EDUC 7515T.

Prerequisite: SEED 7500X [742X], 7501X [792.1X] and permission of the program head of social studies.
Prerequisite or corequisite: SEED 7532T [763.02T] and 7542T [764.5T].
Corequisite: SEED 7543T [764.51T].

SEED 7531T Seminar I in Pedagogy and Curriculum, Middle Childhood and Adolescence Education: English
45 hours, plus conference; 60 hours observation; 3 credits
Seminar concerning problems and issues in the organization of subject matter. Introduction to methods of instruction, curriculum development and assessment, classroom management, and developing school-community relationships. Focus on 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. Preparation in literacy and language acquisition. Attention given to particular needs and interests of students and methods of integrating technology into the classroom. Role of materials and resources applied to teaching English at grade levels appropriate for state certification requirements. Not open to students who are enrolled in or have completed SEED 7540T [763.32T] or EDUC 7531T.

SEED 7532T Seminar I in Pedagogy and Curriculum, Middle Childhood and Adolescence Education: Social Studies
45 hours, plus conference; 60 hours observation; 3 credits
Seminar concerning problems and issues in the organization of subject matter. Introduction to methods of instruction, curriculum development and assessment, classroom management, and developing school-community relationships. Focus on 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. Preparation in literacy and language acquisition. Attention given to particular needs and interests of students and methods of integrating technology into the classroom. Role of materials and resources applied to teaching social studies at grade levels appropriate for state certification requirements.

SEED 7538T Student Teaching of Mathematics: Seminar and Practicum I
15 hours supervised student teaching; 30 hours field observation; 3 credits
Seven-week course in student practice teaching with seminar hours to prepare for State mandated portfolio of student teaching. Opportunity for extensive and intensive participation in teaching and school activities at the middle childhood and adolescence levels. Student teaching hours to be arranged. Observing, developing, and studying curriculum in light of teaching experiences and observations.

Prerequisite: SEED 7500X, SEED 7501X, and permission of the appropriate program head and the chair of the major department. Corequisite SEED 7539T.

SEED 7539T Student Teaching of Mathematics: Seminar and Practicum II
15 hours supervised student teaching; 30 hours field

observation; 3 credits
Seven-week course in student practice teaching with seminar hours to prepare for State mandated portfolio of student teaching. Opportunity to hone teacher candidate practices in alignment with the New York State Teaching Standards at the middle childhood and adolescence levels. Student teaching hours to full time, and in alignment with the daily school schedule and annual school calendar. Observing, developing, and studying curriculum in light of teaching experiences and observations.

Prerequisite: SEED 7500X, SEED 7501X, and SEED 7538T and permission of the appropriate program head and the chair of the major department. Prerequisite or corequisite SEED 7671X. Co-requisite SEED 7538T.

SEED 7541X Teacher Portfolio Assessment

0 credits, 1 hour
A multi-measure teacher portfolio assessment where candidates demonstrate the pedagogical knowledge and skills identified in the New York State Teaching Standards, as aligned with the New York State Culturally Responsive-Sustaining Education Framework, and their content knowledge and skill in teaching to the State learning standards in the grade band and subject area of a certificate sought. Grading system used for the course is Pass, No Pass.

Prerequisite and/or Corequisite: Student teaching fieldwork
Prerequisite: Recommendation by department chair or program coordinator

SEED 7542T Student Teaching Practicum I

Minimum of 300 hours of student practice teaching or as teacher of record; 2 credits
Opportunity, with a minimum of 70 days student teaching, to hone teacher candidate practices in alignment with the New York State Teaching Standards. Hours to be full time, and in alignment with the daily school schedule and annual school calendar. Observing, developing, and studying curriculum in light of teaching experiences and observations.

Prerequisite: (SEED 7500X or SEED 7380T or SEED 7630X) and (SEED 7600T or SEED 7610T or SEED 7620T or SEED 7453X or SEED 7483X or SEED 7314X or SEED 7324X or 7637X) and permission of the appropriate program head and the chair of the major department.
Corequisite: SEED 7541T and SEED 7601T or SEED 7611T or SEED 7621T or SEED 7454T or SEED 7484T or SEED 7381T or SEED 7383T or SEED or SEED 7634T.

SEED 7543T Student Teaching Practicum II

15 hours supervised teaching, 30 hours of field experience; 2 credits
Fourteen weeks of student practice teaching or 40 days as teacher of record with program approval or the number of hours required to fulfill New York State requirements. Hours to full time, and in alignment with the daily school schedule and annual school calendar. Daily supervised student teaching in grades and subject areas appropriate for New York State certification requirements. Observing, developing, and studying curriculum in light of teaching experiences and observations.

Prerequisite: (SEED 7500X or SEED 7380T or SEED 7630X) and (SEED 7600T or SEED 7610T or SEED 7620T or SEED 7453X or SEED 7483X or SEED 7314X or SEED 7324X or 7637X) and permission of the appropriate program head and the chair of the major department.
Corequisite: SEED 7601T or SEED 7611T or SEED 7621T or SEED 7454T or SEED 7484T or SEED 7381T or SEED 7383T or SEED or SEED 7634T.

SEED 7545X Integrating Technology and Media in Adolescence Education

30 hours lecture, 30 hours laboratory; 3 credits
Examination of the instructional applications of technology and media in Adolescence Education; consequent new roles for teachers and changes in classroom organization; computer literacy; analysis and evaluation of selected technologies and media designed for teaching various subject areas in grades 7-12. Not open to students who have completed CBSE 7215X [784.1X] or EDUC 7545X.

SEED 7548X Advanced Theories and Practice of Composition

30 hours plus conference; 3 credits
Theory and practice of teaching writing at the secondary level (grades 7-12), and such related issues as revision, evaluation, and teaching writing to English language learners. (This course is the same as English 7507X.) Not open to students who have taken EDUC 7548X.

SEED 7600T English Seminar I, Middle Childhood and Adolescence Education

45 hours, plus conference; 30 hours observation; 3 credits
Foundations of methods of curriculum and teaching of English to youth in middle and high school. Introduction to methods of culturally-responsive and anti-racist pedagogy curriculum development and assessment classroom management and developing relationships with parents guardians and community members. Focus on preparation in differentiation assessment and literacy in order to adapt to the learning needs of a diverse student population including recent (un)documented immigrants LGBTQ+ English-language learners and students with (dis) abilities. Attention given to the needs and interests of students and methods of integrating technology into the classroom. Not open to students who have taken SEED 7531T.

SEED 7601T English Seminar II, Middle Childhood and Adolescence Education

45 hours, plus conference; 30 hours observation; 3 credits
Advanced theories and methods of teaching English to youth in middle and high school. Building on Seminar I course content focus on methods of culturally-responsive and anti-racist pedagogy curriculum development and assessment classroom management and developing relationships with parents guardians and community members. Preparation in differentiation assessment and literacy in order to adapt to the learning needs of a diverse student population including recent (un)documented immigrants LGBTQ+ English-language learners and students with (dis)abilities. Attention given to the needs and interests of students and methods of integrating technology into the classroom.
Not open to students who have taken SEED 7514T.

Prerequisite: SEED 7500X, SEED 7600T and permission of the program coordinator in English education.
Corequisite: SEED 7542T

SEED 7602T Seminar in Educational Research: English

45 hours seminar, plus conference; 3 credits
Advanced concepts of educational research compared and

contrasted with modes of inquiry in the discipline; emphasis on qualitative and quantitative research methods and possible uses of research. Analysis of research relevant to teaching English. Formulation, development, and realization of an original research project relevant to teaching and learning English. Not open to students who have taken SEED 7521T.

Pre-requisite: (Enrolled in ENGLTCH-MA (ENGTCHRA)) or (enrolled in ENGLTCH-MA (ENGTCHR) and SEED 7600T)
Co-requisite: SEED 7601T.

SEED 7603X Advanced Theories and Practice of Composition
30 hours plus conference; 3 credits
Theory and practice of teaching writing at the secondary level (grades 7-12), and such related issues as revision, evaluation, and teaching writing to English language learners. (This course is the same as English 7507X.) Not open to students who have taken SEED 7548X.

SEED 7604T Curriculum & Instruction in Literacy & Language Arts
45 hours plus conference; 3 credits
Study and analysis of curriculum design and instructional and assessment practices shaped by research in literacy and its relation to English Language Arts in grades 7-12. Collaborative investigation of literacy theories as a linguistic, sociocultural, and political practice for all students, but especially for those who have been poorly served educationally due to race/ethnicity, social class, nationality/language, gender, dis/ability, and sexuality. Develop and deepen understanding of multiple literacies whether print-based, cultural, multimodal, or digital. Alignment of instruction with state and national standards.

SEED 7610T Social Studies Seminar I, Middle Childhood and Adolescence Education
45 hours, plus conference; 30 hours observation; 3 credits
Foundations of methods of curriculum and teaching of social studies to youth in middle and high school. Introduction to methods of culturally-responsive and anti-racist pedagogy curriculum development and assessment classroom management and developing relationships with parents guardians and community members. Focus on preparation in differentiation assessment and literacy in order to adapt to the learning needs of a diverse student population including recent (un)documented immigrants LGBTQ+ English-language learners and students with (dis)abilities. Attention given to the needs and interests of students and methods of integrating technology into the classroom. Not open to students who have taken SEED 7532T.

SEED 7611T Social Studies Seminar II, Middle Childhood and Adolescence Education
45 hours, plus conference; 30 hours observation, 3 credits
Advanced theories and methods of teaching social studies to youth in middle and high school. Building on Seminar I course content focus on methods of culturally-responsive and anti-racist pedagogy curriculum development and assessment classroom management and developing relationships with parents guardians and community members. Preparation in differentiation assessment and literacy in order to adapt to the learning needs of a diverse student population including recent (un)documented immigrants LGBTQ+ English-language learners and students with (dis)abilities. Attention given to the needs and interests of students and methods of integrating technology into the classroom. Not open to students who have taken SEED 7515T.

Prerequisite: SEED 7500X, SEED 7610T and permission of the program head of social studies.
Corequisite: SEED 7542T

SEED 7612T Seminar in Educational Research: Social Studies
45 hours seminar, plus conference; 3 credits
Advanced concepts of educational research compared and contrasted with modes of inquiry in the discipline; emphasis on qualitative and quantitative research methods and possible uses of research. Analysis of research relevant to teaching social studies. Formulation, development, and realization of an original research project relevant to teaching and learning social studies. Not open to students who have taken SEED 7522T.

Pre-requisite: (Enrolled in SSTCHR-MA (SSTTCHOPTA)) or (enrolled in SSTCHR-MA (SSTTCHOPTB) and SEED 7610T)
Co-requisite: SEED 7611T.

SEED 7613X Teaching Concepts of Geography in Middle and High School
45 hours; 3 credits
Concepts of contemporary geography, survey of key current global issues and examination of several of the world's major geographic realms; issues of globalization as well as particular details of critical regions: South America, East Asia, South Asia, Europe, North America, North and Southern Africa. Investigation and development of curriculum and instructional plans to support the teaching of geography to students in grades 7-12. Not open to students who have taken SEED 7584X.

SEED 7620T Modern Languages Seminar I, Middle Childhood and Adolescence Education
45 hours, plus conference; 60 hours observation; 3 credits
Seminar concerning problems and issues in the organization of subject matter. Introduction to methods of instruction, curriculum development and assessment, classroom management, and developing school-community relationships. Focus on 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. Preparation in literacy and language acquisition. Attention given to particular needs and interests of students and methods of integrating technology into the classroom. Role of materials and resources applied to teaching modern languages at grade levels appropriate for state certification requirements. Not open to students who have taken SEED 7534T.

