QUEENS COLLEGE

Graduate Bulletin

2020–2021

QUEENS COLLEGE CUNY

Graduate Bulletin

2020–2021

QUEENS
COLLEGE

Frank H. Wu, President

Graduate Studies at Queens College
Queens, New York 11367-1597 | 718-997-5000 | www.qc.cuny.edu

Office of the Provost 718-997-5900 • Graduate Admissions 718-997-5200
Elizabeth Hendrey, Provost and Vice President for Academic Affairs

CUNY

A Message from the Provost

Since its inception in 1937, Queens College has dedicated itself to excellence in the liberal arts and sciences. We are proud to be a City University of New York campus entrusted with the mission of teaching on both the undergraduate and graduate levels. Our graduate division has an excellent reputation for offering exceptional quality, diversity, and affordability. Our master's programs are highly rated by *Washington Monthly,* and we are considered a Top Public Regional University by *U.S. News and World Report.* Queens College is consistently ranked a best-value institution by *Forbes, U.S. News and World Report,* and the Princeton Review. Among returning students, our outstanding record of admitting and offering extensive services to veterans is recognized by *U.S. News and World Report* and Victory Media. As of fall 2018, we enrolled over 3,100 graduate students, of whom about 14 percent attend full time, and 86 percent attend part time.

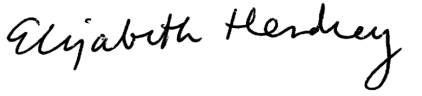
Whether you are considering graduate study as part of a career plan or for the pure pleasure of learning, Queens College has a program to fit your needs. We offer over 90 master's degrees and 20 advanced certificates in over 50 disciplines, and participate in over 20 PhD programs offered by the City University's Graduate Center. As a research center, the college is equipped with state-of-the-art science laboratories that serve hundreds of graduate students who are pursuing their research at Queens under the supervision of our faculty.

Queens College has an outstanding faculty of internationally recognized scholars who care deeply about teaching and research. Indeed, over the past decade, over 300 new, vibrant faculty have joined Queens College across all disciplines. In recognition of their scholarly excellence, our faculty received over $20 million in 2018–2019 in external grants. These include support from the National Science Foundation, the National Institutes of Health, and the New York State and City Departments of Education. Over each of the past several years, our faculty have annually published between 55 and 60 books, over 100 book chapters, and over 300 peer-reviewed publications, made over 900 conference presentations and invited lectures, and performed and/or exhibited over 400 musical, art, and theatrical pieces. Over 90 percent of our faculty possess doctorates or the highest degrees in their fields.

The college has 13 distinguished professors who have been recognized for their exceptional records of scholarly accomplishment and who teach and/or do research with graduate students. These include Joshua Freeman (noted author on 20th-century American history), Fred Gardaphé (leading expert in Italian-American studies), Azriel Z. Genack (internationally known physicist of random processes), Kimiko Hahn (award-winning poet), Samuel C. Heilman (sociologist in Jewish studies), George Hendrey (global change geologist), Yunping Jiang (low-dimensional dynamical mathematical systems and quasiconformal mappings and Teichmuller theory and Riemann surfaces), Richard McCoy (Shakespearean expert), Pyong Gap Min (expert on the Asian-American/Korean-American experience), Carl A. Riskin (development and environmental economics, and China expert), Morris Rossabi (historian specializing in the history of China and its relations with Mongolia), Stephen Steinberg (sociologist specializing in race and ethnicity studies), and Anthony Tamburri (Italian-American heritage).

Graduate education thrives in the college's environment of scholarly exchange. Our students acquire first-rate professional skills and, what is most important, the necessary intellectual and critical skills to meet the challenges of tomorrow.

Therefore, on behalf of Interim President William A. Tramontano, I welcome you to the Graduate Programs at Queens College!



Elizabeth Hendrey, PhD

Contents

Calendar

Note: Dates are subject to change. Check the college's website for the most up-to-date information.

FALL 2020

August 26 – Wednesday
First day of Fall weekday classes.

September 7 – Monday
Labor Day – College closed.

September 18–20 – Friday–Sunday
No classes scheduled.

September 28 – Monday
No classes scheduled.

September 29 – Tuesday
Classes follow Monday schedule.

October 12 – Monday
Columbus Day observed – College closed.

October 14 – Wednesday
Classes follow Monday schedule.

November 25 – Wednesday
Classes follow Friday schedule..

November 26–29 – Thursday–Sunday
Thanksgiving recess – College closed.

December 10–11 – Thursday–Friday
Reading days – No classes scheduled.

December 14–18 – Monday–Friday
Weekday final examinations.

SPRING 2021

January 29 – Friday
First day of Spring weekday classes.

February 12 – Friday
Lincoln's Birthday – College closed.

February 15 – Monday
Presidents' Day – College closed.

March 27–April 4 – Friday–Sunday
Spring Recess.

May 19–25 – Wednesday–Tuesday
Weekday final examinations.

EMERGENCY CLOSINGS

The fastest way to find out if the college will be closed due to the weather or other emergency condition is to go to www.qc.cuny.edu/alert. There you can see if/when the college will be closed, if classes will be canceled, and if the QC Shuttle Bus will be operating. Another way to be notified about emergencies or weather-related closings, via phone or email, is through CUNY Alert (sign up at www.cuny.edu/news/alert.html). Should an emergency necessitate the closing of the college, every effort will be made to provide a timely announcement on the college's homepage, its social media channels, and over the following outlets:

WCBS	**880 AM** **https://newyork.cbslocal.com/**
WINS	**1010 AM** **https://1010wins.radio.com/**
NY1	**CHANNEL 1** **www.ny1.com**
WNBC-TV	**CHANNEL 4** **www.nbcnewyork.com**
WNYW FOX	**CHANNEL 5** **www.fox5ny.com**

Important Notice of Possible Changes
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 University regrets any inconvenience this may cause.

Queens College is an affirmative action/equal opportunity educator and employer.

Queens College Today

Queens College first opened its doors in 1937, in the middle of the Great Depression, to students who were mostly immigrants or the children of immigrants. These people came to the college knowing that education was their surest road to a better life.

Today, in a world that has grown both smaller and more complex, the college retains its international flavor with students representing more than 170 nations attending classes here. And, just as before, Queens College is helping these students achieve their goals while giving them the skills to address the problems of a challenging time.

The college carries out its responsibilities by providing learning opportunities to the community, taking the word "community" in its broadest sense. The scholarly resources of our world-class faculty and facilities offer students a rich learning environment and a quality education at a reasonable cost. Through postgraduate study at Queens, students may expand their career opportunities by learning new professional skills, satisfying their scholarly interests, and participating in research that enriches our society.

Queens College students have been the recipients of many fellowships and awards, and members of the faculty have received numerous national and international fellowships, awards, and research grants.

Graduate programs are offered in all academic divisions as well as the Aaron Copland School of Music, the School of Earth & Environmental Sciences, and the Graduate School of Library & Information Studies. The college is organized into the following schools. (Please note that Queens College's area code is 718.)

ARTS & HUMANITIES SCHOOL
997-5790

Art 997-4800

English 997-4600

European Languages & Literatures 997-5980

Hispanic Languages & Literatures 997-5660

Linguistics & Communication Disorders 997-2870

Media Studies 997-2950

Aaron Copland School of Music
997-3800

EDUCATION SCHOOL
997-5220

Educational & Community Programs 997-5234

Elementary & Early Childhood Education 997-5302

Secondary Education & Youth Services 997-5150

MATHEMATICS & NATURAL SCIENCES SCHOOL
997-4105

Biology 997-3400

Chemistry & Biochemistry 997-4100

Computer Science 997-3566

Family, Nutrition & Exercise Sciences 997-4475

Mathematics 997-5800

Physics 997-3350

Psychology 997-3200

School of Earth & Environmental Sciences
997-3300

SOCIAL SCIENCES SCHOOL
997-5210

Accounting & Information Systems 997-5070

Data Analytics and Applied Social Research (Sociology)
997-2800

History 997-5350

Philosophy 997-5270

Risk Management 997-5387

Urban Studies 997-5130

Graduate School of Library & Information Studies
997-3790


Kimwipes
UltraSense
MICRO FLEX
NITRILE XL
Fisherbrand
NITRILE EXAM

Degree & Certificate Offerings

Queens College offers the following graduate degrees: Master of Arts, Master of Arts in Liberal Studies, Master of Arts in Teaching, Master of Fine Arts, Master of Library Science, Master of Music, Master of Science, and Master of Science in Education. Certificate programs currently accepting students include: Applied Behavior Analysis in Psychology, Post-Master's Certificate in Library Science, Specialist Diploma in Educational Leadership, School District Leader, and the Professional Certificate in School Psychology.

Post-baccalaureate Advanced Certificates leading to New York State provisional teacher certification are offered in Elementary Education in Visual Arts (K–12), Family and Consumer Science (K–12), Music (pre-K–12), and Physical Education (K–12); and in Adolescent Education in English, English Language Teaching, French, General Science (Biology, Chemistry, Earth Science, and Physics), Italian, Mathematics, Social Studies, and Spanish. Bilingual certificates are offered in connection with master's degree programs in Counselor Education, School Psychology, and Special Education. Post-baccalaureate certificate programs in Librarianship are also offered.

BA/MA DEGREES

For qualified undergraduate students, the Departments of Biology, Chemistry & Biochemistry, Philosophy, and Physics offer the opportunity to receive combined bachelor's and master's degrees. Application to the BA/MA program should be made during the upper sophomore or lower junior semester; admission is granted only in the junior year. Full details and application forms can be obtained from the chair or graduate advisor of these departments. See page 10 for a listing of the BA/MA degree programs officially registered under HEGIS codes with the New York State Department of Education (Office of Higher Education & the Professions, Cultural Education Center, Room 5B28, Albany, NY 12230; 518-474-5851).

Students are advised that enrollment in other than registered or approved programs may jeopardize their eligibility for certain student aid awards.

MASTER'S DEGREES

See listing on pages 10–12 for all the master's degrees that are offered by the college, along with their HEGIS and New York State Education codes.

CERTIFICATE PROGRAMS

The certificate programs offered by the college are listed on page 12, along with their HEGIS and New York State Education codes.

DOCTORAL PROGRAMS

Many members of the Queens College faculty participate in the doctoral programs of the City University of New York, which are coordinated through the CUNY Graduate School located in midtown Manhattan. In addition to awarding the PhD degree, the Graduate School offers many services for graduate students, including library and computer research facilities.

The following PhD degrees are offered: Anthropology, Art History, Biochemistry, Biology, Biomedical Sciences, Business, Chemistry, Classics, Comparative Literature, Computer Science, Criminal Justice, Earth & Environmental Sciences, Economics, Educational Psychology, Engineering, English, French, Germanic Languages & Literatures, Hispanic & Luso-Brazilian Literatures, History, Linguistics, Mathematics, Music, Philosophy, Physics, Political Science, Psychology, Sociology, Speech & Hearing Sciences, Theatre, and Urban Education. Both PhD and MD/PhD degrees are offered in Biomedical Sciences, and the DSW is offered in Social Welfare. The DMA is offered in Music Performance. Advanced doctoral work in Biochemistry, Biology, Chemistry, Computer Science, Geology, Physics, and Psychology (Neuropsychology and Learning Processes: Behavior Analysis) is given at Queens.

The first 30 credits of graduate work at the master's level constitute the first year of the doctoral program in some departments. Financial assistance may also be available. For more information, contact the appropriate department at the college or the CUNY Graduate School, 365 Fifth Avenue, New York, NY 10016-4309.

REQUIREMENTS

Students are responsible for meeting degree requirements in force at the time of their first enrollment as matriculated students. Changes to the structure of a program will be applied in such a way as to avoid increasing the number of credits required

of students who have started taking courses in the program. If degree requirements are changed following matriculation, the student may have the option of satisfying either the original or new requirements.

Students dismissed for academic reasons may be subject to new regulations, depending on how long after dismissal the student returns and such other factors as may be taken into account by the Graduate Scholastic Standards Committee.

Please consult the appropriate departmental listing in this *Bulletin* for specific degree and advanced certificate requirements, including the number of semester hours required for the program, mandatory courses, etc. General requirements are as follows:

Minimum Grade-Point Average of B (3.0): All programs must be completed with a minimum average of at least *B* (3.0). At the completion of the total credits allotted to a program, if a student does not have a 3.0 average and wishes to register for additional courses in order to attempt to raise the grade-point average, permission to do so must be obtained from the appropriate academic dean. Such courses must be taken at Queens College. For information on probationary status and dismissal, see the section on *Scholastic Standards*.

Time Limits: All programs must be completed within the time limits permitted for each degree and advanced certificate program. The time limit for completion of all requirements for the Master of Arts, Master of Arts in Liberal Studies, Master of Fine Arts, Master of Library Science, or Master of Science degree is four years. The time limit for the Master of Arts in Teaching and the Master of Science in Education degree is five years. Time limits for certificate programs are noted under the appropriate departmental listing in this *Bulletin*. Transfer credits or credits taken as a non-matriculant that have been approved by the department must have been taken within the time limit. Requests for extensions of time must be submitted to the appropriate academic dean.