SEED 7621T Modern Languages Seminar II, Middle Childhood and Adolescence Education
45 hours, plus conference; 3 credits
Advanced theories and methods of teaching modern languages at grade levels appropriate for New York State certification requirements; focus on developing reflective practitioners and research based instruction; analysis of New York State Learning Standards in modern languages; teaching modern languages to all students, including students with special needs and English language learners; integrating technology into the classroom; developing, implementing, and evaluating the modern language curriculum in urban classrooms. Students enroll in workshops in identifying, reporting, and responding to

child abuse and in substance abuse, fire and arson prevention and safety education. Not open to students who have taken SEED 7516T.

Prerequisite: SEED 7500X, SEED 7620T and permission of the program coordinator in Modern Languages education.
Corequisite: SEED 7542T

SEED 7622T Seminar in Educational Research: Modern Languages
45 hours seminar, plus conference; 3 credits
Advanced concepts of educational research compared and contrasted with modes of inquiry in the discipline; emphasis on qualitative and quantitative research methods and possible uses of research. Analysis of research relevant to teaching modern languages. Formulation, development, and realization of an original research project relevant to teaching and learning modern languages. Not open to students who have taken SEED 7523T.

Pre-requisite: (Enrolled in FRENTCH-MA (FRNTCHOPTA) or SPANTCH-MA (SPNTCHOPTA)) or ((enrolled in FRENTCH-MA (FRNTCHOPTB) or SPANTCH-MA (SPNTCHOPTB)) and SEED 7620T and SEED 7621T)

SEED 7630T Seminar in Pedagogy and Curriculum: Physical Education P-5
45 hours seminar, 3 credits
Introduction of knowledge and skills in P-5 physical education to develop individual approaches to effective planning, instruction and assessment in different classroom situations. Improving teaching methods through review of relevant research, reflective practices, analysis of classroom interactions, discourse, and effective teaching and learning environments. Analysis of patterns and modes of communication in the classroom. Examination of the specialized discourses of the discipline and implications for teaching elementary physical education.Not open to students who have taken SEED 7511T.

SEED 7631X Seminar in Pedagogy and Curriculum: Physical Education 6-12
45 hours seminar, 20 hours field work; 3 credits
Developing teaching methods through study of secondary PE content, techniques of reflection, and analysis of classroom interactions. Analysis of the instructional settings and instructional strategies with focus on designing learning supports for all students. Analysis of learning processes and modes of communication in the classroom are emphasized in areas of planning, instruction and assessment for all students. Analysis of uses of technology in the classroom. Not open to students who have taken SEED 7501X.

SEED 7632T Advanced Seminar I in Pedagogy and Curriculum; Physical Education P-12
45 hours, 3 credits
An advanced seminar addressing current issues and trends in physical education. Students will examine case studies that address problems and issues in the organization of subject matter, methods of instruction, curriculum design, development and assessment, classroom management, and developing school-community relationships. Additional focus is on self-reflective teaching practices and assessment procedures to address the learning needs of diverse student populations. Attention given to the needs and interests of students and methods of integrating technology into the classroom and the role of materials and resources applied to teaching physical education at all grade levels. Not open to students who are enrolled in or have completed taken SEED 7535T.

SEED 7633T Advanced Seminar in Pedagogy and Curriculum II: Physical Education P-12
45 hours, 3 credits
Theories and methods of teaching physical education at grade levels appropriate for New York State and New York City P-12 scope and sequence requirements. Focus on curriculum mapping, and designing instruction and assessment specific to grade level outcomes P-12. Additional emphasis on developing reflective practitioners who use research based instruction; analysis of New York State Learning Standards in physical education; teaching physical education to all students, including students with special needs and English language learners; integrating technology into the classroom; developing, implementing, and evaluating the physical education curriculum in diverse P-12 settings. Not open to students who have taken SEED 7517T

SEED 7634T Seminar with Student Teaching: Physical Education
45 hours, plus conference; 3 credits
Advanced theories and methods of teaching physical education at levels appropriate for state certification requirements (P-12); focus on developing reflective practitioners and leaders of inquiry; developing individualized instruction for all students; using technology for cooperative learning in the classroom and school; developing and evaluating new physical education curricula, grade level outcomes and authentic assessment techniques. Students will identify classroom and school cultures and become responsive to the needs of diverse students, English language learners and students with special needs.

Corequisite: SEED 7542T

SEED 7635X Motor Learning and Development P-12
45 hours; 3 credits
Theoretical perspectives in motor learning and development; principles of motion and stability; physical growth and aging; development of motor skills across the life span; perceptual-motor development; functional constraints to motor development; interaction of exercise and structural constraints; effects of practice regimens and feedback, and the theoretical perspectives relevant to motor development research. Students in this course will learn, examine, and analyze the theories and principles that relate to skillful movement, physical activity, and overall fitness in school-age and other participants.

SEED 7636X Physical Education Curriculum in Elementary and Secondary Schools
45 hours; 3 credits
Fundamental principles for curriculum design and development are explored including theory and history of the process. Sources and criteria for content selection and organization in P-12 programs for urban and suburban schools are discussed. (Not open to students who have completed KINS 7157X or SEED 7157X.)

SEED 7637X School-Based Social, Emotional and Curriculum Skills for PE
45 hours; 3 credits
Students will enhance their school leadership skills through a

variety of means including reading, lectures, presentations and interviews, with a focus on integrated curriculum models to address the specific needs of contemporary and diverse school communities and social and emotional learning (SEL). These skills will prepare the physical education teacher to function professionally in the school environment with school leadership, department leadership, their colleagues, students and parents. (Not open to students who have completed KINS 7159X or SEED 7159X)

SEED 7638X Advancing Instructional Practices in Physical Education
45 hours; 3 credits
Development of advanced skills in physical education pedagogy. Strategic class management and motivation skills based on current pedagogical research are discussed along with advanced planning, instruction and assessment strategies. (Not open to students who have completed KINS 7149X or SEED 7149X.)

Prerequisite: SEED 7630, 7631

SEED 7639T Administration, Leadership and Supervision in Physical Education
45 hours; 3 credits
General principles of administration, leadership, and supervision in physical education and sport programs. Emphasis on practical application of concepts, principles, and theories in physical education and sport. Current topics and trends in management and techniques of supervision in school settings with a focus on school- community and school-personnel relations. Preparation for physical educators and coaches to be leaders of and advocates for quality physical education and sport programs. (Not open to students who have completed KINS 7156T or SEED 7156T.)

SEED 7642T Seminar in Educational Inquiry: Physical Education
45 hours seminar, plus conference; 3 credits
Concepts of educational inquiry are addressed with emphasis on qualitative and quantitative methods and practical applications of results in P-12 settings. Analysis of research practices relevant to teaching physical education are examined and applied. Students will develop, and put into practice an original inquiry project relevant to teaching and learning in physical education. Not open to students who have taken SEED 7524T.

Prerequisites: SEED 7630T, SEED 7633T, SEED 7637X.

SEED 7643X Physical Education P-12: Standards Guided Planning for Instruction and Assessment
45 hours; 3 credits
This course will investigate best practices in the field of Physical Education through the lens of research and resources developed by Physical Education professionals. Students will investigate and examine documents such as the New York City Physical Education Scope and Sequence, the New York State Physical Education Standards P-12, the National Grade Level Outcomes, and the New York State Curriculum and Assessment Document. Students will also identify patterns and connections between popular academic resources used to develop physical education curricula and the current trends found in inquiry-based Physical Education instruction. Not open to students who have completed KINS 7990X, SEED 7990X.

SEED 7671X Children and Youth with Special Needs
45 hours, 25 hours field work; 3 credits
Characteristics of diverse student populations with a focus on English language learners and students with special needs, including the gifted. Clinical practice in the classroom environment regarding assessment, curriculum, management, integrations and positive supports, and interventions for English language learners and students with special needs, including the gifted in general education settings. Review of regulatory compliance. Focus on collaboration with other professionals including co-teaching, consultative and itinerant models. Engagement of family members in collaborative efforts. Clinical experiences (25 hours) in special education and/or inclusive classrooms required. This course is the same as CBSE 7671X.

SEED 7990X Directed Readings and Research
45 hours; 3 credits
The student works under the advisement of a faculty member in conducting independent research on topics related to their area of study. The student will typically produce an extensive research paper or any other such acceptable product as agreed upon with the faculty adviser to demonstrate their activities over the semester in exploring the agreed upon subject matter. (Not open to students who have completed KINS 7990X.)

Kinesiology courses

KINS 7151X Motor Development and Analysis
45 hours; 3 credits
Theoretical perspectives in motor development; principles of motion and stability; physical growth and aging; development of motor skills across the life span; perceptual-motor development; functional constraints to motor development; interaction of exercise and structural constraints; effects of practice regimens and feedback, and the theoretical perspectives relevant to motor development research. Students in this course will learn, examine and analyze the theories and principles that relate to skillful movement, physical activity, and fitness in one's life.

Prerequisite: none

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

SEED 6500X	**Psychological and Sociological Perspectives on Secondary Education and Adolescent Development**
SEED 6501X	**Studies of Curriculum in Secondary Education**
SEED 6503x	**Instructional Methods in Secondary Education**
SEED 6504X	**Student Teaching Practicum**
SEED 7313X	**Physical and Life Science, Theory and Content I, Middle Childhood & Adolescence**
SEED 7323X	**Physical and Life Science, Theory and Content II, Middle Childhood and Adolescence**
SEED 7327T	**Advanced Seminar in Pedagogy and Curriculum Middle Childhood and Adolescence Education: Science**
SEED 7389T	**Teaching Literacy in Middle and Secondary Schools**
SEED 7390T	**Practicum in Meeting the Literacy Needs of Students in Middle Schools**
SEED 7391T	**Practicum in Meeting the Literacy Needs of Students in High School**
SEED 7401T	**Middle Childhood Education: Advanced Methodology and and Interdisciplinary Approaches**
SEED 7402T	**Seminar in Applied Theory and Research in Mathematics Education I**
SEED 7403T	**Seminar in Applied Theory and Research in Mathematics Education II**
SEED 7465X	**Integrating Advanced Digital Technologies in Adolescence Mathematics**
SEED 7470T	**Seminar II in Pedagogy and Curriculum, Middle Childhood and Adolescence Education: Mathematics**
SEED 7505T	**Critical Issues in Education: Social Values and Individual Needs: Physical Education**
SEED 7525T	**Seminar in Educational Research: Health and Nutrition Sciences**
SEED 7527T	**Education and Ethics**
SEED 7528T	**Critical Issues in Education: Social Values and Individual Needs: English**
SEED 7529T	**Critical Issues in Education: Social Values and Individual Needs: Mathematics**
SEED 7540T	**Workshop in Secondary Education: Integrated/interdisciplinary curriculum**
SEED 7546T	**Critical Issues in Education: Social Values and Individual Needs: Social Studies**
SEED 7547T	**Critical Issues in Education: Social Values and Individual Needs: Science**
SEED 7549X	**Theater in the Classroom**

Sociology

Department office: 3612 James Hall
Phone: 718.951.5314

Full-time Faculty

Professors: Bank Muñoz, Braine, Gould, Lewis, Mose, Porter, Saint Paul, Shortell, Smithsimon, Vitale
Associate Professors: Fox, Manohar, Molina, Pan
Assistant Professors: Granville, Johnson, Shtob

With its study of social life, social change, and the social causes and consequences of human behavior, sociology is remarkably dynamic and extraordinarily broad. The sociology curriculum strongly emphasizes social theory and methods and will help you to understand the workings of societies, their institutions, organizations and groups by exposing you to the history, knowledge, theory and methods of the discipline. Faculty teaching in the program are active researchers. Our curriculum emphasizes not only formal knowledge of methods of data collection and tools of data analysis but also practical judgment in research settings, including archives and in the field.

Electives include race and ethnicity, work and labor, globalization, social class, immigration, and criminology. 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 that of others) and the larger social world. In all of your sociology courses you will be asked to examine and query a "world taken for granted."