Credit Requirement: The number of credits required for master's degree programs varies by program and ranges from 30 to 60. The number of credits required for certificate and diploma programs also varies. Please consult the appropriate departmental listing in this *Bulletin* for the credits each program requires.

Thesis and/or Comprehensive Examination Requirement(s): Consult the appropriate departmental listing in this *Bulletin* to determine if a thesis and/or comprehensive examination constitutes part of the requirements for the degree or advanced certificate.

SUMMER SESSION

The college offers several Summer Sessions. Graduate courses are scheduled during two six-week sessions, and also may be given during the four-week session. All of the college's academic, recreational, and cultural facilities are available during this period. For graduate courses and other information, please visit the Summer Session website or write to Summer Session, Queens College, CUNY, Queens, NY 11367-1597. Limited graduate courses are offered in the Summer Session; consult your individual department and/or MA advisor for details about your program.

TRANSFER CREDITS

In most cases, a maximum of 12 credits of graduate work completed at other institutions *may* be accepted as transfer credit, if approved by the appropriate department(s) and taken within the time limit specified for the degree or certificate program.

Matriculated students seeking transfer credit for graduate work taken at another institution must submit the request for evaluation of such credit *no later than the end of their second semester in attendance.* The credits to be transferred must have been taken before the student matriculated at Queens College.

Only the following grades will be accepted for transfer credit: *A+, A, A–, B+, B,* and *B–*. (In cases where a student obtained a *P* grade, and the *P* is

equivalent to no lower than a *B–*, the grade may be transferred if approved by the appropriate department.)

Some graduate programs will not accept courses for credit where the grade is below *B*. Check the departmental listing in this *Bulletin*.

New graduate matriculants who wish to transfer credits from one Queens College record to another Queens College record must file a departmentally approved Advanced Standing Transfer Credit Form in the Graduate Admissions Office (Jefferson Hall, 1st floor).

PERMITS

Currently enrolled matriculants who wish to take courses at another institution must first file for an official permit through the Office of the Registrar *prior* to taking the course. The permit acts as an agreement to allow the student to receive credit for one or more courses completed at another institution. Permits must be filed during the registration period for the term in which the course is to be taken. *Retroactive permits will not be issued.*

There are two types of permit:

1. CUNY permits (E-Permits), for courses taken at another CUNY institution, are filed online by logging on to CUNYfirst, Student Self-Service. In the drop-down menu under Academic, select ePermit.

2. Non-CUNY permits, for courses taken at institutions unaffiliated with CUNY, are filed by submitting a Non-CUNY Permit Request form to the Office of the Registrar. The form must be signed by a faculty graduate advisor to indicate departmental permission for the courses to be taken, and must be processed by the Office of the Registrar. Forms are available online. Courses taken with a non-CUNY permit receive credit only; grades for such courses are not included in the student's GPA.

To be eligible for a permit to enroll outside Queens College in a course or courses pertaining to a graduate degree or certificate program, a student must first:

1. be matriculated in a graduate degree or certificate program at the college;

2. have obtained the approval of the departmental graduate advisor for the permit; and

3. have registered for and completed with a passing grade at least one undergraduate prerequisite course or one graduate course as part of the graduate program at Queens College—except that, if the student is in the first semester of attendance, he/she must register in at least one graduate or undergraduate course at Queens while simultaneously registering elsewhere for the permit course(s).

Students who have taken an entire semester's program on permit at an institution other than a CUNY college must pay a reentry fee and file a graduate reentry application.

TRANSFER AND PERMIT COURSE GRADES AND GPA

Transfer credit grades and grades earned on permit at a non-CUNY institution will not be counted into the cumulative grade-point average (GPA); only the course equivalent or elective credits are posted to the student's record at the college. A minimum grade of *B–* must be earned in order to receive credit for the course toward the degree. It is the responsibility of the student to have an official transcript sent to the Office of the Registrar once the course is completed. No advanced standing or transfer credit may be posted to a student's Queens College record unless an official transcript certifying to the completion of the work has been submitted.

Important note: As of the Fall 2004 semester, grades earned for coursework completed on permit at a CUNY institution other than Queens College *will* be posted to the student's record and *will* be counted into the student's GPA. Queens College will now secure the grade from the host college on the student's behalf.

THESIS, CAPSTONE PROJECT, OR RESEARCH PAPERS

A student matriculated in a department that requires a master's thesis, capstone project, or research papers must submit the manuscript in as many copies as required to the departmental advisor for approval. The title page of the manuscript must bear the following description: "Submitted in partial fulfillment of the requirements for the degree of Master of Arts *or* Master of Arts in Liberal Studies *or* Master of Library Science in (Department) in the Graduate Division of Queens College of the City University of New York, date." Thesis, capstone project, and research paper approvals must be submitted to the appropriate academic dean prior to the degree conferral date. These approvals must then be forwarded by the office of the dean to the Registrar's Office to be posted to the student's record on or before the conferral date.

After the manuscript has been approved, the student must arrange for binding. A $25 binding fee must be paid at the Bursar's window, and a receipt will be issued. The receipt and two copies of the manuscript must be taken to the Catalogue Department, Rosenthal Library, Room 201. One bound copy of the manuscript is retained by the Library and becomes part of its collection. A second bound copy is for the academic department. If desired, a third copy may be submitted, which, when bound, will become the property of the student.

APPEALS

For relief from or waiver of regulations of the Graduate Division, students may petition the Office of the Provost. Appeals of the decision of the office may be directed to the Graduate Scholastic Standards Committee through the Associate Provost.

BA/MA DEGREES

Program (and QC Program Code)	*HEGIS Code*	*NYS Ed. Code*
Biology *(26.0101)*	0401	37475
Chemistry & Biochemistry *(021)*	1905	02798
Philosophy *(081)*	1509	02772
Physics *(085)*	1902	02787

MASTER'S DEGREES

Master's degrees are offered in these officially registered graduate programs, listed with their HEGIS and New York State Education codes.

MASTER OF ARTS DEGREES

Program	*HEGIS Code*	*NYS Ed. Code*
Applied Behavior Analysis	2099	33417
Applied Linguistics	1505	85420
Art History	1003	02728
Behavioral Neuroscience	0425	32823
Biology	0401	02698
Chemistry & Biochemistry	1905	02796
Computer Science	0701	02705
Economics*	2204	02812
English	1501	02762
French	1102	02737
Geology	1914	02801
History	2205	02814
Italian	1104	02744
Mathematics	1701	02780
Media Studies	0601	02703
Music	1004	02731
Physics	1902	02784
Psychology	2001	02806
Psychology: Clinical Behavioral Applications in Mental Health Settings*	2099	90172
Sociology	2208	02819
Spanish	1105	02748
Speech Pathology	0815.00	26448
Urban Affairs	2214	02820

*Applications to this program are not currently being accepted.

Program	*HEGIS Code*	*NYS Ed. Code*
MA IN LIBERAL STUDIES	4901	82492
MASTER OF FINE ARTS		
Creative Writing	1507	31162
Studio Art	1002	02726
MASTER OF LIBRARY SCIENCE		
Library Science	1601.00	02778
Library Media Specialist	0899.01	26411
School Library Media Specialist	1601	34038
MASTER OF MUSIC DEGREES		
Classical Performance	1004.00	35704
Jazz Studies	1004.00	35705
MASTER OF SCIENCE DEGREES		
Accounting & Info. Systems	0502.00	22642
Applied Environmental Geoscience	1914.00	30266
Childhood Ed.	0899.50	27071
Nutrition & Exercise Science	1229.30	22412
(specializations in Nutrition and Exercise Sciences)		
Photonics	1902	35448
Risk Management: Accounting	0502	34081
Risk Management: Dynamic Models	0505	33805
Risk Management: Finance	0505	33804
MASTER OF ARTS IN TEACHING		
Adolescent English Ed. (7–12)	0803.00	36535
Adolescent Math Ed. (7–12)	0803.00	36534
Adolescent Visual Art Ed. (7–12)	0803.00	36536
Childhood Ed. (1–6)	0802.00	26436
Childhood Ed., Biling. Ext. (1–6)	0899.00	26441
Childhood Special Ed. (1–6)	0808.00	32461
Early Childhood Ed. (B–2)	0823.00	26434
Adolescent/Special Ed. Generalist (7–12)	0808.00	32462
MASTER OF SCIENCE IN EDUCATION		
Adoles. Ed.: Biology (7–12)	0401.01	26425
Adoles. Ed.: Biology	0899.50	27480

*Applications to this program are not currently being accepted.

Program	*HEGIS Code*	*NYS Ed. Code*
Adoles. Ed.: Chemistry (7–12)	1905.01	26426
Adoles. Ed.: Chemistry	0899.50	27481
Adoles. Ed.: Chinese		
Adoles. Ed.: Earth Science (7–12)	1917.01	26428
Adoles. Ed.: Earth Science	0899.50	27482
Adoles. Ed.: English (7–12)	1501.01	26423
Adoles. Ed.: English	0899.50	27476
Adoles. Ed.: French (7–12)	1102.01	26430
Adoles. Ed.: French	0899.50	27477
Adoles. Ed.: Italian (7–12)	1104.01	26431
Adoles. Ed.: Italian	0899.50	27478
Adoles. Ed.: Mathematics (7–12)	1701.01	26424
Adoles. Ed.: Mathematics	0899.50	27484
Adoles. Ed.: Physics (7–12)	1902.01	26427
Adoles. Ed.: Physics	0899.50	27483
Adoles. Ed.: Social Studies (7–12)	2201.01	26429
Adoles. Ed.: Social Studies	0899.50	27485
Adoles. Ed.: Spanish (7–12)	1105.01	26432
Adoles. Ed.: Spanish	0899.50	27479
Art Ed. (Visual Arts)	0831.00	26446
Childhood Ed. (1–6)	0802.00	26439
Childhood Ed. with Biling. Ext. (1–6)	0899.00	26440
Childhood Special Education	0899.50	30492
Counselor Ed.	0826.01	02712
Early Childhood Ed. (B–2)	0823.00	26438
Educational Leadership	0827.00	32369
Family & Cons. Sci. Teacher Ed. (K–12)	1301.01	26422
Integrated Bilingual Early Childhood Spec. Ed. (B–2)	0808.00	40742
Instructional Leadership (Non-Certification)	0826.00	
Literacy Teacher (B–6)	0830.00	26420
(5–12)	0830.00	26421
Mental Health Counseling		
Music Ed. (pre-K–12, 36 credits)*	0832.00	26450
Music Ed. (pre-K–12, 30 credits)	0832.00	26449
Music Ed.	0899.50	27072
Physical Ed. Teaching Curric.	0835.00	26414
School Psychologist	0826.02	02711
Teacher of Special Education 7–12		
Special Ed.: Generalist	0899.50	30493
Special Ed.: Biology (7–12)	0899.50	30500
Special Ed.: Chemistry (7–12)	0899.50	30501
Special Ed.: Earth Sci (7–12)	0899.50	30502

Special Ed.: English (7–12)	0899.50	30494
Special Ed.: French (7–12)	0899.50	30496
Program	*HEGIS Code*	*NYS Ed. Code*
Special Ed.: Italian (7–12)	0899.50	30497
Special Ed.: Math (7–12)	0899.50	30495
Special Ed.: Physics (7–12)	0899.50	30503
Special Ed.: Social Studies (7–12)	0899.50	30499
Special Ed.: Spanish (7–12)	0899.50	30498
Teacher of Special Ed. (B–2)	0808.00	26412
(1–6)	0808.00	26482
Teaching Students with Disabilities		
Adolescent Generalist: Grades 7–12	0808.00	26417
Teaching English to Speakers of Other Languages (TESOL)	1508	26444

CERTIFICATE PROGRAMS

POST-BACCALAUREATE ADVANCED CERTIFICATES

Program	*HEGIS Code*	*NYS Ed. Code*
Adoles. Ed.: Biology	0401.01	26868
Adoles. Ed.: Chemistry	1905.01	26869
Adoles. Ed.: Chinese	1107.00	32707
Adoles. Ed.: Earth Science	1917.01	26870
Adoles. Ed.: English	1501.01	26864
Adoles. Ed.: French	1102.01	26865
Adoles. Ed.: Italian	1104.01	26866
Adoles. Ed.: Mathematics	1701.01	26872
Adoles. Ed.: Physics	1902.01	26871
Adoles. Ed.: Social Studies	2201.01	26873
Adoles. Ed.: Spanish	1105.01	26867
Applied Behavior Analysis	2299.00	22225
Archives & Records Management & Preservation	0699.00	28084
Art – Critical Social Practice		
Art Ed. (Visual Arts)	0831.00	26447
Bilingual Ed.: Education	0802.00	32783
Biling. Ed.: ITI	0890.00	32722
Biling. Pupil Personnel	0899.00	32165
Biling. Pupil Personnel–Intensive	0899.00	32166
Childhood Ed. (Grades 1–6)	0802.00	26437
Children/Youth Serv. in Public Lib.	1699.00	26916
Early Childhood Education (B–2)	0802.00	31393
Earth Science (7–12)	1917.01	28142
Educational & Learning Technologies	0899.00	89023
English Language Teaching	1508.00	31946
Family & Cons. Sci. Teacher Ed. (K–12)	1301.01	26442
Music and Production (MAP) Advanced Cert.*		
Music Ed. (pre-K–12)	0832.00	31639
Music Performance – Prof. Studies	1004.00	32426
Physical Ed.	0835.00	26416
Special Ed.		
Childhood Ed. (1–6)	0808.00	32803
Early Childhood (B–2)	0808.00	32802
Teaching Students with Disabilities at the Adolescent Level: Generalist Grades 7–12	0808.00	32804
TESOL: ITI	0899.60	32258

POST-GRADUATE CERTIFICATE

Art – Critical Social Practice	1099.00	38055

POST-BACCALAUREATE ADVANCED DIPLOMAS

Chamber Music	1004.00	32425
Music Performance	1004.00	32424

POST-MASTER'S ADVANCED PROGRAMS

Child Development Psychology	0802.00	31395
Children's Literature (1–6)	0802.00	31398
Early Childhood Education (B–2)	0802.00	31393
Language Minority Ed. (B–6)	0899.00	31394
Librarianship	1601.00	76018
Mathematics Ed. (1–6)	0802.00	31399
Music Performance	1004.00	32424
School Building Leader†	0828.00	28942
School District Leader	0827 00	32369
School Psychology‡	0826.02	12900
Science Ed. (1–6)	0802.00	31396
Social Studies Ed.	0802.00	31397
TESOL & Elementary Bilingual Ed.**		

*Applications to this program are not currently being accepted.

†This advanced certificate program leads to a specialist diploma in School Building Leadership at both elementary and secondary school levels.

‡This professional certificate program is offered in conjunction with the Master of Science in Education program.

**Pending NYS Ed. approval; consult Prof. Vago in TESOL or Prof. Velasco in EECE.

Government, Services & Facilities

Graduate students are encouraged to take advantage of the numerous services and facilities offered by Queens College. There is something for everyone: students can receive career and personal counseling; become involved in the governing of the college by joining the Academic Senate; attend musical and theatrical events; or enjoy a swim in the pool in FitzGerald Gymnasium. Parking is available for those who drive. A college-issued identification card will facilitate students' access to the campus. (Please note that Queens College's area code is 718.)

STUDENT GOVERNMENT

Academic Senate

The Academic Senate is the chief legislative body of the college and, subject to the CUNY Board of Trustees, is responsible for the formulation of policy relating to the admission and retention of students, curriculum, granting of degrees, campus life, and the nomination and review of academic (full) deans. It also establishes rules governing the use of the college name by organizations and clubs, and conducts all educational affairs customarily cared for by a college faculty. There are twenty student representatives and forty faculty delegates/senators. Student representatives are elected every spring by the student body. In addition, there are eleven active Academic Senate standing committees, three special committees, and two college committees, all of which have and encourage the participation of student members. These committees deal with issues ranging from curriculum and academic standards to campus beautification. Applications for committee membership are available at www.qc.cuny.edu/academicsenate.

The Academic Senate usually meets one Thursday of each month from September through May. Meetings are held in Kiely Hall 170 and are open to all. Members of the college community—faculty, staff, and students—are encouraged to participate in discussions. A complete description of the Academic Senate is available in the Senate office in Kiely Hall 141 (718-997-5880; www.qc.cuny.edu/academicsenate).

Graduate Scholastic Standards Committee

The committee is made up of faculty and graduate students representing each division of the college. It constitutes a board of final appeal for students requesting relief from scholastic regulations and requirements of the Graduate Division. Such requests must be directed initially to the Dean of Graduate Studies.

Graduate Curriculum Committee

All proposals to change the present curriculum of the Graduate Division, including proposals for new programs, courses, changes in requirements and prerequisites, etc., must be presented to the Graduate Curriculum Committee for review and approval prior to submission to the Academic Senate. The committee is composed of faculty and graduate students representing each division of the college.

STUDENT SERVICES

Student Association
Student Union 319; 997-4862

The Student Association represents all students, clubs, organizations, and interest groups at Queens College. It offers a variety of services, programs, and events to undergraduate and graduate students. As home to the Student Senate and student leaders across campus, it is the backbone of student-run initiatives and involvement on campus. Its office provides an open student lounge where all students can socialize and relax. Any student interested in joining may go directly to the office and pick up an application (Monday–Friday, 9 am–6 pm).

Graduate Student Organizations

Chi Sigma Iota–Nu Gamma Psi is an honor society for students in the Graduate Counselor Education Program.

Graduate Counselor Education Club acts as an advocate for school/mental health counseling professions and educates the community about the role of a school/mental health counselor (Powdermaker 032).

Graduate Fine Arts Club acts to inform the community about the arts, increase the audience for Master of Fine Arts events, and strengthen the program (Klapper Hall 673; 997-4791).

Graduate Library and Information Studies Student Association alerts students to the importance of networking and sharing ideas while they study, observe, and begin their careers as librarians and information technology specialists.

Graduate Music Association presents professionally led concerts of music composed by its student members.

Graduate School Psychology Club helps to further the education of members and keep them informed about the field (Powdermaker 030; 997-5230).

Graduate Award

An annual prize is awarded to recognize outstanding scholarship and exceptional research or accomplishment in the creative arts and humanities as well as the mathematical, physical, biological, and social sciences. Students who are nominated by a faculty member and are graduating with a Master of Arts, Master of Arts in Liberal Studies, Master of Arts in Teaching, Master of Fine Arts, Master of Library Science, Master of Science, or Master of Science in Education degree are eligible. Many academic departments also provide specialized awards for graduating students.

Scholarships

Thanks to the generosity of the Queens College Foundation, the college is able to award over 60 part-time ($5,500) and full-time ($8,500) scholarships to master's students entering Queens College graduate programs in the 2020–2021 academic year. For information on how to apply, visit the Graduate Admissions website at www.qc.cuny.edu/admissions/graduate.

Veterans and Military Service Information

Queens College is an approved training institution for veterans, disabled veterans, military personnel, spouses, and dependents. Students who believe they are eligible for benefits can be certified to the Veterans Administration by going to Veterans Support Services, Student Union, Room 320, at the time of acceptance. Students must notify the certifying official of all changes in their credit load to ensure their eligibility for future benefits. (See also information under Veterans Administration Educational Benefits in the section on *Tuition, Fees & Financial Aid*.)

OFFICE OF THE VICE PRESIDENT FOR ENROLLMENT & STUDENT RETENTION

Kiely Hall 1305; 997-5929

The Division of Enrollment and Student Retention brings enhanced focus and support to all facets of the student experience in admission, enrollment, advising, and degree completion. The division is responsible for the following areas across the campus: Admissions, QC Hub (includes the functions of Financial Aid, the Registrar, and the One Stop Service Center), Academic Advising, Testing, and College Now.

Financial Aid Services

Jefferson Hall
997-5102; fax 997-5122; www.qc.cuny.edu/fao

For our current location and office hours, please visit our website.

Office of the Registrar

Jefferson Hall, 1st Floor; 997-4400
Hours (for referrals and appointments only): Mon.–Fri., 9 am–5 pm
Customer Service hours: Visit the One Stop Service Center, Dining Hall, Room 128, Mon.–Fri., 9 am–5 pm, and Tues.–Wed., 5–7 pm (when classes are in session)

For information on registrar services, see www.qc.cuny.edu/registrar.

DIVISION OF STUDENT AFFAIRS

Student Union, Room 327
997-5500; VPSA@qc.cuny.edu

The Office of the Vice President for Student Affairs is an advocate for students in their lives beyond the classroom, including by helping them explore and secure campus services. It also assists them with any concerns or complaints they may have about the college. Its objectives include helping students succeed individually and building a sense of community on campus.

Center for Career Engagement and Internships

Frese Hall 213; 997-4465; fax 997-4463
http://career.qc.cuny.edu
Hours: Mon.–Fri., 9 am–5 pm. (Tues. and Wed. until 7 pm when classes are in session)

The Center for Career Engagement and Internships is the student's link between the academic and the business and professional worlds. Queens College alumni also are allowed to access some services. In addition to one-on-one career counseling, many other resources are available for students:

- Counseling on how to choose a college major and select a career.
- Computer-assisted counseling and information to explore different college majors, graduate schools, and information on part-time job opportunities for current students who wish to develop practical work experience while earning money.
- Internship preparation assistance, referral, and follow-up.
- Workshops on career exploration for students who are in the process of defining their career goals through interaction with alumni and other professionals.
- Workshops on the question: "What can you do with your major?"
- Job-search counseling for graduating students who are preparing to enter the workforce.
- Summer job information and referral.
- Workshops on resume writing, interview techniques, and job-search strategies to help students develop skills to organize their educational and work experience to prepare for the transition from college to work.
- On-campus recruitment for graduating students through campus interviews.
- Full-time job information for graduating students and recent alumni.
- Information on recruiting organizations, employers and career directories, current job vacancy listings, and an array of other career resources.
- Credential Services: The office has made arrangements with Interfolio, Inc., which offers web-based credentials file management to handle our credentials service. Interfolio maintains an electronically stored credential service that offers students convenience and accessibility. To begin using these services, students must create an account at www.Interfolio.com. Further information is available at the Center for Career Engagement and Internships. Through this important resource, recommendation letters can be forwarded to graduate schools and prospective employers to support your applications.

- An Internet-based internship, career, and job information system (on Symplicity).

An internship is a supervised education program that integrates classroom learning with work experience. The program provides students with individualized, structured, career-exploration opportunities that include:

- Career counseling
- Resume preparation
- Information on interviewing techniques
- Job-search strategies
- Work experience
- Professional enrichment

The program is administered by the Center for Career Engagement and Internships in cooperation with the academic departments that sponsor internships and offer academic credit as appropriate.

The Child Development Center at Queens College

Kiely Hall 245; 997-5885

The center provides high-quality early care and education for children (30 months to 5 years) of QC students. An after-school program is also available for children (5 to 10 years of age) from 3:30 to 8 pm. For more information, visit www.qc.cuny.edu/childdev or Kiely Hall, Room 245.

Counseling, Health & Wellness Center: Counseling Services, Health Services, Office of Special Services, Minority Student Affairs, and Peer Support Services

For information on these services, see www.qc.cuny.edu/stuservices.

International Students and Scholars

King Hall 207; 997-4440; www.qc.cuny.edu/isso

The International Students and Scholars Office (ISSO) facilitates international student and exchange visitor entry into the U.S. for the purpose of earning a degree, conducting research, or teaching at Queens College. During an international visitor's stay at the college, the ISSO staff provides him or her with a variety of ongoing support services, including maintenance of U.S. visa and immigration requirements, employment eligibility assessment, and authorization for students and faculty holding the F-1 Student Visa and J-1 Exchange Scholar Visa, as well as academic and cross-cultural advisement.

The Summit Office of Housing & Residence Life

Summit Apartments, Room 138
997-4881; fax 997-4882
www.qc.cuny.edu/housing

Queens College offers all students the opportunity to live on campus in an apartment-style residence hall. The Summit Apartments provide luxury housing and support services to assist students in being successful. The building offers the privacy, amenities, services, and conveniences that today's college students seek:

- Fully furnished apartments
- Private and shared bedrooms
- Semi-private bathrooms
- All utilities included
- Stove, microwave, and full-size refrigerator
- Free laundry
- Fitness center
- Individual controls for heat and air-conditioning
- Digital cable TV and wireless high-speed Internet
- 24-hour computer lab access
- Parking
- Professional live-in staff
- Safety cameras in corridors and common areas
- 24-hour staffed courtesy desk

Queens College Online Bookstore

www.QCBookstore.com

By logging in through CUNYfirst, students may obtain a customized list of books and materials that are required for courses in which they are registered. They are given comparison prices for new, used, rental, and eBook options, which can be shipped to either home or campus addresses. Buying books and materials through the online bookstore benefits student-focused programs and services throughout Queens College.

Queens College Shuttle

All students may ride the Queens College Shuttle, which travels between the college and mass-transit hubs at Jamaica Station and the Flushing–Main Street Station. For routes and schedules, visit www.qc.cuny.edu/shuttle.

Veterans Support Services (VSS)

Student Union 320; 997-5539
www.qc.cuny.edu/veterans

VSS provides full assistance with paperwork required for obtaining VA educational benefits, arranges deferral of tuition bills, and certifies enrollment to Veterans Administration. In addition, it collaborates with all departments on campus in assisting veterans, military personnel, and their families, and offers a support structure to ensure academic success.

FACILITIES

The Student Union

Hours: Monday–Thursday, 7 am–10:30 pm; Friday–Sunday, 7 am–5 pm (subject to change)

The Student Union is the hub of campus life. Containing major social, cultural, recreational, and educational facilities and services, the Student Union adds greatly to student development, enrichment, and pleasure. More than 45 student organizations have office space here, and another 90 use the Union for meetings, events, and seminars.