Graduates are well prepared for various careers. Many of our students are currently employed and are pursuing a degree that will help them advance their present careers. Some of our students go on to sociology Ph.D. programs, while others pursue jobs in government service or with community based non-profits.

CUNY Ph.D.

The City University of New York offers a doctoral program in sociology. General information about CUNY Ph.D. programs is in the chapter “Support for Academic Success in Graduate School.” Sociology Department courses may be credited toward the CUNY doctoral degree with permission of the executive officer of the doctoral program. For information, students should consult the deputy chairperson of the Sociology Department and the executive officer of the doctoral program.

Courses

Unless a prerequisite is specific, students may apply graduate or undergraduate courses toward fulfillment of that prerequisite.

SOCY 7101X Development of Sociological Theory

45 hours; 3 credits
Critical examination of major treatises and schools in the development of sociological theory from Comte to twentieth-century theorists.

SOCY 7102X Contemporary Sociological Theory

45 hours; 3 credits
Critical discussion of current sociological theory. Relation of contemporary theory to empirical research.

SOCY 7111X Qualitative Methods of Sociological Research

45 hours; 3 credits
Qualitative concepts and methods of sociological research; their application in representative published studies.

SOCY 7112G Introductory Statistics

45 hours; 3 credits
Descriptive and inferential statistics appropriate for analysis of sociological data. Emphasis on concepts and implications of sociological statistics rather than on mathematical foundations. Critical survey of statistical reasoning in major sociological studies.

SOCY 7113G Advanced Statistics

45 hours; 3 credits
Analysis of categorical data. Loglinear models for contingency tables. Logistic regression models. Aspects of multivariate analysis, multivariate normal distribution, MANOVA. Analysis of covariance, principal components, factor analysis. Classification and grouping techniques, discriminant function analysis, multidimensional scaling. Statistical computing.

Prerequisite: Sociology 7112G [712G], or permission of the chairperson.

SOCY 7204X Mapping Social Data

45 hours; 3 credits
This course provides an introduction to methodological tools and sociological theories related to the use of spatial methods

and mapping techniques for the analysis of social data. Topics covered include visualization and quantitative description of spatial data, Kriging, variogram modeling, point pattern analysis, global spatial regression, and locally weighted geographic regression models.

Prerequisite: SOC 7112G

SOCY 7314X Advanced Criminology

45 hours; 3 credits
Major sociological and cultural forces that lead to crime. Criminal behavior viewed as separable behavioral systems and as adaptations to variations in cultural standards and the social structure.

SOCY 7322X Sociology of Power

45 hours; 3 credits
Central problems of concern to sociologists studying the ability of individuals and groups to influence and/or control the behavior of others even against their will. Ways in which individuals and groups translate preferences into social organization. Focus on the institutionalization of power in states and economic structures. Competing sociological models and theories of power. Concepts of legitimacy and authority. The nature of power, inside of and outside of politics and governance. The dynamics of political and social change. Focus on the intersection of power and social class, gender and race.

SOCY 7341X Race and Ethnicity

45 hours; 3 credits
Overview of theories on race and ethnicity. Focus on urban environment. Relationship between different racial and ethnic groups. Development of racism and capitalism. Research paper required.

SOCY 7342X Sociology of Immigration

45 hours; 3 credits
Major sociological perspectives on international migration. The diverse causes, consequences and contexts of contemporary immigration. Linkages between local, regional, national and transnational processes organizing immigration. Impacts of global economics and geopolitics, immigration policies, the creation of social and technological linkages, familial, community and interpersonal relationships in immigration. Immigrant settlement, adaptation, transnational mobility in social, economic, political, and cultural arenas. Immigrant organizing and activism.

SOCY 7343X Social Class

45 hours; 3 credits
Various class, estate, caste systems. Their influences on behavior and values. Their relation to political power, social prestige, consumption style. Social mobility.

SOCY 7344X Sociology of Gender

45 hours; 3 credits
Exploration of the social construction of gender as a major social category and its production and maintenance as a master social status. Issues that will be explored are: gender and parenting; social scripting of sexuality; micropolitics of gender; gender, production, and power in nonindustrialized societies; gender and class in industrialized societies; occupational gender segregation in post-industrial societies; gender, class, and racial oppression in the United States; theories and strategies of feminism.

SOCY 7370X Environmental Sociology

45 hours; 3 credits
Dynamic interactions between social systems and ecosystems; incorporating the natural environment as a variable in sociological analysis; social origins of major environmental stresses; social conflicts produced by environmental; approaches to resolving social system-ecosystem disjuncture; major theoretical frameworks and debates in the sub-discipline; roles of science and technology in generating and responding to socio-environmental disorganization; role of socio-economic inequality in environmental conflicts; emergence of environmental social movement coalitions; linkages between economic processes and sustainable development trajectories.

SOCY 7401X Research Seminar in Special Topics in Sociology

45 hours; 3 credits
Seminar in special topics on research methodology and analytical approaches in sociology. Content of course varies and is determined by instructor.

SOCY 7403X Urban Sociology

45 hours; 3 credits
Sociology of urban communities and public space. Urban social trends, dynamics, processes, and problems from a sociological point of view. Impact of community, social context, ecology on urban institutions and residents. Sociological factor of metropolitan, including suburban, planning.

SOCY 7501X Independent Reading

Minimum of 135 hours of independent work and conference; 3 credits
Critical study, in an area of sociology selected by the student, of reading approved by a faculty adviser. One or more written reports or a final examination.

Prerequisite: matriculation in the sociology program and permission of the deputy chairperson.

SOCY 7502X Thesis Seminar Course

48 hours; 3 credits
Thesis preparation seminar. Topics based on students' theses. Final paper includes literature review and proposal for data collection and analysis, and is written in the style of a professional sociology proposal.

Prerequisites: Sociology SOCY 7101X, SOCY 7111X, and 7112G

SOCY 7503X Field Research

Minimum of 135 hours of independent work and conference; 3 credits
Data collection in the field under the supervision of a faculty advisor. Analysis of data. Preliminary presentation of the results.

Prerequisite: SOCY 7502X Thesis Seminar.

SOCY 7601G Thesis Preparation

15 hours, plus conference; 1 credit each term
Research supervised by a faculty member for the thesis. The work must be awarded a grade of B or higher in order to be eligible for consideration toward the completion of the master of arts degree in sociology. Students register for each of these courses only once.

Prerequisite: 21 credits in sociology and permission of the deputy chairperson.

SOCY 7602G Thesis Preparation

15 hours plus conference; 1 credit each term
Research supervised by a faculty member for the thesis. The work must be awarded a grade of B or higher in order to be eligible for consideration toward the completion of the master of arts degree in sociology. Students register for each of these courses only once.

Prerequisite: 21 credits in sociology and permission of the deputy chairperson.

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

SOCY 7201X Survey Research Methods

SOCY 7202X Social Networks

SOCY 7203X Demography

SOCY 7321X Sociology of Globalization and Sustainability

SOCY 7323X Sociology of Work and Labor

SOCY 7351X Sociology of Socialization

SOCY 7352X Social Conflict

SOCY 7361X The Sociology of the Family

SOCY 7362X The Sociology of Aging

SOCY 7396X Sociology of Medicine

Television, Radio & Emerging Media

Department office: 304 Whitehead Hall
Phone: 718.951.5555

Full-time Faculty

Professors: Fry, Jannone, Patkanian, Rodman, Sosa, Wasser
Associate Professors: Moore, Robinson
Assistant Professor: Hashmi
Lecturer: Dunphy

The Department of Television, Radio & Emerging Media is held in such high regard that the New York media--the most powerful and influential media market in the world--seeks out our graduates for positions in their organizations. Our facilities are all-encompassing and state-of-the-art in television, radio, and digital production, and our faculty members are experts in the artistic, business, and scholarly aspects of all media forms. In the M.S. program you will learn how rapid changes in communication technologies are revolutionizing media on all fronts, with an opportunity to focus on media literacy education. Our affiliations with ABC, CNBC, CBS, SONY Music, HBO, and numerous other media organizations can provide you with opportunities to intern and gain hands-on experience.

The many graduates who have gone on to distinguished media careers not only keep in touch with Brooklyn College but also keep us apprised of the latest developments in the industry, which enables us to keep pace with any and all advancements.

M.F.A. degree program in television production
HEGIS code 0603; SED program code 84002

The M.F.A. in television production provides students with the theoretical and practical background needed to become writers, directors and producers across platforms: from the established media industry to the evolving movement of independent television. We encourage our students to tell their own stories, develop their own audiences and to build their own networks. The program explores the larger social and cultural contexts which frame creative endeavors and emphasize critical analysis of media and history of visual storytelling. Our multi faceted curriculum exposes students to a wide range of existing genres of fiction and nonfiction storytelling as well as introduces them to new and evolving forms, such as virtual and transmedia storytelling. Students move seamlessly between single and multiple camera formats. They write, research, develop, direct and produce fiction and nonfiction narratives, comedy and drama pilots, documentaries and webisodes, and utilize our high definition television studio to create live-streaming internet broadcasts. Our incoming students bring to the classroom a wide range of ideas, skills and backgrounds. Many are experienced visual storytellers, others are writers and artists with little production experience. Together they are determined to find the appropriate artistic expression of their viewpoints and beliefs about the world.

This program is currently not accepting applications.

Matriculation requirements

Applicants must offer a well-rounded undergraduate record of at least a 3.0 GPA that suggests promise as a creative communication professional. Each applicant's record is considered individually in this respect. Applicants must submit a writing sample, which may be an essay about media, a scholarly paper, or a media script. Applicants must also submit a biographical statement of 500 to 1000 words that indicates experience, interest, and professional objectives. This statement should provide background information about the applicant and what he/she hopes to achieve by enrolling in the M.F.A. program. In addition the applicant must submit two letters of recommendation. Applicants are encouraged to submit examples of creative work in support of their application. However, previous professional or academic media experience is not required for admission to the program. The department's M.F.A. admissions committee may require an interview of applicants. International applicants are required to pass the Test of English as a Foreign Language (TOEFL) with a score of at least 580 on the paper-based test or 237 on the computer-based test or 92 on the internet-based test, before being considered for admission.

General matriculation and admission requirements of Graduate Studies are in the section "Admission" of the Graduate Bulletin.

Degree requirements

Fifty-one credits are required for the degree.
At least 45 credits must be taken in the Television, Radio & Emerging Media Department. Of the 51 credits, 45 credits must be taken in departmental required Television, Radio & Emerging Media courses; the remaining 6 credits are elective, and must be approved in consultation with the director of the M.F.A. program and the graduate deputy chairperson.

Every M.F.A. student shall be required to successfully complete the department's graduate core, and the Production specialization

courses.

The Television Production specialization for M.F.A. students encompasses the following courses: Television, Radio & Emerging Media 7731X, 7741G, 7752X, 7761G, 7742G, 7754G, 7780G, 7733G, 7756G, 7783G, 7764G, and 7784G for a total of 45 credits.

The remaining 6 credits are elective.

M.F.A. students may offer 3 credits of a Television Production Externship (Television, Radio & Emerging Media 7799X) toward the M.F.A. degree. This externship provides on-the-job production experience under the supervision of a selected television professional.

Creative work in the program must culminate in submission of two projects: multi-camera and single camera productions. The specific parameters of the student's creative thesis project must be formally approved by the graduate deputy chairperson in consultation with the student's faculty adviser. This audiovisual material shall meet the professional production and content standards appropriate for granting a terminal academic degree. The project will be accompanied by a production book acceptable to the department.

Courses in the Television, Radio & Emerging Media Department offered toward a degree must be 7000-level courses.

M.S. degree program in media studies
HEGIS code 0603; SED program code 77735

This program is a research and theory based program that emphasizes the connection between theory and practice. The curriculum examines the environments and impact of electronic media from social, political, cultural and economic perspectives. Students gain in-depth knowledge of the television and radio industries, emerging digital media industries, media literacy, and key critical, theoretical and research perspectives on media broadly. The program prepares students to apply their education in a variety of professional positions or to continue their education by enrolling in a doctoral program.