Various food choices are available at the Student Union. Starbucks Coffee Shop offers a variety of espresso and coffee beverages and freshly prepared sandwiches and soup. Avenue Q is a convenience store that offers prepared meals and snacks.

Other services offered at the Student Union include a parking garage and a branch of the Queens County Savings Bank. Catering facilities, meeting rooms, and the fourth-floor ballroom are available for lectures, movies, music performances, conferences, and dinner or dance events.

Financed through Student Union fees and revenue-producing enterprises, the Student Union is committed

to meeting the needs of the entire college and greater New York communities.

Dining Hall

The Midway Court includes a Starbucks store that sells espresso and coffee, On the Go Grab and Go, Shah's Halal, and the Dairy Stop, which serves only kosher food provided under strict rabbinical supervision. An ATM is available.

The Corner Pocket, a recreation center, features billiards, ping-pong, video games, and copy services. It also offers discounted AMC movie tickets for purchase.

Two additional food service areas operate on campus:

- The Science Building has a café on the second floor landing, which features a full line of Starbucks beverages, bagels, and made-to-order sandwiches.
- Rosenthal Library is home to an Internet café, Books and Bytes, with coffee, snacks, and light meals.

Athletics and Recreation
FitzGerald Gymnasium
https://queensknights.com/

In the belief that an integrated curriculum should foster students' physical as well as cognitive abilities, the Office of Intercollegiate Athletics and Recreation presents graduate students with an opportunity to participate in intramural and recreational athletics. These programs are now run through the Office of Campus and Community Recreation (OCCR). The recreation program is made up of informal open recreation, including basketball, swimming, weightlifting, running, tennis, fitness classes, and many other activities. Fitness classes in the past included yoga, martial arts, self-defense, and meditation, among others. Students who wish to participate should contact the Fitness Center in FitzGerald Gymnasium 206 at 997-2740. Facility hours for these activities are posted in the office at the start of each semester.

The intramural program is composed of special events and activities such as flag football, volleyball, three-on-three and five-on-five basketball, indoor soccer, badminton, dodgeball, wiffleball, a one-day track event, and the Fall Fun Run. Students may enter as a team or ask to be placed on an existing team. Announcements about specific activities and the appropriate forms may be obtained in the OCCR in FitzGerald Gymnasium 206 (570-0361). All intramural activities are held during Club Hours on Mondays and Wednesdays, 12:15–1:30 pm. For more details and a full description, visit www.queensknights.com.

Benjamin S. Rosenthal Library
https://library.qc.cuny.edu

The Benjamin S. Rosenthal Library, which opened in 1988, is the centerpiece of the campus with six levels of space for study and research. Its distinctive Chaney-Goodman-Schwerner Clock Tower is dedicated to the memory of the three civil rights workers murdered in Mississippi during the Freedom Summer of 1964.

The Library's collection contains over 900,000 printed books, 400,000 e-books, 115,000 e-journals, and 300 research databases. The Library supports teacher education through its Educational Curriculum Center and a sizeable collection of education and curriculum materials. The department of Special Collections and Archives contains rare books, manuscripts, primary source materials, and the College's archives, which are available for primary research. The Art Library has a research-level collection of books, periodicals, and visual items. The Music Library, located in the Aaron Copland School of Music, is a first-class research facility with many thousands of scores, books, and sound recordings, including several special collections.

The Library houses a computer commons on level 2—with more than seventy workstations for student use and late-night study—with print, copy, and scan services, as well as group study rooms located throughout the building. In addition, we have recently created a pop-up makerspace and are currently installing a data services lab with specialized software and support for data-based projects.

In addition, the Library provides access to its electronic resources from off campus, online book renewal, and online access to scanned required readings for courses. Users may submit online requests for circulating books from other CUNY libraries, borrow books from non-CUNY libraries, and receive online delivery of periodical articles from other libraries.

Research Services provides reference and research help by our research librarians—through walk-in consultation as well as telephone, email, and a cooperative 24/7 chat service. For specialized research questions, students may consult with a subject specialist librarian. Instructional Services maintains several computer lab classrooms where our Library faculty teach subject-based, course-related sessions in library research methods.

Information Technology Services
www.qc.cuny.edu/computing

The Office of Information Technology Services (ITS) offers in-person, email, and phone Help Desk support (located in the Dining Hall, Room 151). It provides QWIFI on-campus wireless access, network and telephone services, web services, and audio/video and digital media classroom and event services. ITS also administers access to the following accounts for faculty, staff, and students:

- CUNYfirst
- QC username (CAMS: Campus Access Management Systems)
- Mymail (email services for faculty and staff)
- Office 365 student email
- Office 365 Pro Plus faculty and staff
- CUNY Portal and Blackboard
- Authentification services for Lynda.com and Google for Education

ITS manages the QC Technology Fee Committee process and promotes compliance with the CUNY Information Technology security policy (security.cuny.edu). ID Cards are issued at the QCard office located in the Dining Hall (Room 116A). ITS computer labs are open Sunday–Saturday in the I Building and Powdermaker Hall. ITS administrative offices are located in I Building, Suite 200. For online help, visit www.qc.cuny.edu/computing.

Speech-Language-Hearing Center
www.qc.cuny.edu/slh

The Queens College Speech-Language-Hearing Center (Gertz Building) serves children and adults living in Queens and the greater metropolitan area who have speech and language disorders or developmental delays. Its staff of licensed and professionally certified speech-language pathologists provides speech-language evaluations and treatment to individuals needing those services. These include children with language disorders resulting from autism, delays in speech and language development, dysfluency, or school-related learning disorders. It also serves adults with speech-language disorders resulting from a stroke, neurological disorder, developmental challenges, or head trauma as well as voice and swallowing disorders. The center is part of the Department of Linguistics & Communication Disorders. For more information, contact speechcenter@qc.cuny.edu or call 997-2930.

Kupferberg Center for the Arts
www.kupferbergcenter.org

Kupferberg Center for the Arts comprises ten distinguished institutions that offer outstanding programming in music, dance, drama, literature, and the visual arts. Since 1961, the Kupferberg Center has hosted affordable, world-class cultural events, concerts, and family programs at Colden Auditorium, LeFrak Concert Hall, Goldstein Theatre, and select off-campus locations.

Campus Ministry

The Queens College Campus Ministers is an association of the Catholic, Greek Orthodox, Hillel: The Foundation for Jewish Campus Life, and Protestant ministries on campus. Its purpose is to foster harmony among religious traditions and to join in campus efforts to promote spiritual and ethical growth. The campus ministers serve as resources for religious and ethical information and insight for the academic and the wider Queens community. All students, faculty, and staff are welcome to participate in the activities of the various centers.

The Catholic Newman Center is the Catholic parish on campus. The center celebrates the sacraments; sponsors spiritual, cultural, and social programs; and offers pastoral counseling to all students, faculty, and staff. Mass is celebrated in the chapel every Sunday at 1 pm, Tuesday and Wednesday at 12:10 pm, and Thursday at 5:15 pm (Student Union 207 and 208; 997-3969 or 793-3130 [also the fax number]; www.facebook.com/QCNewmanCenter; email: frpaw@yahoo.com).

Queens College Hillel envisions a world where every Jewish student is inspired to make an enduring commitment to Jewish life, learning, and Israel. QC Hillel helps students discover and explore their Jewish identity, learn about Jewish peoplehood, experience Jewish holidays and Shabbat, and develop as leaders and volunteers. (Student Union 206; 997-3980 or 718-793-2222; qchillel.org, facebook.com/qchillel, or Instagram.com/qchillel)

The Protestant Center welcomes students, faculty, and staff from the various Protestant denominations for worship and Bible study, counseling, and a variety of programs. (Student Union 203; 997-3979, 261-1550)

Several student cultural or religious clubs register each semester with the Student Life Office (Student Union 320):

The Ikaros Hellenic Orthodox Club (Student Union 219; 997-3576) provides religious, cultural, and social programming, counseling, and outreach for Greek Orthodox students, faculty, and staff. It also offers information on worship and Bible study. For other matters, please call the Center for Byzantine & Modern Greek Studies (Jefferson Hall 302; 997-4520; fax 997-4529).

The Muslim Students Association (Student Union 217 and 218) has as its purpose the empowerment of students on campus by creating significant opportunities to learn from and build coalitions with the campus community at large.

For a list of cultural/religious groups on campus, call 997-3970.

Identification Card

The college supplies each student with an identification card called the QCard. Students must carry this card on campus and present it to a member of the faculty or staff if requested to do so. The QCard protects the college from persons not authorized to be on campus or to use college facilities. It also allows registered students all the privileges of membership in the college community. You must show a valid QCard when collecting any checks from the Bursar's Office and when using the library. The QCard is also a quick and convenient method for buying things on campus.

Incoming students must acquire their QCard during their first semester. To obtain a QCard (new or replacement), you must have an active QC user account (https://cams.qc.cuny.edu) and a photo ID, such as a driver's license. To obtain a replacement, a QCard replacement fee charge of $10 must be paid at the Bursar's office, and the receipt shown at the Qcard office. The QCard office is in the Dining Hall, Room 116A (997-4240; www.qc.cuny.edu/qcard).

Campus Parking

Parking on the Queens College campus is **by decal only**. Information on applying for and purchasing a decal is available at https://apps.qc.cuny.edu/ParkingAdministration/Logon.aspx. To park on college property, all vehicles must be registered with the Public Safety Office. Unregistered vehicles or those parked in violation of the college's Parking & Traffic Regulations are subject to both ticketing and immobilization ("booting"). A fee of $75 will be charged for removal of the immobilization boot in addition to the parking violation penalty for the ticket(s).

Day students can apply for day parking through the lottery, held once a year in May and ending in July. There is unlimited evening parking (Monday–Thursday after 2 pm and all day Friday, Saturday, and Sunday). A decal is good for the Fall, Spring, and Summer sessions. Please bring a check or money order (payable to Queens College) or cash, payable at the

Bursar's Office only, as well as a valid driver's license and vehicle registration. **Credit cards are accepted as a form of payment at the window.**

Students, faculty, and staff must park *only* in their assigned fields.

Student Fees. All fees and fines quoted include New York City parking tax where applicable, have been approved by the college and the Board of Trustees of the City University of New York, and are subject to change *without notice*. Fees and fines are designed to provide a self-supporting parking program, financing construction, maintenance, lighting, security, and administration of the parking operation.

- **Fall/Spring/Summer (day/evening students)** – $275 (parking for Summer Session(s) is included in the yearly decal)
- **Summit resident parking** (Field 5) – $385
- **Summit underground parking** – $440 plus $25 refundable deposit for access card
- **Spring Semester only** – $138
- **Summer Session(s) only** – $138
- **Weekends per semester** – $50 (includes Fridays after 3 pm and all day Saturday and Sunday)
- **Motorcycles** – Fall/Spring, $176; Summer only, $88
- **Bounced check fee –** $25

For information, contact the Security & Public Safety Office in Jefferson Hall 201 (997-4443).

Parking for Students with Disabilities

Requests for parking privileges based on physical and mobility disabilities must be made through the Office of Special Services for Students with Disabilities (Frese Hall, Room 111A). Students with disabilities who wish to park in a handicapped spot *must* have a hangtag issued by the Department of Motor Vehicles. The tag *must* be displayed at all times. (This is *in addition to* the Queens College decal.) Payment for parking is due upon receipt of the parking decal in the Security Office in Jefferson Hall, Room 201.

Admission, Retention & Graduation

Applications for admission to master's degree programs, advanced certificate programs, and non-degree study are accepted throughout the academic year. Openings for admission are filled on a competitive basis, and admission cannot be guaranteed to all who meet the stated requirements. Since requirements, deadlines, and fees change from year to year, prospective students are encouraged to visit the Office of Graduate Admissions website for details at www.qc.cuny.edu/admissions/graduate or visit its office in the lobby of Jefferson Hall.

General Requirements

All students applying for admission as a matriculated student must have a bachelor's degree from a regionally accredited college or university, or an international equivalent, with an undergraduate record indicating good preparation for the proposed area of graduate study. Good preparation, generally, means a minimum academic average of *B* in undergraduate work. If ten years have elapsed since completion of undergraduate work, additional undergraduate courses may be required as a condition of admission.

Additionally, each program and department has specific requirements concerning letters of recommendation, essay topic, test scores, interviews, and deadlines. Applicants should refer to the appropriate department listing in this Bulletin and the Graduate Admissions website (www.qc.cuny.edu/admissions/graduate).

Students Educated Outside the United States

In addition to the general requirements previously stated, students educated in a non-English-speaking environment must submit TOEFL or IELTS scores. Applications and information regarding the TOEFL may be obtained from TOEFL Services at www.toefl.org. IELTS information can be found at www.ielts.org. The institutional code number for Queens College is 2750.

Students seeking a student visa (F-1) must also provide financial information confirming that funds will be available to meet expenses for each year of enrollment at Queens College. A financial information and certification form, the Pre-I20 Package, can be downloaded at www.qc.cuny.edu/isso. Additional information and assistance for students on temporary visas are provided by the International Students & Scholars Office (King Hall 207; 997-4440; www.qc.cuny.edu/iss).

ADMISSION PROCEDURES

Degree and Certificate Program

Complete instructions are included in the online application, which may be obtained at www.qc.cuny.edu/gradapp.

Students accepted for admission in the Fall are eligible to start in the preceding Summer Session if acceptance is granted prior to Summer Session registration. Students who wish to start in the Summer should check with individual departments to see if courses are available.

Applicants who are admitted to matriculation in one semester but who do not register or enroll in that semester must reactivate their application for full review. Please note that admission in one semester does not guarantee admission in a subsequent semester.

A nonrefundable fee of $75 must be paid when the application for admission is filed.

Full-Time/Part-Time Status

Students who are registered for 9 credits of coursework, or the equivalent, are considered full time. To meet requirements of the Immigration and Naturalization Service, F-1 visa students must be enrolled full time. Full-time graduate students may take a maximum of 15 credits a semester. Students in the Teacher Education program with full-time employment may take a maximum of 6 credits in any semester. Students who want to exceed these limits must receive the permission of both their academic department and the appropriate academic dean.

Enrollment Status

There is no official leave of absence classification for graduate students; students who do not register for a semester are considered inactive. Such status is not noted on student records and does *not* extend the time limit for the degree or certificate.

Reentry. Students seeking to reenter must be in good standing (*B* average), and within the time limit allowed to complete their degree. Complete instructions for reentry are included in the online application.

A nonrefundable readmissions application fee of $20 is required. Note that all requirements for the Master of Arts, Master of Arts in Liberal Studies, Master of

Fine Arts, Master of Library Science, Master of Music, or Master of Science degree must be completed within a period of four years. The Master of Arts in Teaching or the Master of Science in Education degree must be completed within a period of five years. Students who exceed these time periods, or who are not in good academic standing, must contact the appropriate academic dean. It is advisable for reentering students to inform their departments and make an appointment with a graduate advisor prior to registration.

Maintenance of Matriculation. CUNY regulations require students to be registered in the semester/session in which the degree is awarded. If all coursework was completed before the graduation semester and no courses are being taken, students must register for *maintenance of matriculation*.

Please see the Bursar's website (www.qc.cuny.edu/bursar) for current fees. Registration for maintenance of matriculation is *not* required for any semester other than the semester in which the degree is obtained, and the fee cannot be waived.

Payment of the fee allows students to use the facilities of Queens College as a regularly registered student (library, laboratories, etc.).

Non-Matriculated Status

Students seeking to apply as a non-matriculant may do so by logging in to our online application at www.qc.cuny.edu/gradapp. A nonrefundable fee of $75 will be charged after course registration. Applicants applying as non-matriculants must submit copies of their transcripts showing proof of receipt of a bachelor's degree (except Post-Master's Certificates, for which proof of a master's degree is required), which must be approved by the graduate advisor of the program in which the applicant wishes to take courses.

Applicants on student visas (F-1) are *not* eligible to apply for non-matriculated status.

Registration in Courses for Non-Matriculants

Acceptance in a non-degree status does not guarantee admittance to courses. Class sections may have been filled during earlier registration periods; many courses have prerequisites; and some courses and programs are not open to non-matriculants.

Non-matriculated students must obtain permission from their graduate advisor *each semester* before registering for classes.

Graduate non-matriculants, except those who have a master's or higher degree, or those who are Cooperating Teachers with tuition waivers, may take no more than 12 credits at Queens College in that status.

Students should bear in mind that admission to non-matriculant status does not guarantee subsequent acceptance for matriculation. Currently enrolled non-matriculants who have successfully completed 6–9 credits are encouraged to apply for matriculation before completing 12 credits; only courses related to the program for which they are accepted will be credited toward the degree.

Non-matriculants who have not achieved a *B* average after completing 12 credits will not be permitted to continue at the college.

Graduation Procedures

Students must consult with the faculty advisor to ensure they are on track to graduate. We strongly encourage students to apply for graduation by the posted deadlines on the QC Hub website at www.qc.cuny.edu/registrar. The completion process for students in certificate programs (Advanced and Post-Master's Certificate) must be initiated by the advisor. If a student's record is inactive prior to the semester of graduation, they must file a reentry application available at www.qc.cuny.edu/gradapp prior to registering for maintenance of matriculation.

Enrollment Following Graduation

If a student wishes to continue taking courses on a non-matriculated basis after receiving a Queens College master's degree, a Non-Matriculant Application must be filed via the online application by the appropriate deadline date. Individuals who wish to apply for a second master's degree or post-master's certificate(s) should file an online application for matriculation.

Immunization Requirements

New York State Public Health Law requires that anyone born on or after January 1, 1957, must be immunized against measles, mumps, and rubella before starting school, and be provided with information about meningococcal disease and vaccination. Students are required to file a QC Immunization Form with the Health Service Center (Frese Hall, 3rd floor, 997-2760); the form is available at www.qc.cuny.edu/health. Failure to file this form will jeopardize the student's continuation in the graduate program, and registration will be blocked if the immunization requirement is not satisfied.

Teacher Education Programs

Queens College's master's and certificate programs in Teacher Education meet New York State academic and field requirements for certification.

Applicants should bear in mind that while the college recommends for New York State teacher certification those students who successfully complete an approved program in Teacher Education, the college itself does not issue teaching licenses or certificates. New York State issues teaching certificates, which are universally accepted in New York State school districts, including New York City. Note also that requirements are subject to change. It is the student's responsibility to determine whether a course of study will meet in full the licensing and certification requirements for New York City and State and, where relevant, for states other than New York.

Students applying for certificate programs. Please consult the appropriate departmental listing in this *Bulletin* for additional admission requirements.

Tuition, Fees & Financial Aid

TUITION AND FEES

All tuition and other fees listed in this *Graduate Bulletin* and in any registration material issued by the college are subject to change. In the event of any increase in fees or tuition charges, payments already made to the college will be treated as partial payments, and subsequent notification of the additional amount due and the time and method of payment will be given. *Check the Bursar's website at* www.qc.cuny.edu/tuition *for fee changes prior to registration*.

Senior Citizens

People who qualify as senior citizens may attend QC as auditors. To qualify they must be New York State residents 60 years of age or older who have completed high school. Senior auditors may enroll on a space-available basis by completing the Senior Citizen Auditor Application, available through the Office of Admissions. Individuals who enroll shall be charged an administrative fee, the student consolidated services fee, as well as any other fees they may incur.

Provisions specific to the Senior Citizen Audit Program are:

- Senior Citizen Auditors may enroll in undergraduate courses only on an audit basis without tuition charge and academic credit.
- The grade of AUD will be assigned to all Senior Citizen Auditors.
- Senior citizens are not permitted to register tuition free for any graduate-level course and utilize a tuition fee waiver.
- Senior citizen auditors pay $80 per semester or session plus any course fees and penalty charges (change of program, late registration, late payment, etc.).

Payment of Tuition and Fees

Students must be prepared to pay all fees associated with their registration. These include tuition, consolidated service fee, student senate fee, student activity fee, technology fee, material and transportation charges, and other miscellaneous fees.

Students may view their charges on their CUNYfirst account. Payments can be made online with an eCheck (no fee is incurred for an eCheck transaction) or a major credit card. When you use a credit or debit card, a nonrefundable 2.65 percent service fee will be charged to your account in addition to your tuition, fee, and housing payment. Students also may enroll online in Nelnet (a payment plan) through their CUNYfirst Student Center to make paying their bill easier with equal monthly installments. The enrollment fee is $25 per semester/session; if paying by credit or debit card, a nonrefundable 2.65 percent fee will be charged to your account in addition to your payment .

If a student pays by check or money order, his or her QC CUNYfirst ID number must be written in the memo section of their check or money order. Students may mail checks or money orders to the Bursar's Office or pay in person at the Bursar's Office with checks, money orders, or cash.

A student who issues a check or an eCheck payment that is returned by the bank or our third-party processor for online payments will be liable for tuition and fees in addition to a reprocessing fee. Please note that future payment by check or eCheck will no longer be acceptable.

A "Stop Payment" on a student's check *does not* cancel registration. The student must withdraw officially.

Once a student registers for classes, that student assumes a financial responsibility. If the student chooses not to attend, the student must drop his or her courses before the first official day of the semester. Failure to do so automatically entails a financial obligation on the part of the student.

If you do not make full payment of your tuition and fees and other college bills and your account is sent to a collection agency, you will be responsible for all collection costs, in addition to whatever amounts you owe the college. Also, nonpayment or a default judgment against your account may be reported to a credit bureau and reflected in your credit report.

For billing and payment information, refer to the Bursar's website and the *Bursar's Information Letter* at www.qc.cuny.edu/admissions/bursar or see www.qc.cuny.edu/tuition.

Tuition Fees: Matriculated and Non-Matriculated

New York State Residents
$470 per credit plus
$ 65 per additional contact hour
Maximum of $5,545

Out-of-State Students
$855 per credit plus
$ 85 per additional contact hour
(No maximum)

Resident graduate degree students who take undergraduate courses and receive undergraduate credit for them are charged undergraduate tuition for those courses and the mandatory graduate student fees.

To qualify for resident fees, a student must have been a resident of the State of New York for a consecutive period of one year immediately preceding the first day of classes of the session in consideration.

Guidelines for Tuition Schedule

Resident graduate degree students enrolled for 12 or more credits or billable equivalent credits are billed the maximum tuition and student fee rates. Resident graduate degree students enrolled for fewer than 12 credits or billable equivalent credits are billed tuition on a per-credit basis and the lower student fee rates. The tuition for graduate degree students should not exceed the maximum tuition and fee degree rate in a regular semester.

There is no maximum tuition rate for Summer Session students. Similarly, there is no maximum rate for nonresident graduate students. Therefore, all Summer and nonresident graduate students are billed on a per-credit basis regardless of the number of credits for which they register. For additional information, contact the Bursar's Office (Jefferson Hall 200; 997-4500).

MANDATORY GRADUATE STUDENT FEES

	Total	Consol. Serv. Fee	Technology Fee	Student Fee	College Govt. Fee	Student Union Fee	Shuttle Bus Fee	Sports Fee	PIRG Fee	Disabled Students Fee	Spec. Non-Instruc. Fee	Child Care Fee	Univ. Govt. Fee
Students enrolled in 12 or more billable credits	$260.85	$15.00	$125.00	$3.00	$4.75	$55.00	$40.00	$8.00	$4.00	$2.70	-0-	$1.95	$1.45
Students enrolled in fewer than 12 billable credits	198.35	15.00	62.50	3.00	4.75	55.00	40.00	8.00	4.00	2.70	-0-	1.95	1.45
COOPERATING TEACHERS													
Students enrolled in 12 or more billable credits	$165.00	$15.00	$125.00	-0-	-0-	-0-	-0-	-0-	-0-	-0-	$25.00	-0-	-0-
Students enrolled in fewer than 12 billable credits	102.50	15.00	62.50	-0-	-0-	-0-	-0-	-0-	-0-	-0-	25.00	-0-	-0-

- The PIRG fee is refundable if application is made to the college PIRG Office (Student Union LL36) within 3 weeks of the start of the session.
- The child care fee is refundable if application is made in the Child Development Center Office (Kiely Hall 245) within 3 weeks of the beginning of the Fall and Spring semesters or within one week of the beginning of the Summer Sessions. You must show your paid bill and ID with your application.
- The sports fee is refundable if application is made in FitzGerald Gymnasium 218 within 3 weeks of the start of the session. You must show your paid bill with your application.
- Students who initially register for 12 or more credits and subsequently reduce their load to fewer than 12 after the semester begins must still pay the higher mandatory student fees.
- The mandatory student fees, cooperating teachers fees, material/film and transportation/field charges, and technology fees cannot be refunded, if paid, unless the student drops all courses before the official opening day of the semester or if the student's registration is canceled by the college.

Mandatory Student Fees

For each session of attendance, all students are required to pay mandatory student fees that cover student activities, Public Interest Research Group (PIRG), Student Union, and the like. It does not cover service fees that a student may incur individually, such as fees for program changes, late registration, transcripts, special examinations, or parking. Unless changed after printing of this *Bulletin,* the mandatory student fees for graduate students enrolled in 12 or more credits or billable equivalent credits (including technology fee and consolidated fee) total $260.85; the mandatory student fees for graduate students enrolled in fewer than 12 credits or billable equivalent credits (also including the technology fee and consolidated fee) total $198.35 for each session of attendance. The breakdown of the fee is shown below.

The mandatory student fees (activity fee, consolidated student fee, technology fee, and student senate fee) or any part thereof will not be refundable at any time, nor can they be waived unless the college cancels all courses for which a student has registered or the student formally withdraws from all classes *prior to* the official first day of classes. Exceptions may be made as follows:

1. If a student is placed on active military service, partial refunds may be made. Students who are so notified should get in touch with the Veterans Support Services Office immediately.