Matriculation requirements

Applicants must offer a well-rounded undergraduate record of at least a 3.0 GPA that suggests promise of success in the program. Each applicant's record is considered individually in this respect. Applicants must submit an essay about contemporary media and society, which can be an original essay written to accompany the application, or a 5 - 10 page scholarly paper that was written as an undergraduate. General matriculation and admission requirements of Graduate Studies are in the section "Admission." International applicants are required to pass the Test of English as a Foreign Language (TOEFL) with a score of at least 580 on the paper-based test or 237 on the computer-based test or 92 on the internet-based test, before being considered for admission.

Degree requirements (30 credits)

Thirty credits are required for the degree. Other than required courses, credits required for the degree must be in courses chosen in consultation with the graduate deputy chairperson or program advisor. The program of study must be approved by the department. Courses in the Television, Radio & Emerging Media Department offered toward the degree must be 7000-level courses. Students must complete 30 credits, at least 24 credits of which must be taken in the Television, Radio & Emerging Media Department.
Students may choose one of two possible tracks of study in the program. The first track is the M.S. in Media Studies, and the second track is the M.S. in Media Studies, Media Literacy Concentration.
Every student shall be required to successfully complete the following six core graduate courses:
Television, Radio & Emerging Media 7701X, 7710X, 7712X, 7713X, 7714X, and 7945.
Students in the M.S. in Media Studies, Media Literacy concentration are required to take, in addition to the six core graduate courses, the following:
Television, Radio & Emerging Media 7716X and 7769X.
Students in both tracks are encouraged to take the following:
Television, Radio & Emerging Media 7716X, 7772X, 7726X, and 7728X.

Students are also eligible to take as electives the following two television production courses: Television, Radio & Emerging Media 7730X and 7740G. Television, Radio & Emerging Media 7769X and 7796X will be available each semester. Students may take each of these courses only once during their program of study. Up to 6 credits may be taken outside the department with the approval of the graduate deputy chairperson or program advisor.

Students must pass a written comprehensive examination. The examination will consist of questions in areas in which the student has taken courses during his/her course of study. Information about the comprehensive examination is in the section "Academic Regulations and Procedures."

Honor Society

Alpha Epsilon Rho is a national honor society in radio and television. Members are selected from both undergraduate and graduate students on the basis of achievement.

Courses

Unless a prerequisite is specific, students may apply graduate or undergraduate courses toward fulfillment of that prerequisite.

TREM 7701X Introduction to Media Studies

45 hours; 3 credits
Introduction to the literature of mass media scholarship, methods of inquiry, bibliographic skills, and topical issues in the field. To be taken in student's first semester.

Prerequisite: permission of the graduate deputy chairperson or department chairperson.

TREM 7710X Media Studies Seminar

45 hours; 3 credits
Current topics in electronic media. Emphasizes both entertainment industry and critical/cultural perspective. To be taken in student's final semester.

Prerequisite: Television, Radio and Emerging Media 7701X [701X] and permission of the graduate deputy chairperson or department chairperson.

TREM 7712X The Digital Media Environment

45 hours; 3 credits
Examination of the relationship between digital media and society within the contexts of social and cultural theory. Emphasis on perspectives of cultural studies and media ecology. Analysis of changes in industry, audience, content, everyday practices and consciousness.

Prerequisite or corequisite: Television, Radio and Emerging Media 7701X or permission of the graduate deputy chairperson or department chairperson.

TREM 7713X Media and Communication History and Regulation

45 hours; 3 credits
In-depth industrial and cultural historical overview of the development of electronic mass communication. Historical and legal approaches and methods.

Prerequisite or corequisite: Television, Radio and Emerging Media 7701X [701X]; or permission of the graduate deputy chairperson or department chairperson.

TREM 7714X Critical Analysis of Media

45 hours; 3 credits
Textual and analytical approaches the scholarly study of media. Survey of the most significant Marxist, structuralist, semiotic and formalist readings of media over the past one hundred years.

Prerequisite or corequisite: Television, Radio and Emerging Media 7701X [701X]; or permission of the graduate deputy chairperson or department chairperson.

TREM 7716X Seminar in Media Literacy

45 hours; 3 credits
Historical development and current practices of the media literacy movement nationally and internationally; principles of media literacy. Students will engage with leaders and practitioners of media literacy, and will construct projects around media literacy needs and issues in the community.

Prerequisite: Television, Radio and Emerging Media 7701X

TREM 7725X Television and Radio Management Theory and Practice

45 hours; 3 credits
Theories of management of electronic mass media communication; industry structure, management styles and practices; finance and budgeting systems; human resource management; negotiation strategies.

Prerequisite: Television, Radio and Emerging Media 7701X [701X].

TREM 7727X Media Marketing and Promotion

45 hours; 3 credits
Principles of marketing and promotion. Developing marketing and promotion strategies. Implementing campaigns. Evaluating their effectiveness in attracting audiences and building audience share in increasingly competitive electronic mass communication industries. This course is the same as Business 7203X.

Prerequisite or corequisite: Television, Radio and Emerging Media 7701X [701X]; or permission of the graduate deputy chairperson or department chairperson.

TREM 7728X Global Media

45 hours; 3 credits
The globalization of television, Radio and Emerging Media; implications of transnational satellite communication; problems and opportunities in international coproduction; changing patterns in distribution to a global market. Analysis of program genres and styles in the context of language, culture, and developmental differences. (Not open to students who have completed Television, Radio and Emerging Media 7960X [796X], "Special Problems in World Television.")

Prerequisite: Television, Radio and Emerging Media 7701X [701X]; or permission of the
graduate deputy chairperson or department chairperson.

TREM 7730X Applied Media Aesthetics

45 hours; 3 credits
Analysis of the various audiovisual aesthetic "fields"-- light, color, two-dimensional and three-dimensional space, time, motion/pace/rhythm, sound; narrative storytelling devices; and character types as cultural archetypes.

Prerequisite or corequisite: Television, Radio and Emerging Media 7701X [701X].

TREM 7733G Sound Recording and Design

30 lecture, 30 hours laboratory; 3 credits
Principles and techniques in sound recording and design for television production and sound art. Aesthetics and techniques of sound recording and design through all stages of production: research and development through post-production. Students will learn how to construct a complex soundscape in a variety of digital platforms. The course is taught as a workshop.

Prerequisite: Permission of the graduate deputy chairperson.

TREM 7741G Research and Development. Introduction to Scriptwriting
45 hours; 3 credits
The art of visual storytelling. Principles of story design. Generating, researching and developing ideas in a broad range of forms. Various script formats. Treatments and proposals. Creating and developing characters. Essentials of dramatizations. Structure and plot.

Prerequisite: Matriculation for the M.F.A. degree or permission of the deputy chairperson.

TREM 7742G Advanced Proposal and Script Writing

45 hours; 3 credits
Researching, developing and writing scripts and proposals for long form storytelling, both fiction and nonfiction. Developing original ideas and research into two major projects: a screenplay for a half hour narrative and an extended proposal/script for a half hour documentary. Both projects are pitched to a committee of faculty as possible M.F.A. Single Camera Projects.

Prerequisite: Television, Radio and Emerging Media 7741G

TREM 7752X Single Camera: Directing and Producing

30 hours lecture, 30 hours laboratory; 3 credits
History and evolution of single camera aesthetics. Genres and styles. In-depth analysis of fiction and non fiction narratives produced with a single camera. Production planning and management. Directing and producing content for single camera production. Director's and Producer's roles in creating and distributing such content across platforms.

Prerequisite: matriculation for the M.F.A. degree in television production.

TREM 7754G Single Camera: Advanced Directing and Producing
15 hours lecture, 60 hours laboratory; 3 credits
Director’s vision, craft and responsibility. All aspects of pre-production, production, and post-production. Students write, direct, produce, design, shoot and edit 10-20 min. projects. Fiction and non-fiction. Course prepares students for their 30 min. MFA single camera production.

Prerequisite: Television, Radio and Emerging Media 7752X.

TREM 7756G MFA Single Camera Project: Production

15 hour lecture, 75 hours laboratory plus 135 hours independent work; 6 credits
Supervised production of fiction or non-fiction MFA Single Camera Project. Students present in class finalized scripts and storyboards; compile schedules and budgets, assign crew from the pool of their classmates; discuss location agreements, SAG contracts, insurance and copyright issues. Students crew on each other’s productions that are scheduled in advance and take place outside of scheduled class time and off campus. Assembly edits and rough cuts of scenes screened in class for critique.

Prerequisite: matriculation in the MFA program

TREM 7761G Post-Production: Theory and Practice

15 hours lecture, 90 hours laboratory; 4 credits
Design and operation of postproduction workflow; the technique, craft, and art of editing; fundamental principles of montage, continuity and dialogue editing, with a focus on telling a compelling story. Students assemble short projects from prerecorded footage.

Prerequisite: matriculation for the M.F.A. degree in television production.

TREM 7764G MFA Single Camera Project: Post Production
30 hour lecture, 60 hours laboratory plus 90 hours independent work, 6 credits
Advanced Post-Production theories and techniques designed to support the completion of the MFA Single Camera Project. Lectures, demonstrations, screenings and critiques to allow students to learn and utilize advanced picture and sound editing proficiencies. Distribution and marketing strategies. Building and engaging with audiences.

Prerequisite: Television, Radio and Emerging Media 7753G

TREM 7770X Directing Television Adaption: Analysis and Production
30 Lecture Hours and 30 Lab Hours; 3 credits
In-depth analysis of scenes from critically acclaimed adaptations of classic and modern literary and dramatic text. Art of adaptation. Principles and techniques of adapting for television, focusing on interpretation of texts and constructing its audio-visual realization through all phases of production: research and development, working with actors, set design and lighting, shot composition, editing and mixing sound in multi-camera live environment and post production. Students direct their own interpretation of a script of their choice. For the final common class project students choose one production position, according to their interests and skills.

Prerequisite: Permission of the Deputy Chair

TREM 7772X Broadcast and New Media Journalism

45 hours; 3 credits
Analysis and evaluation of broadcast and new media news, editorials, commentaries. Examination of network and local news operations. Relationship between print and electronic news reporting considered in terms of their effect on the audience. Historical study of the concepts of free speech, investigative reporting, and the right of citizens' access to government information.

Prerequisite or corequisite: Television, Radio and Emerging Media 7701X [701X].

TREM 7773X Advanced Directing

30 hours lecture, 30 hours laboratory; 3 credits
Authorship and aesthetics. Director’s vision and craft. All stages of production: pitch and proposal, screenwriting, budget and logistics, casting, rehearsals and performance, visualization, production design, staging and directing mise-en-scene, editing, post-production and distribution.

Prerequisite: Television, Radio and Emerging Media 7754G or 7780X for M.F.A. in Television Production candidates; PIMA 7010G [701G] for advanced certificate candidates in the Performance and Interactive Media Arts program.

TREM 7776X Art of Documentary

45 hours; 3 credits
In-depth analysis of critically acclaimed documentaries across various distribution platforms. Principles and techniques of

nonfiction storytelling. Lectures, screening and discussion about authorship, evidence, ethics and responsibility. Structure and formal techniques.

Prerequisite or corequisite: Television, Radio and Emerging Media 7701X [701X] or 786.5X or permission of the deputy chairperson.

TREM 7779X Study Abroad India: Documentary Production and Cultural Studies
15 hours lecture, 60 hours lab; 3 credits
A 21-day course that combines lectures, sightseeing, and documentary
production work.

Prerequisite: Permission of the instructor

TREM 7780X Multi-Camera: Directing and Producing

30 hours lecture, 30 hours laboratory; 3 credits
Producing and directing various program formats including panel discussion, news, fiction, music, dance and other genres suitable for multiple camera.