2. The PIRG fee is refundable if application is made to the Queens College PIRG Office (Student Union LL36) within three weeks after the start of the session.

3. The sports fee is refundable if application is made in FitzGerald Gymnasium 218 within three weeks of the start of the session. Students must show their paid bill with their application.

4. The child care fee is refundable if application is made in the Child Development Center Office (Kiely Hall 245) within three weeks of the beginning of the Fall and Spring semesters or within one week of the beginning of the Summer Sessions. Students must show their paid bill and ID.

Material/Film & Transportation/Field Charges

Material/film and transportation/field (MAT) charges may be applied in addition to tuition for various courses in this *Bulletin.* Charges are listed for individual classes in the Class Search function in CUNYfirst, available prior to registration. A student who drops a course that has such charges before the semester begins will receive a refund.

Academic Excellence Fee

This fee supports the costs of enhancing the instructional and program quality offered to graduate students enrolled in certain graduate-level program plans. For a listing of the program plans and their fees, visit www.qc.cuny.edu/tuition.

Chalk & Wire Fee

Chalk & Wire is an e-portfolio, web-based assessment management system that enables candidates in the Professional Education Unit to document academic and professional development, organize and showcase their work, and reflect on learning in alignment with programmatic goals, objectives, and national standards, including discipline-specific competencies.

Candidates enrolled in programs within the Education Unit must purchase Chalk & Wire subscriptions when instructed to do so by their programs. Subscriptions are offered in five-month and one-, two-, three-, and four-year increments (with costs ranging from $38.66 for five months to $132 for the four-year option).

Special Fees

The following fees will also be charged:

1. When submitting an application for admission to Queens College, students are required to pay a nonrefundable fee of $75 at the time of filing for either matriculant or non-matriculant status in a master's degree or certificate program.

2. A reentry fee of $20 is payable by matriculated students who want to re-enter the college after an absence of one or more semesters.

3. A charge of $25 is made for late registration after the regularly scheduled registration period.

4. A charge of $18 is assessed for students who change their schedules and add courses on or after the first day of the term. The flat fee of $18 is charged per day (not per course), and occurs each day the student's schedule is changed when the term has begun.

5. Parking on campus is by decal only and limited. The annual decal costs $275 and covers the Fall, Spring, and Summer semesters. For the Spring semester only, the cost is $138. Summer sessions cost $138 per session. Summit residents' yearly parking is $440 plus $25 (refundable deposit) for an access card. (See Campus Parking in the *Regulations* section.) Payment can be made by check, cash, money order, or a major credit card.

6. Duplicate Records fees are: (*a*) duplicate ID card, $10; (*b*) duplicate diploma, $30; (*c*) each transcript of record, $7 (waived when the transcript is to be forwarded to another unit of the City University); and (*d*) other duplicate records, $5. Each transcript of record is $7 (waived when the transcript is to be forwarded to another unit of the City University). Online orders require an additional $2 processing fee for a total of $9 per transcript request.

7. A fee of $35–$60 is charged for the binding of the master's degree thesis, depending on the number of copies ordered.

8. The per-semester fees for maintenance of matriculation are $225 for NYS residents; $370 for out-of-state students.

9. A $15 non-payment service fee is charged whenever a student does not pay any bill by its due date. It applies to all students, including those who are declared eligible for financial aid as well as to those not receiving aid.

10. A payment reprocessing fee of $20 is charged when a check or eCheck tendered to the college by a student is not honored by the bank upon which the check is drawn. A separate fee will be charged for each check that is returned. In the event that the return of the check resulted from a bank error and the bank acknowledges

the error in writing, the returned-check fee may be waived. If your check or eCheck is returned by the bank for "stop payment," you will be liable for all tuition and fees in addition to a returned-check fee. A "stop payment" on a check or eCheck *does not cancel* any liability due to the college.

11. A fee of $25 is charged when a makeup examination is given. Each additional examination in a session costs $5.

12. Payment of service fees, fines, and miscellaneous charges may be made at the Bursar's windows in Jefferson Hall. Parking fines must be paid by check, money order, or credit card at the Public Safety Office in Jefferson Hall, Room 201. The check or money order must be made payable to Queens College and include the student's CUNY ID and ticket number.

The Bursar's Office is open Monday through Thursday from 9:30 am to 4:30 pm, Friday 9:30 am to 1 pm, and Tuesday and Wednesday evenings from 5 to 7 pm, during Fall and Spring when classes are in session. During Summer, the Bursar's Office is open Monday through Thursday from 9:30 am to 4:30 pm and Wednesday evenings from 5 to 7 pm when classes are in session. Please visit our website for more information on Summer office hours (www.qc.cuny.edu/bursar).

Refund of Tuition Fees

Once students have registered, they must pay for their classes by the payment due date. Students may change their registration online via their CUNYfirst Self-Service Center. To receive a 100% refund of tuition, a student must have dropped all courses before the official opening day of the semester.

The last date of attendance in class is not an official withdrawal date unless the student cancels registration online.

Refunds will be made in accordance with the following schedule. Students should refer to each semester's *Bursar Information Newsletter* (www.qc.cuny.edu/bursar) for specific calendar dates, including in Summer.

Fall and Spring	*Refund*
Withdrawal from course before the official scheduled opening date of the semester	100%
Withdrawal within one week after the official scheduled opening date of the semester	75%
Withdrawal during the second week after the official scheduled opening date of the semester	50%
Withdrawal during the third week after the official scheduled opening date of the semester	25%
Withdrawal after completion of the third week after the official scheduled opening date of the semester	None

Except as otherwise noted, no other fees are refundable.

Checks Returned to the College by the Bank

If your check is returned by the bank to Queens College, your registration will be processed in the following manner:

1. *Stop Payments:* A stop payment on your check will *NOT* result in cancellation of your registration. You must cancel your registration online *prior to* the official opening day of classes. Doing so will ensure you assume no financial liability. As stated in paragraph 10 on the previous page, any check tendered to the college by a student that is not honored by the bank upon which the check is drawn will result in a returned-check fee of $20.

2. *Other:* If your check or eCheck is returned by the bank or our online, third-party processor as not presentable for collection (NG), including "unable to locate account," you will be liable for all tuition and fees in addition to the $20 returned-check fee. Please note that future payment by check or eCheck will not be acceptable in this case.

Holds

Students who have debts (for any tuition, fees, parking violations, breakage, emergency loans, etc.) that are past due will have a hold placed on their registration, transcripts, and diplomas until they satisfy their outstanding obligations to the college.

FINANCIAL AID PROGRAMS

Many students need some sort of financial assistance to help pay the costs of attending graduate school. Financial aid at Queens College includes grants, work-study, and loans from New York State and the federal government, all of which can help pay related expenses beyond tuition and fees. For detailed information on costs, programs, eligibility criteria, and application procedures for federal and NY State aid, as well as links to other resources, visit our website at www.qc.cuny.edu/fao.

Note that financial aid programs, procedures, and requirements are subject to change. The following information highlights financial aid programs available to graduate students and important details for filing.

Aid Applications

- The **Free Application for Federal Student Aid** (FAFSA) is the application for all federal aid (Title IV) programs, and is filed online at https://fafsa.ed.gov. The FAFSA college code for Queens College is 002690. To be considered for work-study, check the appropriate boxes on the FAFSA. Additional forms are required to apply for Direct Loans.

Note: Students in a PhD program at the CUNY Graduate School should file for aid through the Graduate School.

Aid Programs

New York State (with NY State residency requirements)

- Scholarships: Math and Science Teaching Initiative Scholarship, Master-in-Education Teacher Initiative Scholarship, Veterans Tuition Assistance, and others (please see www.hesc.ny.gov for full listing and how to establish initial eligibility).

Queens College Programs

- Grants: Graduate Partial Tuition Reimbursement Program (pending availability of funds), based on the FAFSA.
- Short-term emergency loans.

NEW YORK STATE PROGRAMS

Note: Where a question of eligibility exists, contact the Financial Aid Office for information and assistance.

FEDERAL PROGRAMS

To be eligible for federal Title IV student financial aid programs (Federal Direct Loans and FWS), a student must:

1. be enrolled at least half time (6 credits) as a matriculated student;
2. be a U.S. citizen or an eligible noncitizen;
3. show evidence of need;
4. be making satisfactory academic progress toward a degree;
5. not be in default on any student loan, or owe a repayment of a Pell or Supplemental Educational Opportunity Grant.

Satisfactory Progress Standard

For purposes of receiving Title IV Federal Student Assistance, a student is considered to be making satisfactory progress toward a degree by meeting or exceeding the Graduate Division requirements concerning grade-point average, as explained in the section Required Grade-Point Average, Probation, and Dismissal (see *Scholastic Standards*). In addition the student must have accumulated credits toward the degree greater than or equal to two-thirds the cumulative credits attempted at the college and *not* have attempted more than 150% of the credits normally required for completion of the degree.

Students will be measured against the satisfactory progress standard at the end of the Spring term to determine their eligibility for receipt of funds for the upcoming year. Students who fail to meet the standard may appeal their status in the Graduate Admissions Office located in Jefferson Hall 105 or email Graduate Admissions at GraduateAdmissions@qc.cuny.edu.

Appeal/Reinstatement

Appeals will be evaluated for mitigating circumstances resulting from events such as personal illness, injury, personal tragedy, changes in academic program, and the reasonableness of the student's capability for improvement to meet the appropriate standard for the degree program in which the student is enrolled. A successful appeal would result in the granting of a one-year or one-semester probation period for the student to improve the academic record to meet the appropriate standard for the degree program in which the student is enrolled. During this probationary period the student would be eligible for Title IV aid.

Attendance

Title IV aid is awarded with the assumption that a student will attend school for the entire period for which the aid is awarded. If a student withdraws from all classes, he/she may no longer be eligible for the full amount of Title IV funds originally scheduled to be awarded. The amount of Title IV funds a student has "earned" is based on the amount of time he/she has spent in academic attendance. Students are advised to contact the Office of Financial Aid Services prior to withdrawal.

Federal Direct Loan Program

Application Procedures

The first step is to file the FAFSA. After the FAFSA is processed, fill out the Direct Loan Processing Form online. Access this form through your CUNYfirst account from the student self-service page.

Selection of Recipients

To be eligible for a Federal Direct Loan, you must meet the eligibility requirements listed above. All students must complete a FAFSA to determine need for the loan.

Loan Schedule

A graduate student may borrow up to $20,500 per academic year under the Federal Direct Unsubsidized Loan Program, up to a combined total of $138,500, *including* any loan for undergraduate study. The amount you may borrow is limited to the cost of education at Queens College minus other financial aid you may receive at Queens College.

The interest rate on Federal Direct Unsubsidized Loans is variable. Students are responsible for an origination fee, which is deducted from the payment(s).

For more detailed information about repayment schedules and procedures, visit our website at www.qc.cuny.edu/fao.

Federal Work-Study Program (FWSP)

Application Procedures

Students who are interested in applying for Federal Work-Study (FWS) for Fall 2020–Spring 2021 can do so by completing a 2020–2021 FAFSA and checking "yes" to the question: Are you interested in work study? File early; funds are limited.

Selection of Recipients

The college must make employment reasonably available to all eligible students. In the event that more students are eligible than there are funds available, preference is given to students who have a greater financial need and who must earn a part of their educational expenses. All awarded students must be placed through the Office of Financial Aid Services and must follow placement instructions. The earlier placed, the better the choice of positions that will be available to students.

Awards

The college arranges jobs on and off campus, with public or private nonprofit agencies, such as hospitals, for up to 20 hours per week during the academic year.

The level of salary must be at least the minimum wage. Wages for graduate students are the same for all on-campus jobs; off-campus wages may vary.

Satisfactory academic progress must be maintained, as well as satisfactory performance on the job.

Federal TEACH Grant Program

The TEACH Grant is offered to matriculated graduate students and does not require repayment so long as the student completes the program. To be considered for this federal financial aid, you must be a U.S. citizen or an eligible noncitizen admitted as at least a half-time student to an approved degree program, and you must maintain satisfactory academic progress to preserve your continuing aid eligibility. (Students not yet admitted into an approved degree program do not qualify.

As a condition of receiving a TEACH Grant, you must sign a TEACH Grant Agreement to Serve in which you agree (among other requirements) to teach in a high-need field; at an elementary school, secondary school, or educational service agency that serves students from low-income families; and for at least four complete academic years within eight years after completing (or ceasing enrollment in) the course of study for which you received the grant.

If you do not complete your service obligation, all TEACH Grant funds you received will be converted to a Federal Direct Unsubsidized Loan. You must then repay this loan to the U.S. Department of Education, with interest charged from the date the TEACH Grant was disbursed (paid to you or on your behalf).

Veterans Administration (VA) Educational Benefits

Application Procedures

Application forms are available at all VA offices, active duty stations, and American embassies. They also can be downloaded at the G.I. Bill website (www.gibill.va.gov). In addition, forms and assistance in completing and submitting them to the VA Regional Office are available at the Veteran Support Services Office, located in Student Union 320.

Educational benefits are available through the VA under the following programs:

(Post-9/11) G.I. Bill: For veterans and service persons who served on active duty on or after September 11, 2001. Eligible service members may transfer all 36 months or the portion of unused Post-9/11 GI Bill benefits to a spouse or child. The request to transfer unused GI Bill benefits to eligible dependents must be completed while serving as an active member of the armed forces.

Montgomery G.I. Bill—Active Duty (Chapter 30): For service persons who entered active duty between July 1, 1985 and the present.

Vocational Rehabilitation (Chapter 31): For veterans who have at least a 10% disability as a result of active service.

Veterans Educational Assistance Program (VEAP) (Chapter 32): For veterans and service persons who first entered active duty between January 1, 1977 and June 30, 1985 and who elected to make contributions from their military pay to participate in this education benefit program.

Survivors' and Dependents' Educational Assistance Benefits (Chapter 35): For spouses and children of veterans whose death or total, permanent disability was service connected.

Montgomery G.I. Bill—Selected Reserve (Chapter 1606): For active duty members of the Selected Reserve (Selected Reserve components include the Army Reserve, Naval Reserve, Air Force Reserve, Marine Corps Reserve, Coast Guard Reserve, Army National Guard, and Air National Guard).

Reserve Educational Assistance Program (REAP) (Chapter 1607): For active members of the Selected Reserve called to active duty and members of the Individual Ready Reserve (Army IRR, Air Force IRR, Navy IRR and Marine Corps IRR). These active members of the Selected Reserve must have served at least 90 consecutive days on active duty in response to a contingency operation declared by the president or Congress.

VA Pending Payment Policy

A. In accordance with Title 38 U.S. Code 3679 subsection (*e*), this school adopts the following additional provisions for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while payment to the institution is pending from the VA. This school *will not:*
   1. Prevent or delay the student's enrollment;
   2. Assess a late penalty fee to the student;
   3. Require the student to secure alternative or additional funding;
   4. Deny the student access to any resources available to other students who have satisfied their tuition and fee bills to the institution, including but not limited to access to classes, libraries, or other institutional facilities.

B. However, to qualify for this provision, such students may be required to:
   1. Produce a Certificate of Eligibility by the first day of class;
   2. Provide a written request to be certified;
   3. Provide additional information needed to properly certify the enrollment as described in other institutional policies.

In the event an expected payment from the U.S Department of Veterans Affairs was not posted to the student's account, he or she must alert the Bursar's Office.

QUEENS COLLEGE PROGRAMS

Emergency Student Loan Funds

Students may borrow small amounts to cover emergencies for a short time and pay no interest. In general, loans are limited to $100 and are to be repaid within 30 days. Apply in person at the Financial Aid Office. Approved loans usually may be obtained in two days.

Scholastic Standards

Full-time graduate students may take a maximum of 15 credits a semester. Students in the Teacher Education program with full-time employment may take a maximum of six credits in any semester. There is a protocol in place for those doing student teaching and taking six credits to be certified as full-time students; they must ensure that their academic department provides this information to the Office of the Registrar. Students who want to exceed these limits must receive the permission of both their academic department and the appropriate academic dean.

Grades

The following grades are used in the Graduate Division of Queens College:

A+, A, A–, B+, B, B–, C+, C, C–, F.

To ensure uniformity of grading standards, the Committee on Graduate Scholastic Standards has approved the following table of equivalents:

A+	97–100	*B–*	80–82
A	93–96	C+	77–79
A–	90–92	*C*	73–76
B+	87–89	*C–*	70–72
B	83–86	*F*	0–69

The following special grades are also used. Please see the section below for procedures for dropping or withdrawing from courses.

W (Withdrawn Passing): Given when a student withdraws formally from the fourth week through 60% of the calendar days of the session, or after the 60% point in time with a passing grade in the coursework completed.

WF (Withdrawn Failing): Given when a student withdraws formally after 60% of the calendar days of the session, with a failing grade in the coursework completed. *WF* is equivalent to failure.

WU (Withdrawn Unofficially): Given when the student ceases to attend classes without formally withdrawing from the course. *WU* is equivalent to a failure.

WA (Administrative Withdrawal): Given when the student fails to comply with New York State Public Health Laws #2165 and #2167 (Immunization).

P is a passing grade that is valid *only* in those few courses that are designated as permitting this grade.

Z is a temporary grade assigned when an instructor does not submit a grade.

Withdrawal Procedures

In the Graduate Division, course withdrawals are allowable up to the official last day of classes. Withdrawal may have implications for federal financial aid. Students are advised to contact the Financial Aid Office prior to withdrawal. The procedure and outcome for a drop or withdrawal vary by the following four time periods.

Through the first three weeks: A course (or courses) *must* be dropped via CUNYfirst prior to classes and during the first *three* weeks of a regular semester. This may result in a refund of some portion of the tuition fee. The activity fee is not refundable unless the student has formally dropped from classes prior to the first official day of classes. The liability and refund rates and final day to drop a class or classes without a grade of *W* will be published for each session at www.qc.cuny.edu/registrar.

Week 4 through 60% of the session: Withdrawals from courses during the first 60% of the calendar days of the session require no special approval. During this period, students *must* use CUNYfirst to withdraw and will receive a grade of *W.* The deadline for this action will be published each session at www.qc.cuny.edu/registrar.

Sixty-one percent of the session through week 13: During this period, graduate students must complete a Request for Permission to Withdraw from a Course. This form may be obtained online or from the Registrar's Office. It must be signed by the course instructor and by the student's graduate advisor and must be filed in the Registrar's Office. The instructor must indicate whether the student is passing or failing as of the date of withdrawal. An indication of failure results in the grade of *WF,* which has the same effect on the student's grade-point average as an *F.*

Week 14 through the end of classes: Beginning with the fourteenth week of the semester, approval of the appropriate academic dean is required in addition to the above on the Permission form. This approval can be extended through the *official* last day of classes.

Incomplete Work

Incomplete (Inc.): This grade, which must be requested by the student prior to the end of the semester, is given by the instructor to indicate a student has made a satisfactory record in coursework but, *for good and sufficient reason,* is unable to complete the course. A graduate student receiving this grade must complete the work of the course by the end of the next two regular semesters. Requests for extensions of time may be addressed to the appropriate academic dean. If the work for the course is *not* completed, the grade remains on the transcript without penalty. Students preparing to complete a course in which the grade is *Incomplete* must not register for the course a second time.

Advisement

Matriculated students are urged to consult with their graduate advisor before registering for courses. New matriculants and non-matriculated students are required to obtain permission from the graduate advisor *each semester* prior to registering for courses. Instructors have the right to dismiss from class any non-matriculated student who did not obtain permission to enroll.

Grade-Point Average (GPA)

The grade-point average is a numerical index of the student's academic record at Queens College, and is computed in the following manner:

1. Multiply the total number of credits earned at Queens College with each specific grade (*A*+ to *C*– and *F*) by the numerical values of these grades.
2. Add the number of credits taken at Queens College. This sum includes credits for courses failed *(WU, WF,* or *F)* as well as courses passed with grades *A*+ to *C*–. Credits completed with a grade of *P* are *not* included in this sum. (See also the *Important Note* below.)
3. Divide the result obtained in step 1 by the result obtained in step 2. This result becomes the grade-point average, which is calculated to three decimal places.

Important Note: Grades for courses transferred from other institutions are *not* included in the computation of the GPA; it is based *only* on grades received in Queens College courses. An exception to this is course(s) taken at other units of CUNY for which enrollment was by ePermit (see Transfer Credits and Permits in the *Degree & Certificate Offerings* section).

Grade-Replacement Policy

As of September 1, 2014, graduate students are entitled to the following grade-replacement policy, which is limited to graduate courses: With the exception of courses that have been designated as repeatable for credit, graduate students may repeat only four credits for grade replacement within any one graduate program and only for a course receiving a grade of *F* or *WF.* The last grade received replaces the previous grade in the cumulative GPA.

Transcripts

All students, regardless of when they attended Queens College, may request their official transcript through our transcript vendor, Credentials. For detailed information, and to place a transcript order, please visit the registrar's website at www.qc.cuny.edu/registrar/transcripts.

COMPUTING THE GRADE-POINT AVERAGE

Grade	Numerical Value		Credits		Quality Points
A+	4	×	6	=	24
A	4	×	9	=	36
A–	3.7	×	3	=	11.1
B+	3.3	×	6	=	19.8
B	3	×	6	=	18
B–	2.7	×	3	=	8.1
C+	2.3	×	3	=	6.9
C	2	×	3	=	6
C–	1.7	×	3	=	5.1
WU, WF, F	0	×	3*	=	0
			45		135

135 ÷ 45 = 3.00

The GPA is 3.00.

*Credit granted in computing the GPA, but not toward the degree.

Students do not need to place transcript requests for unofficial transcripts as that data can be retrieved by self-service in CUNYfirst. Additionally, there is no need to place an order for offices or academic departments within Queens College, as they can access your record if necessary.

Online orders are generally processed within one to two business days after the order has been authorized and approved, and when all attachments have been received (if applicable). Students may indicate on their request if they wish to have their transcript held for current grades or a degree notation, or they can send the transcript as is by choosing the "Send Now" option.

Required Grade-Point Average, Probation, and Dismissal

All programs must be completed with a minimum GPA of at least *B* (3.0). A matriculated graduate student whose GPA falls below 3.0 during the course of the program will be placed on probation. The student will then have up to 12 graduate credits within which to raise the GPA to 3.0. If this standard is not met, the student will be dismissed. If, after full completion of all the requirements for a graduate program, a student has an overall GPA above 2.950, the student may appeal to his or her MA advisor to request that the overall GPA be "rounded up" for administrative purposes to a 3.0, and the student thereby be allowed to graduate. The MA advisor, in consultation with their program, may approve or decline the request. If the MA advisor declines the request, they must do so in writing and indicate what remedies the student must perform (take an additional course or retake an existing course). If the MA advisor approves the request, they must do so in writing to the Dean of Graduate Studies, detailing why the request should be granted. If the student's overall GPA falls between 2.970 and 2.999, the Dean of Graduate Studies may approve the request. However, if the student's overall GPA falls between 2.950 and 2.969, the request and the dean's recommendation must be approved by the Graduate Scholastic Standards Committee (GSSC). The GSSC may approve the request or, if it does not, must detail what remedies the student must perform. Please note that if the appeal to round up the GPA is granted by either the GSSC or the Associate Provost, the overall GPA displayed on the student's transcript and academic record will not be changed. The rounding will be used only to establish eligibility for graduation. It must be emphasized that any overall GPA *below* 2.950 may not use this appeal process because the rounding process would lower, not raise, the value.

A matriculated graduate student who is dismissed must remain out of the college for at least one semester. To return, the student must file a formal application for reentry and pay a nonrefundable reentry fee by the appropriate deadline (see the *Admission, Retention & Graduation* section). The student must also petition the appropriate academic dean for permission to reenter. Requests for reentry will be reviewed on an individual basis.

Permission to reenter following a suspension may be granted *one time only.*

Students who have completed the total credits required by their degree or certificate program may not take additional credits at another institution to raise their GPA. At the completion of the total credits allotted to a program, if a student does not have a 3.0 average and wishes to register for additional courses at Queens College to attempt to raise the GPA, permission to do so must be obtained from the appropriate academic dean.

Appeals of Grades

A student who believes he/she has received an inappropriate grade must take the following steps:

1. Consult with the instructor.
2. If no satisfactory resolution can be reached with the instructor, consult with the department chair and then, if necessary, the appropriate divisional academic dean. The chair or dean may convene a faculty committee to review the appeal.
3. If there is still no satisfactory resolution, appeal to the Office of Graduate Studies for a further review. The appeal must be in writing, and must detail the reasons the grade is felt to be inappropriate.
4. Appeals from the decisions of the Office of the Dean of Graduate Studies may be directed in writing to the GSSC.

At the department level, a grade appeal may be based on the academic quality of the student's work. The only basis for an appeal to the Office of the Dean of Graduate Studies and the GSSC is that the student feels he/she has been treated in an arbitrary and capricious manner by the instructor. To make such an appeal, the student must be prepared to demonstrate that the grade was assigned punitively, unfairly, or on a basis other than impartial academic evaluation.

Once a grade has been posted on the record, it may not be changed without the written permission of the Office of the Dean of Graduate Studies.

Attendance

By registering in a course, the student assumes the obligation to fulfill the requirements set for that course by its instructor. Although absence in and of itself shall not affect a student's grade, students are responsible for such activities as participation in class discussions, laboratory sessions, field trips, etc.; the preparation of papers and reports; and the taking of quizzes and examinations—any or all of which may constitute a component in the student's final grade for the course. In addition to observing the regulation regarding withdrawal from a course, students are expected as a normal courtesy to inform the instructor of any prolonged absence or withdrawal.