Prerequisite: matriculation in the M.F.A. program.

TREM 7783G Advanced Multi-Camera Production I

15 hours lecture, 60 laboratory plus 45 hours independent work; 4 credits
Advanced techniques of directing and producing multi camera programs. Set design, facilities and location management, permissions and release forms. Production package. Rotation of crew assignments for in-studio and remote location productions. Each student creates, designs, directs and produces one 30 minute program in partial fulfillment of the requirements for the MFA degree.

Prerequisite: Television, Radio and Emerging Media 7732G [732G].

TREM 7784G Advanced Multi-Camera Production II

15 hours lecture, 60 laboratory plus 45 hours independent work; 4 credits
Advanced techniques of directing and producing a multi camera program. Set design, facilities and location management, permissions and release forms. Production package. Rotation of crew assignments for in-studio and remote location productions. Each student creates, designs, directs and produces one 30 minute program in partial fulfillment of the requirements for the MFA degree.

Prerequisite: Television, Radio and Emerging Media 7783G [783G].

TREM 7797X Special Topic in Mass Media

45 hours; 3 credits
Topics vary from term to term. Students may take this course twice but may not repeat a topic.

Prerequisite: Television, Radio and Emerging Media 7701X [701X].

TREM 7799X Fieldwork in Electronic Media

200 hours of fieldwork plus conference hours to be arranged; 3 credits
Placement in a professional electronic media organization for intensive supervised assignment. Joint supervision by a faculty member and member of the organization. Regular conferences with faculty supervisor. Preparation of written report on fieldwork experience.

Prerequisite: matriculation in the M.S. or M.F.A. program and permission of the deputy chairperson.

TREM 7851G MFA Production Development: Research and Proposal
45 hours laboratory; 1 credit
Develop and research ideas, write treatments. Authorship and aesthetics. Genre and style. Several drafts of proposal submitted.

Prerequisite: matriculation for the M.F.A. degree.

TREM 7852G MFA Production Development: Script and Production Package
45 hours laboratory; 1 credit
Pre-production. Script: writing treatment, script and extended proposal (for documentary). Several drafts submitted. Design and plan the production. Budget and schedule. Pitching two ideas to a committee of faculty members.

Prerequisite: matriculation for the M.F.A. degree.

TREM 7853G MFA Production Development: Post-Production I
45 hours laboratory; 1 credit
Post-production. Assembly edit. Screening and discussion with peers and faculty. Sound design. Special effects and graphics.

Prerequisite: matriculation for the M.F.A. degree.

TREM 7854G MFA Production Development: Post-Production II
45 hours laboratory; 1 credit
Final edit based on feedback received last semester and additional production. Screening and discussion with peers and faculty. Sound mix. Color correction. Preparing for broadcast on CUNY TV. Production Book. Screening and defending the MFA production for the committee of three faculty members.

Prerequisite: matriculation for the M.F.A. degree.

TREM 7925X Research Practicum in Media Studies

45 hours fieldwork; 1 credit
Directed research project under supervision of a faculty member. Weekly meetings to evaluate and monitor progress. With the prior permission of the deputy chairperson, this course may be taken three times.

Prerequisite: Television, Radio and Emerging Media 7701X [701X] and the permission of the deputy chairperson.

TREM 7945X Media Research Methods

45 hours; 3 credits
Survey of various quantitative and qualitative media and audience research methods, including content analysis, survey analysis, focus groups, ethnography and discourse analysis. Students complete original research data collection and written reports.

Prerequisite: Television, Radio and Emerging Media 7701X.

TREM 7960X Special Problems

45 hours; 3 credits

Directed study supervised by a faculty member. With prior written permission of the deputy chairperson, this course may be repeated once for credit.

Prerequisite: permission of the deputy chairperson.

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

TREM 6614X Mass Media and Education

TREM 7715X Media Reception: Processes and Practices

TREM 7722X Seminar in Television and Radio Program Development and Audience Analysis

TREM 7726X Seminar in Media Industries

TREM 7774X Television Magazine Programs

Theater

Department office: 317 Whitehead Hall
Phone: 718.951.5666

Full-time Faculty

Professors: Marsh, Snider-Stein, Tesman, Vivier
Assistant Professor: Sabongui
Lecturer: Tong

The Department of Theater is one of New York City's leading institutions in the training of actors, directors, set/costume/lighting designers, dramaturgs, performing arts managers, and theater technicians. The department offers a rich array of courses, workshops, and seminars that cover every conceivable aspect of these disciplines, so that students can pursue a career in their choice of one or more of them. Guest artists at special lectures, seminars and workshops have included Joel Grey, Betty Buckley, the team of John Kander and Fred Ebb, and other major theater personalities.

The Theater Department takes full advantage of the extraordinary theater resources of New York City. Students have opportunities for practicum/internship residencies at some of the city's most prestigious theater organizations: Manhattan Theater Club, Second Stage, Primary Stages, New York Shakespeare Festival, Playwrights Horizons, The Public Theater, Lincoln Center, the New York City Opera, the Brooklyn Academy of Music, Carnegie Hall, Jujamcyn Theaters, Columbia Artists Theatricals, Roundabout Theater Company, Don Buchwald Talent Associates, the Drama League, and many others. In addition to all these offerings, the department puts on six or more productions yearly in theaters on campus.

M.F.A. degree program in theater
HEGIS code 1007; SED program code 76211

The Department of Theater offers a master of fine arts degree in theater with a concentration in one of the following areas: performing arts management, acting, directing, dramaturgy, or design. The two-year, 60-credit program prepares students for leadership and professional careers in each area of concentration through a combination of practical and theoretical courses as well as through internships with major institutions in the New York metropolitan area.

The Department of Theater offers a master of fine arts degree in theater with a concentration in one of the following areas: performing arts management, acting, directing, or design. The two-year, 60-credit program prepares students for leadership and professional careers in each area of concentration through a combination of practical and theoretical courses as well as through internships with major institutions in the New York metropolitan area.

Matriculation requirements

Acting: Applicants must offer at least 18-21 credits in acting courses. Consideration will also be given to applicants who do not meet course requirements but have equivalent experience or unusual talent in the chosen concentration. Such applicants should consult the head of concentration directly. Applicants must apply to the head of concentration for an audition/interview appointment once their application has been submitted.

Design and technical production: Applicants must offer at least 18 credits in theater courses including courses in directing, design, and theater production, or in such design-related courses as architecture, art history, and painting. Applicants must be interviewed by the Theater Department or submit a portfolio directly to the Theater Department at the time of application.

Directing: Applicants must offer at least 18 credits in theater courses including courses in acting, directing, dramatic literature, theater history, and stagecraft. A production book for an actual or proposed production must be submitted directly to the Theater Department at the time of application. If possible, applicants should arrange to be interviewed by the Theater Department.

Performing arts management: Applicants must offer at least 18-21 credits or the equivalent in courses in one of the following: dance, fine arts, music, or theater. Applicants must submit an essay on professional goals. Applicants must be interviewed by the Theater Department.

Consideration is also given to applicants who do not meet course requirements but have equivalent experience or unusual talent in the chosen concentration. Such applicants should consult the head of concentration.

A request for an audition or interview appointment may be made by letter or telephone to the head of the relevant concentration.

General matriculation and admission requirements of Graduate Studies are in the section "Admission."

Degree requirements

Sixty credits are required for the degree.

Students must also submit a thesis based on a thesis project and/or production acceptable to the department. Information about requirements for the thesis is in the section "Academic Regulations and Procedures."

Prior to the above, all students must undergo a pre-thesis evaluation (consisting of a work-in-progress shown to the faculty, an academic progress review by faculty, or both) by the time they complete 24 credits. If a student's progress is not deemed satisfactory by the head of the relevant concentration, the student will be denied the approval of a thesis production or project until the deficiencies noted in written form to the student have been corrected.

Students must complete requirements in one concentration as follows:

Acting: Theater 7311X, 7321X, 7322X, 7323X, 7324X, 7331X, 7332X, 7333X, 7334X, 7341X, 7342X, 7325X, 7343X, 7344X, 7351X, 7352X, 7353X, 7360X, 7722X, and 7742X. Acting candidates are required to audition for all departmental productions and must accept roles as cast. Before taking Theater 7742X, students must perform in a "pre-thesis" role approved by the head of concentration.

Design and technical production: Theater 7212X, 7213X, 7415X, 7431X, 7433X, 7435X, 7421X, 7721X, 7722X, 7723X, 7742X; and a minimum of three additional courses in design and technical production. Before taking Theater 7742X, students must complete designs for actual productions at the experimental or thesis production level and must complete a design for a major production in fulfillment of the practicum course requirements.

Directing: Theater 7611X, 7511X, 7512X, 7513X, 7721X, 7722X or 7622X, 7723X or 7623X, 7514X, 7515X, and 7742X. Additional advanced courses to bring the total number of advanced credits in Department of Theater concentration in Directing courses to 60. All the required courses used to meet these degree requirements must be completed with a grade of C or higher.

Performing arts management: Theater 7442X, 7610X, 7611X, 7612X, 7613X, 7615X, 7616X, 7617X , 7619X, 7621X, 7622X, 7623X. Students must take two of the following courses: THEA 7212X, 7213X, 7214X, 7215X, 7216X, 7223X, 7224X, 7231X, 7232X, or 7233X. With a few exceptions, students must also take Theater 7631X, which requires the satisfactory completion of a ten- to fifteen-week residency with a professional arts organization or agency approved by the chairperson and a thesis report based on the residency experience.

Courses in the Theater Department offered toward the degree must be 7000-level courses.

The program of study must be approved in advance by the head of concentration.

CUNY Ph.D.

The City University of New York offers a doctoral program in theater. General information about CUNY Ph.D. programs is in the chapter “Support for Academic Success in Graduate School.” Theater Department courses may be credited toward the CUNY doctoral degree with permission of the executive officer of the doctoral program. For information, students should consult the deputy chairperson of the Theater Department and the executive officer of the doctoral program.

Courses

Unless a prerequisite is specific, students may apply graduate or undergraduate courses toward fulfillment of that prerequisite.

Dramaturgy

THEA U7111X Introduction to Dramaturgy

30 hours plus conference; 3 credits
Introduction to the history and practice of dramaturgy in Europe and the United States since the eighteenth century. Development of basic dramaturgical skills: selection and analysis of classics and new plays, production research, principles of cutting, collaborative techniques, institutional dramaturgy.

THEA U7121X Development of Dramatic Structure I

30 hours plus conference; 3 credits
Analysis of dramatic structure in representative major plays of Greek, Roman, medieval, Renaissance playwrights. Fall term.

THEA U7122X Development of Dramatic Structure II

30 hours plus conference; 3 credits
Analysis of dramatic structure in representative major plays of eighteenth-century to twentieth-century playwrights. Spring term.

THEA 7141X Theater in the Classroom

30 hours plus field experience; 3 credits
Theater work in classroom settings. Existing models of theater arts in education. Using theater, improvisation, and creative drama to explore specialized subject areas and pedagogy. Practical studio work. The classroom as theater. Collaboration

of education and theater students on theater in education projects, including workshops in focus schools. Mainstage and outside productions. Visits to area public schools. Creation of age-appropriate theater study guides. This course is the same as CBSE 7549X and SEED 7549X.

Prerequisite: approval of program head or chairperson.

THEA 7142X Seminar in Theater Criticism

30 hours plus conference; 3 credits
Theater criticism in relation to the dramatic arts. Spring term.

Prerequisite: Theater U7212X [751X] and U7213X [U752X].

THEA 7152X Criticism Workshop

15 hours; 1 credit
Research and writing projects designed to strengthen skills in theatrical criticism and dramaturgy.

Prerequisite: permission of the chairperson.

THEA 7153X Criticism Workshop

15 hours; 1 credit
Research and writing projects designed to strengthen skills in theatrical criticism and dramaturgy.

Prerequisite: permission of the chairperson.

Theater history and criticism

THEA 7211X Theater Research and Bibliography

30 hours plus conference; 3 credits
Introduction to theater research, bibliography, critical methodology. Fall term.

THEA U7212X History of the Theater to 1642

30 hours plus conference; 3 credits
Survey of methods of production from ancient Greece to the closing of theaters by the Puritan Commonwealth. (Not open to students who have completed Theater [771.1X]). Fall term.

Prerequisite: a course in play production.

THEA U7213X History of the Theater from 1642

30 hours plus conference; 3 credits
Methods of production from the English Restoration to the present including French neoclassicism. (Not open to students who have completed Theater 772.1X.) Spring term.

Prerequisite: a course in play production or Theater U7212X [751X] or 771.1X.

History of theater

THEA 7214X Global Theater History and Theory I

30 hours plus conference and independent work; 3 credits
Topics and cultures covered include ancient ritual, classical Greece and Rome, medieval Europe, neoclassical and Renaissance drama, and early drama in India, China, and Japan.

THEA 7215X Global Theater History and Theory II

30 hours plus conference and independent work; 3 credits
Topics include sentimental drama, melodrama, Romanticism, modern realism, and avant-garde modernism.

THEA 7216X Global Theater History and Theory III

30 hours plus conference and independent work; 3 credits
Topics include popular entertainment, postcolonial and intercultural theater, community-based theater, and postmodernism.

Theater history and criticism

THEA U7221X History of Theatrical Theory and Criticism I

30 hours plus conference; 3 credits
A survey of major theorists and critics concerned with drama and theater, both text and production, from Plato and Aristotle through the German philosophers and critics of the mid-nineteenth century. (Not open to students who have completed Theater [U702X]).

THEA U7222X History of Theatrical Theory and Criticism II

30 hours plus conference; 3 credits
A survey of major theorists and critics concerned with drama and theater, both text and production, from the mid-nineteenth century to the present, including melodrama, farce, theories of dramaturgy, expressionism, epic theater, political theater, and post-structuralism. (Not open to students who have completed Theater [U702X]).

THEA U7224X American Musical Theater

45 hours; 3 credits
History of American musical theater from its beginnings through today. Examination of major artists and productions.

THEA U7231X Studies in Theater History and Production

30 hours plus conference; 3 credits
History and theory of one of the component arts of the theater: acting, directing, scene design and lighting, theater architecture, stage costumes. Subject is announced in advance and is supervised by a specialist.

THEA U7232X Studies in Theater History and Production

30 hours plus conference; 3 credits
History and theory of one of the component arts of the theater: acting, directing, scene design and lighting, theater architecture, stage costumes. Subject is announced in advance and is supervised by a specialist.

THEA U7233X Studies in Theater History and Production

30 hours plus conference; 3 credits
History and theory of one of the component arts of the theater: acting, directing, scene design and lighting, theater architecture, stage costumes. Subject is announced in advance and is supervised by a specialist.

Acting

THEA 7311X Lucid Body

60 hours; 3 credits
Training of the actor's body as a tool for creative expression and character development by investigating the emotional and physical habits that limit the actor, aiming to expand the actor's range of character choices for roles in theater, film, television, and auditions. Fall semester.

Prerequisite: Matriculation for the M.F.A. in theater with a concentration in acting or by audition.

THEA 7321X Acting I: Acting with Imagination

60 hours; 3 credits
Working with improvisational exercises, actors focus on freeing the imagination, breathing, remaining in present reality, and the "art of doing," or actions/objectives and obstacles. They explore the journey of the play script through text analysis, scene work, and the application of physical theater techniques from Theater 7360X Physical Theater to create character and situations specific to the play script. Fall semester.

Prerequisite: matriculation for the M.F.A. in theater with a concentration in acting.
Corequisite: Theater 7360X Physical Theater Techniques for the Actor.

THEA 7322X Acting II: The Actor and the Contemporary Play

60 hours; 3 credits
Acting techniques necessary to bring the text to life through an exploration of contemporary scenes. This course introduces three interrelated components: recognition of events that tell the story, exploration and application of action that enhance the events of the story, and definition of character through exploration of physical action and behaviors. Spring semester.

Prerequisite: Theater 7321X or permission of the head of the M. F.A. acting concentration.

THEA 7323X Acting III: Classic Plays

60 hours; 3 credits
Application of the basic principles of acting studied in Theater 7321X and Theater 7322X to the work and world of classical work, comparing the structure, and therefore the demands of the classic play with the contemporary play. Fall semester.

Prerequisite: Theater 7322X or permission of the head of the M. F.A. acting concentration.

THEA 7324X Acting IV: The Actor and the Play

60 hours; 3 credits
Examination of the tools and techniques an actor requires to work within different modes of theater. Through advanced scene studies from a variety of plays providing contrasting language and genres, actors apply their skills to tell the story. Spring semester.

Prerequisite: Theater 7323X or permission of the head of the M. F.A. acting concentration.

THEA 7325X Acting for the Camera

60 hours; 3 credits
Application of advanced acting skills to the techniques required when acting in television and on film. Spring semester.

Prerequisite: Theater 7321X and Theater 7322X; or permission of the head of the M.F.A. acting concentration.

THEA 7326X Audition Techniques and the Business of Acting

60 hours; 3 credits
The advanced study of the interplay between the practical business aspects of the profession, auditions, and marketing strategies. Focus is on: the selection and preparation of material suitable to the student's individual strengths; the exploration of the range of acting skills necessary for inventive performance in cold readings; how to gather information on unions, theaters, producing organizations, and useful trade publications; understanding the responsibilities and roles of casting directors, managers, and agents; the importance of a professional headshot and resume. This course supports and integrates with the professional showcase preparation practicum Theater 7722. Spring semester.

Prerequisites: Theater 7323X, Theater 7343X, and Theater 7344X; or permission of the head of concentration

THEA 7331X Movement: Alexander Technique I

60 hours; 3 credits
Study of the Alexander Technique and its use as a tool for the actor. Application of experiential anatomy to support course material and provide an informed foundation for movement exercises. Sensory awareness, flexibility, and stretching will be developed to allow for greater strength, balance, and physical ease. Exploration of the dynamic variables of movement-time, space, weight, and energy-through improvisational exercises and choreographed phrases. Fall semester.

Prerequisite: Matriculation for the M.F.A. in theater with a concentration in acting or audition.

THEA 7332X Movement: Alexander Technique II

60 hours; 3 credits
Study of the relationship of breath, voice, and movement. Development of the ability to recognize and change one's psycho- physical dynamic in any given moment through further study of the Alexander Technique and its application to movement, as well as the spoken word. Continued development of the actor's movement potential through improvisation and choreographed explorations. This course builds directly on Theater 7331X. Spring term.

Prerequisites: Theater 7331X or permission of the head of the M.F.A. acting concentration

THEA 7333X Movement III: Physical Expression

60 hours; 3 credits
Application of advanced movement techniques to further expand the actor's self knowledge, self-awareness, flexibility, strength, and clarity of expression in the body.

Prerequisite: Theater 7331X and Theater 7332X; or permission of the head of concentration

THEA 7334X Movement IV: Physical Integration

60 hours; 3 credits
Continued development of the actor's movement potential through improvisation and choreographed explorations that supports the integration of physical skills acquired throughout

the two-year study.

Prerequisite: THEA 7331X, 7332X, 7333X or permission of the concentration head.

THEA 7341X Voice I: Making Your Voice Heard

60 hours; 3 credits
Training of the actor's speaking voice. Heightening the actor's awareness of the integration of physical release, unnecessary effort, ease of breath, and vibration. Focus on the development of a responsive and powerful instrument that directly reveals, rather than describes emotions and thoughts. Understanding and practice of breathing for voice production; awareness and redirection of habitual holding patterns that inhibit a free, forward, flowing, and dynamically expressive vocal instrument. Introduction and integration of the Miller Voice Method. Fall semester.

Prerequisite: Matriculation for the M.F.A. in theater with a concentration in acting or audition.

THEA 7342X Voice II: Sound and Sense

60 hours; 3 credits
Review of vocal warm-up introduced in Theater 7341X; continuation of integrated awareness of physical release, ease, breath, vibration, and the spoken word. Exploration of contrasting poetic texts from a variety of periods to understand the relationship between the sound(s) of the word and the texture, time, space, rhythm, meter, and meaning/sense of words and thoughts. Further integration of the Miller Voice Method. Spring semester.

Prerequisites: Theater 7341X or permission of the head of the acting concentration

THEA 7343X Voice III: Shakespeare's Heightened Text

60 hours; 3 credits
Advanced vocal techniques for integrating physical ease, breath, vibration, and physical release to the demands of speaking Shakespeare's heightened language. Attention to the rhetorical structures or "givens" in the text: repetition and texture of sounds, rhythm, meter, thought structure, the physicality of the language, imagery, antithesis, word play, irony, puns and how to recognize or "read" them as specific clues that inspire specific acting choices. Fall semester.

Prerequisite: Theater 7342X or permission of the head of the M. F.A. acting concentration

THEA 7344X Voice IV: Solo Performance of the Self

60 hours; 3 credits
Advanced vocal techniques that integrate all voice and movement training from the previous three semesters more fully into the acting process: awareness of the body in space, connection with emotional impulses, intentions, and physical actions; skilled use of the dynamically free and expressive voice as a powerful and responsive instrument to reveal, rather than describe, emotions and thoughts. An original solo performance piece is the culminating project; the focus of which is the literal and metaphorical expression of "Making Your Voice Heard", Spring semester.

Prerequisites: Theater 7343X; or permission of the head of the M.F.A. acting concentration

THEA 7345X An Actor's Approach to Shakespeare

60 hours; 3 credits
Examines Shakespearean heightened language and illuminates practical strategies to approach the text as an actor toward developing a clear, comprehensive process that will prepare the graduate actor to perform Shakespearean texts as a professional. Focuses on intense physical and intellectual study of three Shakespearean plays, at least one of which is a comedy.

Prerequisite or Corequisite: THEA 7342X

THEA 7351X The Actor's Idiolect

60 hours; 3 credits
Development of a flexible speech instrument for the actor. Focus on muscle and sensory awareness through understanding of the anatomy/physiology of the articulators, the physical nature and quality of General American speech sounds, the production of vowel and consonant sounds, and the recognition of speech as a physical process. Study of the International Phonetic Alphabet as applied to physical practice, using each student's individual idiolect as a point of reference. Fall semester.

Prerequisite: matriculation for the M.F.A. in theater with a concentration in acting or audition.

THEA 7352X Heightened Text and Rhetoric

60 hours; 3 credits
Development of commitment to the word—fulfilling the demands of the text with skill and sensitivity; practice and application of General American speech sounds and the International Phonetic Alphabet to the "heightened text" of poetry, classical drama, and political speech.

Prerequisite: Theater 7351X; or permission of the head of the M.F.A. acting concentration

THEA 7353X Dialects and Accents for the Actor

60 hours; 3 credits
Builds on basic diction skills acquired in the first year. Focus on the greater demands of speaking difficult heightened texts, whether classic or modern. Analysis of the structure and meaning of such texts. Emphasis on individual development of a greater command of expression, and the acquisition of mastery in advanced diction and dialect techniques, which are essential to the well-rounded professional actor.

Prerequisite: Theater 7351X and Theater 7352X; or permission of the concentration head.

THEA 7354X The Character's Idiolect

60 hours; 3 credits
Builds upon the speech skills previously acquired. Final semester of speech and dialect training. The actor will learn to acquire a dialect or accent independently in preparation for an audition or a specific role in a production, crafting a character's unique idiolect.

Prerequisite: Theater 7351X and Theater 7352X; or permission of the concentration head.

THEA 7360X Physical Theater Skills

60 Hours; 3 Credits
This course trains versatile and engaging performers by expanding the actors' understanding of archetypes, heightened performance, physical engagement, and physical risk-taking: to

'think' with their bodies, an anti-intellectual form of study, without negating the need to analyze their progress by developing a personal understanding of their body in movement—aware of all the elements it takes to create vital theater.

Prerequisite: Matriculation for the M.F.A. in Theater with a concentration in acting.

Design and technical theater

THEA 7411X Rendering Techniques for the Stage Designer
45 hours; 3 credits
Media and techniques involved in visual communication of the stage designer. Fall term.

Prerequisite: Theater 7415X [771.4X] or permission of the chairperson.

THEA 7412X Costume-Rendering Techniques

45 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. Fall term.

THEA 7413X Costume Construction for Stage and Screen I
45 hours; 3 credits
Theory and practice of costume construction in performance based media.

THEA 7414X Scene Painting

45 hours; 3 credits
Intensive study of styles of architecture and ornament as applied to scene painting. Traditional and contemporary styles; practices and procedures in scene painting. Application to department productions.

Prerequisite: Theater 7415X [771.4X] or permission of the chairperson

THEA 7415X Stagecraft

30 hours lecture, 30 hours laboratory; 3 credits
Scenic construction equipment and techniques. Shop organization, materials, graphics, rigging and handling procedures, budgeting, lighting equipment maintenance and handling. Participation in department productions as assigned. Spring term.

Prerequisite: an introductory course in the principles and practices of theater production or permission of the chairperson.

THEA 7416X Costume Construction for the Stage and Screen II
45 hours; 3 credits
Continued theory and practice of costume construction in performance based media.

Prerequisite: THEA 7413.

THEA 7417X Costume Construction for the Stage and Screen III
45 hours; 3 credits
Advanced theory and practice of costume construction in performance based media.

Prerequisite: THEA 7413X and 7416X.

THEA 7421X Scenographic Techniques I: Fundamentals

45 hours; 3 credits
Study of fundamental scenographic concepts and execution of all necessary technical drawings used in preparation of scenery and lighting for the theater. Traditional tools and media will be used. Spring term.

Prerequisite: permission of the chairperson.

THEA 7422X Scenographic Techniques II: 2D CADD

45 hours; 3 credits
Study of Computer Assisted 2D Drafting and Design as applied to the disciplines of scenery, lighting, and costume design.

Prerequisite: Theater 7415X [771.4X], 7421X [772.4X], or equivalent; and permission of chairperson

THEA 7423X Scenographic Techniques III: 3D CADD and Rendering
45 hours; 3 credits
Study of Computer Assisted 3D Drafting and Design as applied to the disciplines of scenery, lighting, and costume design.

Prerequisite: Theater 7415X [771.4X], 7421X [772.4X], 7422X [772.8X], or equivalent; and permission of chairperson.

THEA 7430X Stage Design Concepts

45 hours; 3 credits
Introduction to the principles of Stage Design; including Set, Costume and Lighting Design, and their application to design problems.

Prerequisites: Permission of the Chairperson or Concentration head

THEA 7431X Scene Design

45 hours; 3 credits
Principles of scenery design and their application to design problems. Fall term.

Prerequisite: Theater 7415X [771.4X] or 7421X [772.4X] or permission of the chairperson.

THEA 7432X Advanced Scene Design

45 hours; 3 credits
Scene design for theater or television. Spring term.

Prerequisite: Theater 7431X [771.5X] or the equivalent; and permission of the chairperson.

THEA 7433X Costume Design

45 hours; 3 credits
Study of contemporary and period costume. Application to department productions. Fall term.

Prerequisite: an introductory course in the principles and practices of theater production.

THEA 7434X Advanced Costume Design

45 hours; 3 credits

Problems in costume design for the theater or television. Production design problems and principles. Application to a specific production. Spring term.

Prerequisite: Theater 7433X [771.6X].

THEA 7435X Lighting Design

45 hours; 3 credits
Principles of lighting design and their application to design problems. Fall term.

Prerequisite: Theater 7415X [771.4X] or the equivalent or permission of the chairperson.

THEA 7436X Advanced Lighting Design

45 hours; 3 credits
Advanced study of lighting design. Spring term.

Prerequisite: Theater 7435X [771.7X] or the equivalent or permission of the chairperson.

THEA 7437X Projection Design for Theater and Live Performance
45 Hours, 3 Credits
This course will introduce students to the broad field of projection and video design for theater and live performance. We will study early pioneers of video integration and look at some of the most innovative new work in the field today. Students will be introduced to the technical aspects of projection and video design for theater and through investigations and projects will develop an understanding of the role projection plays in theater and hone the skills necessary to create their own designs.

Prerequisite: Enrollment in the MFA or permission from the program director

THEA 7438X Advanced Projection Design for Theater and Live Performance
45 Hours, 3 Credits
The course will focus on advanced content creation through assembled images as well as original filmed content. Additionally, it will cover advanced system design including media servers, storage, playback, and how to assemble a complex projection design using multiple projectors, video mapping and real time effects using both projected images as well as emissive displays and video walls.

Prerequisite: THEA 7437X Projection Design for Theater and Live Performance and permission from the program director

THEA 7439X Production Design for Film

60 Hours, 3 Credits
Production Design is one of the fundamental skills of crafting the appearance of a motion picture. From the basics of dressing a found location to the constructing of elaborate sets, understanding the goals and techniques of the art department is vital to the growth of any filmmaker. This course will prepare students for supervising the look of their own films, for contributing to other student productions, and potentially for working freelance in the art department on professional productions.

Prerequisite: Enrollment in the MFA or permission from the program director

THEA 7441X Advanced Studies in Design

45 hours; 3 credits
Application of stage design to a specific production. Projects in scenery, costume, and/or lighting. With prior written permission of the chairperson,students may repeat this course once, in a different area, for credit. Spring term.

Prerequisite:Theater 7432X [772.5X] or 7434X [772.6X] or permission of the chairperson.

THEA 7442X Theater Design and Planning

30 hours plus conference; 3 credits
Study of the design and planning of a functioning theater. Examination of typical theater forms. Aesthetics of theater architecture. Spring term.

Prerequisite: Theater 7431X [771.5X]; and Theater 7611X [773.9X] or 7511X [775.2X].

Directing

THEA 7511X Directing I: Interpretive Fundamentals

Minimum of 60 hours; 3 credits
Text interpretation through the exploration of objectives, actions, obstacles, events, and environments. Fall term.

Prerequisite: permission of the chairperson.

THEA 7512X Directing II: Rehearsal Process and Problems
Minimum of 60 hours; 3 credits
The director's relationship to the actor in the creation of a theater event; establishment of a common language. Culminates in a forty-minute prethesis production. Spring term.

Prerequisite: Theater 7511X [775.2X] or permission of the chairperson.

THEA 7513X Directing III: Interpreting the Classics

Minimum of 60 hours; 3 credits
Advanced study of new and classic texts to be selected and developed as scene study in collaboration with other theater artists. Fall term.

Prerequisite: Theater 7511X [775.2X] and 7512X [776.2X]; or permission of the chairperson.

THEA 7514X Directing IV: Problems in Style

Minimum of 60 hours; 3 credits
Focus on the evolution of the director's personal vision with particular emphasis on visual and aural organization.

Prerequisite: Theater 7511X [775.2X], 7512X [776.2X], and 7513X [777.2X]; or permission of the chairperson.

THEA 7515X Advanced Seminar in Directing

Minimum of 60 hours; 3 credits
Theory and practice of advanced problems in theater directing of classic plays for contemporary audiences; application of theory in rehearsal and performance. Spring term.

Prerequisite: Theater 7511X [775.2X], 7512X [776.2X], and permission of the chairperson.

THEA 7516X Stage and Company Management

45 hours; 3 credits

Professional procedures and practices for the rehearsal, technical preparation, performance and touring of theater, opera, and dance productions.

Prerequisite: permission of the chairperson.

Performing Arts management

THEA 7610X Accounting for the Performing and Media Arts
45 hours; 3 credits
Introduction to the principles of financial and managerial accounting; including cash and accrual accounting, the preparation of financial statements, budgeting, as well as an introduction to taxation and accounting controls used to safeguard company assets.

Prerequisites: Permission of the Chairman or Concentration Head

THEA 7611X Principles of Performing Arts Administration
45 hours; 3 credits
Introduction to history and methods of producing in the performing arts. Economic and administrative structuring of performing arts companies and institutions. Fall term.

Prerequisite: Permission of the head of the concentration.

THEA 7612X Business Management for the Performing Arts
45 hours; 3 credits
Managerial organization and structuring of contemporary performing arts ventures, companies, institutions. Economics, accounting, budgeting, box office organization and control. Spring term.

Prerequisite: THEA 7610X Accounting for the Performing and Media Arts and permission of the head of concentration.

THEA 7613X Promotion and Marketing for the Performing Arts
45 hours; 3 credits
Practical methods for marketing performing arts companies. Spring Term.

Prerequisite: must be taken in the same semester as 7612X [774.9] and permission of the head of the concentration.

THEA 7614X Technology and the Performing Arts

45 hours; 3 credits
Study of current and future performing arts management relationships between technology and the live performing arts; theory, principle, and practice. Computerized business, box office, production systems, cable and other video production, and marketing of live arts events. Fall term.

Prerequisite: permission of the head of the concentration.

THEA 7615X Fundraising for the Performing Arts

30 hours plus conference; 3 credits
In-depth study of the philosophy and methodology of raising contributed income for the professional, nonprofit performing arts institutions. Fall term.

Corequisites: Theater 7621 [778.09] and permission of the head of concentration.

THEA 7616X The Performing Arts and the Law

45 hours; 3 credits
Analysis of legal briefs, contracts, copyright laws, and other legal obligations related to performing arts companies and institutions. Spring term.

Prerequisite: Must be taken in same semester as Theater 7612X [774.9X] and permission of the head of the concentration.

THEA 7617X Labor and Employee Relations in the Performing Arts
45 hours; 3 credits
Labor/management relations in the performing arts; individual and collective bargaining negotiations; federal, state, and local regulations; personnel policies and legal issues. Fall term.

Prerequisite: Theater 7616X [776.9] and permission of the head of the concentration.

THEA 7618X Artistic/Managerial Decision Making in the Performing Arts
30 hours plus conference; 3 credits
Dynamics of planning, organizing, and realizing performing arts projects, ventures, companies, and institutions; interrelationships between artists, managers, and funding sources in the collaborative process of making performances. Spring term.

Prerequisite: permission of the head of concentration.

THEA 7619X Seminar in Performing Arts Management

30 hours plus conference; 3 credits
Study in depth of selected problems related to the management of performing arts organizations using the case study approach, role playing, other discussion methods. Fall term.

Prerequisite: Theater 7612X [774.9X] and permission of the head of the concentration.

THEA 7621X Performing Arts Externship

200 hours of fieldwork per course plus conference to be arranged; 4 credits
Placement with a professional performing arts company or organization for intensive fieldwork; joint supervision by a faculty member and a member of the sponsoring organization. Regular conferences with faculty supervisor; preparation of a written report regarding the externship experience. (Theater 7621X [778.09X] is not open to students who have completed Theater 778.9X.)

Prerequisite: permission of the head of concentration.

THEA 7622X Performing Arts Externship

200 hours of fieldwork per course plus conference to be arranged; 4 credits
Placement with a professional performing arts company or organization for intensive fieldwork; joint supervision by a faculty member and a member of the sponsoring organization. Regular conferences with faculty supervisor; preparation of a written report regarding the externship experience. (Theater 7621X [778.09X] is not open to students who have completed Theater 778.9X.)

Prerequisite: permission of the head of concentration.

THEA 7623X Performing Arts Externship

200 hours of fieldwork per course plus conference to be arranged; 4 credits
Placement with a professional performing arts company or organization for intensive fieldwork; joint supervision by a faculty member and a member of the sponsoring organization. Regular conferences with faculty supervisor; preparation of a written report regarding the externship experience. (Theater 7621X [778.09X] is not open to students who have completed Theater 778.9X.)

Prerequisite: permission of the head of concentration.

THEA 7631X Professional Residency and Thesis

Minimum of 400 hours of fieldwork plus conference; 6 credits
Full-time work with a professional arts company or organization under joint supervision of a faculty member and a staff member from the sponsoring organization. Written thesis covering the history of the organization, a description of the resident's responsibilities, an evaluation of the residency experience, and an overview of the field as a whole. (Not open to students who are enrolled in or have completed Theater 7742X [778X].)

Prerequisite: permission of the head of the concentration.

Production

THEA 7720X Collaborative Discipline Seminar

15 hours, 1 credit
Exploration, expansion, and application of collaborative practices related to the creative theatre production process. May be repeated 4 times for credit.

Prerequisite: Permission of head of concentration.

Independent studies

THEA 7711X Research Problems in Theater

45 hours; 3 credits
Individual and group study of advanced problems of theater production or history and criticism.

Prerequisite for students concentrating in design/technical: Theater 7432X [772.5X]; and Theater 7442X [773.4X] or the equivalent of the course.
Prerequisite for students concentrating in directing: Theater 7322X [722.3X] and Theater 7512X [776.2X]; Theater 7442X [773.4X] or the equivalent of the course.
Prerequisite for students concentrating in theater history and criticism: Theater U7212X [751X] and 7213X [U752X] and 7142X [773.1X]; or the equivalent of the courses.

THEA 7721X Theater Practicum

Minimum of 60 hours; 3 credits
Assigned theater production work and projects, supervised by faculty.

Prerequisite: permission of the head of concentration.

THEA 7722X Theater Practicum

Minimum of 60 hours; 3 credits
Assigned theater production work and projects, supervised by faculty.

Prerequisite: permission of the head of concentration.

THEA 7723X Theater Practicum

Minimum of 60 hours; 3 credits
Assigned theater production work and projects, supervised by faculty.

Prerequisite: permission of the head of concentration.

THEA 7724X Theater Practicum

45 hours; 3 credits
Assigned theater production work and projects, supervised by faculty.

Prerequisite: Permission of the head of concentration.

THEA 7731X Special Problems

45 hours; 3 credits
Directed study supervised by a faculty member.

Prerequisite: permission of the chairperson.

THEA 7732X Special Problems

45 hours; 3 credits
Directed study supervised by a faculty member.

Prerequisite: permission of the chairperson.

THEA 7741G Thesis Research

Hours to be arranged; no credit
Research for master's thesis supervised by a faculty member. Degree is not earned until thesis is accepted. Students register for this course only once.

Prerequisite: permission of the chairperson.

THEA 7742X Thesis Production and/or Project

45 hours; 3 credits
Completion of an approved production and/or project with written thesis. (Not open to students who are enrolled in or have completed Theater 7631X [789X].)

Prerequisites: completion of the pre-thesis and permission of the head of the M.F.A. directing concentration.

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

THEA 7151X Criticism Workshop

THEA 7154X Criticism Workshop

THEA 7225X History of Theater in Education

THEA 7312X Improvisation for the Actor II

THEA 7620X Theater in the Age of Globalization

THEA U7131X Models of Collaboration

THEA U7132X Problems in the Translation of Dramatic Texts

THEA U7223X History of the American Theater

Urban Sustainability Program

Department office: 3308 Boylan Hall
Phone: 718.951.5311

Courses

SUST 7001X Urban Sustainability Systems Theory and Applications
45 hours; 3 credits
Examination and application of systems theory to urban ecosystems through an environmental justice lens; topics include planning, policy, economic development, ecosystem quality and services, health, resilience, climate change in socio-ecological systems. Introduces urban sustainability from multiple disciplinary perspectives while emphasizing the intersection of social and natural systems; provides theoretical and methodological tools to help build more sustainable cities.

SUST 7101X Research Writing for Environmental Justice Practitioners
45 hours, 3 credits
Principles and practices of presenting environmental justice, sustainability and resilience issues in professional and non-professional forums; concise writing of abstracts; graphics and data visualization; emphasis on research papers; other ways of presenting research to scholarly and non scholarly audiences

SUST 7300X Participatory Governance

45 hours, 3 credits
Introduction to the theory and practice of participatory planning, governance and civic engagement relative to the values of sustainability, resilience, environmental, racial, and climate justice; economic democracy; civic engagement; case studies. Ways to shift planning practices and facilitate a “just transition” for building sustainable resilient cities. Same as POLS 7745 Participatory Governance

SUST 7500X Capstone

45 hours, 3 credits
Seminar in recent and current topics in environmental justice, sustainability and resilience with a focus on research methodology. Seminars by invited speakers; student seminars and discussions moderated by instructor. Students will collaborate to complete and present a project for a client selected by the urban sustainability program steering committee.

Prerequisite: Permission of Program Director

SUST 7600X Internship

45 hours, 3 credits
Minimum of 135 hours of internship work and conference. Supervised participation in professional activities with public, private or non-profit entity; on-campus seminar meetings; creating a work journal and professional portfolio; internship must be pre-approved by Environmental Justice and Sustainability program director or faculty mentor prior to enrolling.

Prerequisite: Permission of the faculty mentor or Program Director

Women's and Gender Studies

Department office: 1207 Ingersoll Hall
Phone: 718.951.5476

Courses

WGST 7000X Theories of Feminism

45 hours; 3 credits
The construction of knowledge pertaining to women; theoretical aspects of the challenges to traditional thinking about women. The main theories or schools of thought to be studied are liberal, radical, lesbian, socialist, and Third World feminism, as well as feminist perspectives on psychoanalysis and representation.

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 CUNYfirst class numbers that appear in the Schedule of Classes and are used for registration and other internal purposes. Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain student aid awards.

HEGIS Code	SED Program Code	Certificate or Program Name	Certificate or Degree(s) Awarded
0502	88398	Accounting	M.S.
1002	02016	Art	M.F.A.
0831	36856	Art Education	Advanced Certificate
1003	02017	Art History	M.A.†
0831	26751	Art Teacher	M.A.
0808	31638	Autism Spectrum Disorders	Advanced Certificate
0401	01987	Biology	M.A.†
0401.01	26742	Biology Teacher	M.A.†
0506	01895	Business Administration	M.S.
1905	02083	Chemistry	M.A.†
1905	35301	Chemistry	M.S.†
1905.01	26766	Chemistry Teacher	M.A.†
1010	36817	Cinema Arts	M.F.A.
1214	78495	Community Health	M.A.
0701	77202	Computer Science	M.S.
1507	02056	Creative Writing (See also English.)	M.F.A.
0823	36844	Early Intervention and Parenting	Advanced Certificate
1914	02091	Earth and Environmental Sciences	M.A.
1914	36028	Earth and Environmental Sciences	M.S.
1917.01	33640	Earth Science Teacher (grades 7–12) (in-service)	M.A.T.
1917.01	33641	Earth Science Teacher (grades 7–12) (pre-service)	M.A.T.
Education* (See also teacher education programs in subject areas.)			
0834	32662, 32663	Adolescence Science Education (grades 7–12)	M.A.T.
0899	31826	Bilingual Education	Advanced Certificate
0802	26826	Childhood Education Teacher (grades 1–6)	M.S. in Ed.
	26823	Childhood Education Teacher (grades 1–6): extension to bilingual education	M.S. in Ed.
00823	26736	Early Childhood Education Teacher (birth–grade 2)	M.S. in Ed.

HEGIS Code	SED Program Code	Certificate or Program Name	Certificate or Degree(s) Awarded
0828	33411	Educational Leadership: School Building Leader; School District Leader	M.S. in Ed.
0811	31828	Gifted Education	Advanced Certificate
0804.03	26723	Middle Childhood Education Specialist: Mathematics (grades 5–9)	M.S. in Ed.
0804.04	26820	Middle Childhood Education Teacher: General Science (grades 5–9)	M.A.
0899	36517	Museum Education	Advanced Certificate†
0826.02	36488	Play Therapy	Advanced Certificate
0826.01	41479	School Counseling	M.S. in Ed.
0826.02	01998	School Psychologist	M.S. in Ed.
0826.02	79597	School Psychologist	Advanced Certificate
0808	26726	Teacher of Students With Disabilities in Early Childhood Education (birth–grade 2)	M.S. in Ed.
0808	26729	Teacher of Students With Disabilities in Childhood Education (grades 1–6)	M.S. in Ed.
0808	31136	Teacher of Students With Disabilities in Secondary Education (grades 7–12)	M.S. in Ed.
1501	02044	English (See also Creative Writing.)	M.A.
1501.01	26811	English Teacher	M.A.
1102	02026	French	M.A.
1102.01	26797	French Teacher	M.A.
2104.10	38330	Geriatric Mental Health	Advanced Certificate†
0799	86190	Health Informatics	M.S.†
2205	02107	History	M.A.
0702	89058	Information Systems	M.S.†
0309	79419	Judaic Studies	M.A.
1299.30	89178	Exercise Science and Rehabilitation	M.S.†
0835	26745	Physical Education Teacher	M.S. in Ed.
1501	39593	Publishing	Advanced Certificate†
0835	83153	Sport Management	M.S.†
1701	02063	Mathematics	M.A.†
1701.01	26734	Mathematics Teacher (See also Education.)	M.A.
0603	77735	Media Studies	M.S.
1004.10	37733	Media Scoring	M.F.A.
1005	02020	Musicology	M.A.
1004.10	88183	Music Composition	M.Mus.
1004	88184	Music Performance	M.Mus.
1004	36848	Music Performance (18 credits)	Advanced Certificate
1004	36849	Music Performance (36 credits)	Advanced Certificate
1004	36846	Music Performance (18 credits)	Advanced Diploma

HEGIS Code	SED Program Code	Certificate or Program Name	Certificate or Degree(s) Awarded
1004	36847	Music Performance (36 credits)	Advanced Diploma
1004	39249	Global and Contemporary Jazz Studies	M.Mus.†
0832	26816	Music Teacher	M.A.
0832	26817	Music Education	Advanced Certificate
1306	86173	Nutrition	M.S.
1004	27812	Performance and Interactive Media Arts	Advanced Certificate
1099	31062	Performance and Interactive Media Arts	M.F.A.
1902	02068	Physics	M.A.
1902.01	26762	Physics Teacher	M.A.†
2207	02108	Political Science	M.A.
2002	90064	Psychological Research	M.S.†
2008	90065	Industrial and Organizational Psychology—Group Processes and Organizational Behavior	M.A.
2008	90066	Industrial and Organizational Psychology—Personnel and Human Resources	M.A.
2104.10	30978	Mental Health Counseling	M.A.
2104.10	42353	Mental Health Counseling	Advanced Certificate
1010	36605	Screen Studies	M.A.
2201.01	26753	Social Studies Teacher	M.A.
2208	02110	Sociology	M.A.†
1104.10	37730	Sonic Arts	M.F.A.
1105	02035	Spanish	M.A.
1105.01	26800	Spanish Teacher	M.A.
1506	81376	Speech	M.A.†
1220	77738	Speech Language Pathology	M.S.
1220	29956	Audiology (program cosponsored by Hunter, Brooklyn, and the CUNY Graduate Center; Brooklyn College awards the Aud.D.)	Aud.D.
0603	84002	Television Production	M.F.A.†
2104.103	30468	Thanatology	Advanced Certificate
1007	76211	Theater	M.F.A.
1007	04002	Theater	M.A.†

* Additional titles for alternative (transition B) certificate programs also appear in the inventory. These specialized programs provide alternative pathways to teacher certification. Consult with the School of Education for further information.

† Programs currently not accepting applications.

Addendum

For current tuition rates and fees, visit the college website.