Students who wish to withdraw officially from a course should refer to the section of this *Bulletin* dealing with withdrawal procedures (see first page of *Scholastic Standards* above).

Students who wish to request a grade of *Incomplete (INC)* should refer to the section on Incomplete Work on page 29.

Grade Change Guide

The following is a faculty guide to reasons that may or may not be acceptable for faculty submitting Report of Change of Grade forms. While the list below is not

exhaustive, a form with a reason not included here or one that carries too much extraneous information will be sent back to your department. If you have a question about a scenario not listed here, please contact the Registrar's office to find out what reason(s) might be appropriate.

These guidelines are very particular to protect the college when audited. *Important note:* This guide does not supersede or modify any existing academic policy at Queens College.

Letter Grade (A+ through F) to Any Other Grade

An earned grade is, according to college policies, final and no additional work is to be evaluated. The only reason an instructor should ever change this grade is if an error was made. There are almost no exceptions to this rule.

The following could be valid: "Instructor error," "Misevaluation of an exam," "Miscalculation of student average," "Error in grading several assignments," or "Mix-up in my grading book." Not acceptable: "Student completed extra paper" or "Student retook final exam."

On Graduate INC *Grades*

A graduate student has until the last day of final exams after two regular semesters to finish an outstanding *Inc.* grade. Specifically, Fall incomplete grades should be resolved by the end of the following Fall, Spring by the end of the following Spring, and Summer by the end of the following Spring as well.

After that time, the grade will not change in any way, but the student may petition the appropriate academic dean to allow extra time.

For All Graduate Grades More than One Year Old

Grade changes must be approved by the appropriate academic dean for all grades more than one year old.

Changing to and from WU

A *WU* should always be assigned where a student was once present, but ceased to attend classes and complete necessary coursework. In almost all cases, this grade is more appropriate than *F* for students who cease attendance.

If the instructor made a mistake and did *not* assign *WU* appropriately, the grade change form should read "instructor error." The reverse is also true and if the instructor made a mistake and assigned *WU* inappropriately, the grade change form should read "instructor error." Reasons denoting various types of "extenuating circumstances" should be excluded.

Changing to and from WN

The *WN* grade is not available to instructors on their grade roster. It is assigned early in the semester by the Registrar to students who did not attend. If instructors simply need to remove a *WN* for a student who begins attendance during the term, they should file a Commencement of Attendance Revision Form.

If an instructor made a mistake on the attendance roster (or did not submit one at all), they may have no other option than to assign a *WU* come grading time. In this case, the grade change form should read *WU* to *WN* with the reason of "Student never attended." If a student assigned a *WN* did begin to attend, then the grade change should read *WN* to *??* where the reason is "student never attended the course." The *??* could be any earned grade (*A+* through *F*), an *INC*, or a *WU*.

Grade Appeals (see section on page 30)

In the event that a grade runs through the grade appeals process detailed in the college *Bulletin*, a letter from the decision-maker (chair or divisional dean) would preferably accompany the Change of Grade form. The reason could then be "Grade appeal approved" or something similar.

University Policies

CONSUMER INFORMATION FOR PROSPECTIVE AND CURRENT STUDENTS

In addition to the information provided throughout this *Bulletin*, general information for prospective and current students is consolidated and easily accessible at www.qc.cuny.edu/Pages/HEOACompliance.aspx. This includes the college graduation rate for degree-seeking, full-time students pursuant to the federal Higher Education Opportunity Act. This information is updated annually, and may also be obtained from the Office of Institutional Effectiveness (Kiely Hall 104 and 108, 997-5788).

POLICIES CONCERNING DIVERSITY, INCLUSION, AND NON-DISCRIMINATION

Diversity and Inclusion

Queens College attracts a diverse student body, and fostering diversity is essential to its mission. The college's commitment to diversity includes encouraging and facilitating the participation of all members of the college community in all phases of college and campus activities. Additional information can be found on the website for the Queens College Office of Compliance & Diversity Programs at www.qc.cuny.edu/about/administration/affirmativeaction/pages/default.aspx (or at Kiely Hall 147, 997-5888).

Equal Opportunity and Non-Discrimination

The college has and enforces numerous policies against discrimination and is an Equal Opportunity and Affirmative Action institution. CUNY and Queens College do not discriminate on the basis of race, color, creed, national origin, ethnicity, ancestry, religion, age, sex (including pregnancy, childbirth, and related conditions), marital status, partnership status, disability, genetic information, alienage, citizenship, military or veteran status, status as a victim of domestic violence/stalking/sex offenses, unemployment status, any other legally prohibited basis in accordance with federal, state, and city laws with respect to student admissions or access to programs, or in connection with administration or employment. The CUNY Policy on Equal Opportunity and Non-Discrimination addresses claims of discrimination based on the categories identified above. The policy can be found at www1.cuny.edu/sites/title-ix/campus-websites/cuny-policies/.

POLICIES CONCERNING SEXUAL MISCONDUCT (INCLUDING SEXUAL HARASSMENT AND SEXUAL ASSAULT)

In addition to policies prohibiting discrimination, CUNY's policies prohibit sexual misconduct, including sexual harassment and sexual assault, in connection with all university student services and academic programs.

The CUNY Policy on Sexual Misconduct and further information concerning Title IX, which prohibits sex discrimination, sexual harassment, and sexual assault in connection with all university student services and academic programs, and forbids discrimination on the basis of sex in employment and recruitment, consideration, or selection under any education program or activity operated by an institution receiving or benefiting from federal financial assistance, can be found at www1.cuny.edu/sites/title-ix/campus-websites/cuny-policies/.

STUDENT COMPLAINT AND ACCOMMODATION PROCEDURES

CUNY and Queens College provide procedures for student complaints and accommodations, depending on the nature of the concerns and circumstances. Students should review these resources to determine the avenue appropriate for their concern. Students who have a question about the applicable procedure to follow for a particular complaint should consult with the Office of the Vice President for Student Affairs (718-997-5500).

General Student Complaints

In general, student complaints (other than those involving discrimination or harassment or concerning faculty) are heard initially by the Office of the Vice President for Student Affairs. If a student does not want to file a formal complaint or grievance, the vice president or designee will act as an ombudsman or mediator in an effort to resolve the problem and/or get an answer for the student. To file a formal complaint, students should write a detailed complaint and submit it via email to VPSA@qc.cuny.edu, or in person to the Office of the Vice President for Student Affairs (Student Union, Room 327). The vice president or other appropriate college official(s) will review the complaint and provide the student with a response, usually within 14 business days. The college official(s) providing a final determination will not be a person (or persons) involved in the alleged problem. Filings of complaints in good faith will not result in adverse action taken against the student for filing the complaint.

Student Complaints about Faculty

CUNY and the college provide procedures for handling student complaints about faculty. The university respects the academic freedom of the faculty and will not interfere with such academic freedom as it relates to the content or style of teaching activities, and also recognizes the necessity of providing a procedure to address complaints about faculty treatment of students that are not protected by academic freedom and are not covered by other procedures. Examples of such complaints about faculty include incompetent or inefficient service, neglect of duty, physical or mental incapacity, and conduct unbecoming a member of the staff. The process provided for under this procedure includes informal resolution (contacting the chair of the faculty member to facilitate informal resolution) and/or a formal written complaint filed with the chair of the department, or, if the chair is the subject of the complaint, the academic dean or designee of the college president. In general, the complaint should be filed within 30 calendar days of the alleged conduct. The process for fact-finding, resolution/determination, appeal, and subsequent action is set forth in detail in CUNY's Procedures for Handling Student Complaints about Faculty Conduct in Academic Settings, which can be found at www.cuny.edu/about/administration/offices/legal-affairs/policies-procedures/.

Student Complaints of Discrimination

Students who believe they have been aggrieved in violation of CUNY's Policy on Equal Opportunity and Non-Discrimination may file complaints as provided for in that policy (see www1.cuny.edu/sites/title-ix/campus-websites/cuny-policies).

The chief diversity officer and director of the Office of Compliance and Diversity Programs (OCDP), is responsible for investigating such claims. Of course, if a student's complaint concerns immediate health and safety, the student should report the conduct to Public Safety (718-997-5912/5911) and/or should call 911.

Student Complaints of Sexual Misconduct

Students who believe they have been aggrieved in violation of CUNY's Policy on Sexual Misconduct may file complaints as provided for in that policy. (See www1.cuny.edu/sites/title-ix/campus-websites/cuny-policies.)

Members of the college community, including students, who become aware of allegations of sexual harassment should encourage the aggrieved individual to report the alleged sexual harassment to the Office of Compliance & Diversity Programs.

The university's Drug/Alcohol Use Amnesty Policy is intended to encourage victims of or witnesses to sexual harassment or sexual violence while under the influence of drugs or alcohol to report the conduct and seek medical assistance for themselves or others without fear of being disciplined for such drug or alcohol use. (See www.cuny.edu/about/administration/offices/legal-affairs/policies-procedures/.)

The director of the Office of Compliance and Diversity Programs (OCDP), is responsible for investigating such claims (718-997-5888). Of course, if a student's complaint concerns immediate health and safety, the student should report the conduct to Public Safety (997-5912/5911) and to the police.

Confidentiality

An individual who speaks to a college or CUNY employee about sexual harassment, gender-based harassment, or sexual violence should be aware that employees fall into three categories:

(1) "confidential" employees, who have an obligation to maintain a complainant's confidentiality regarding the incident(s);

(2) "responsible" employees, who are required to report the incident(s) to the Title IX coordinator; and

(3) all other employees, who are strongly encouraged but not required to report the incident(s).

"Confidential" employees include counselors or other staff members at the college Counseling Center; nurses, nurse practitioners, and other staff members in the college Health & Wellness Center; pastoral counselors (i.e., counselors who are also religious leaders); and staff members in women's and men's centers.

"Responsible" employees include the Title IX coordinator and staff, Office of Public Safety employees, the vice president for student affairs and all staff housed in that office, residence life staff and resident assistants, the college president, vice presidents, deans, athletic staff including faculty athletics representatives, department chairpersons/executive officers, human resources staff, employees in the University Office of the General Counsel, college attorney/labor designee and staff, international education liaisons, study abroad campus and field directors, faculty members at times when they are leading or supervising students on off-campus trips, faculty and staff advisors to student groups, employees who are managers or supervisors, SEEK/College Discovery staff, college childcare center staff, directors of Educational Opportunity Centers affiliated with CUNY colleges, and faculty or staff academic advisors.

All other employees are permitted but not required to report any possible sexual harassment, gender-based harassment, or sexual violence; however, they are encouraged by CUNY and the college to make such a report.

For more information, see section IX of CUNY's Policy on Sexual Misconduct at www1.cuny.edu/sites/title-ix/campus-websites/cuny-policies/.

Accommodations for Students with Disabilities and for Pregnancy and Related Conditions

The college's Office of Special Services for Students with Disabilities (718-997-5870) is dedicated to providing support services for students with disabilities and pregnancy-related conditions in order to ensure accessibility of academic and other college activities. Such services may include registration assistance, equipment and device loans, reader/writer/attendant care referrals, interpreters, counseling, books on tape, test administration, liaison with counselors, and assistive technology services. To receive such services, students must register with the Office of Special Services and provide documentation of the disability and requested accommodations. In general, absences due to medical condi-

tions related to pregnancy will be excused for as long as deemed medically necessary by a student's doctor, and students will be given the opportunity to make up missed work. (Employee requests are addressed by the Office of Human Resources.)

Appeals concerning such accommodations are handled by the Section 504/ADA coordinator and director of the Office of Compliance and Diversity Programs (OCDP) (718-997-5888).

For general CUNY policy on accommodations, see www2.cuny.edu/about/administration/offices/hr/policies-and-procedures/.

Accommodations for Religious Observance

It is understood that observance of various religious holidays may impact class attendance, participation in examinations, and study or work requirements on particular days. Appropriate arrangements will be made to provide an equivalent opportunity to register for classes or make up any examination, study, or work requirements students may have missed because of such absence.

Students should provide advance notice to their professors of any religious obligations and indicate when such observance and obligations will conflict with class attendance or other college responsibilities. Faculty will reasonably accommodate students' religious obligations, provided that advance notice of these obligations is given by the student. To the extent possible, faculty will refrain from scheduling tests on such class days. The student may also contact the Office of Student Affairs to initiate such accommodations.

If a faculty member does not accommodate a student's request with regard to examinations, assignments, or quizzes missed for reason of a religious holiday, students may pursue refused requests for such accommodation with the department chairperson and the chief diversity officer. See Religious Accommodations procedures, found at https://www2.cuny.edu/about/administration/offices/legal-affairs/policies-procedures/reasonable-accommodations-and-academic-adjustments/vi-religious-accommodations/.

Consistent with Education Law 224, students will not be expelled or refused admission because they are unable, due to their religious beliefs, to attend classes or participate in an examination, study, or work requirements on particular day(s).

ALCOHOL AND DRUG POLICY

The unlawful manufacture, possession, use, dispensation or distribution of alcohol and/or illegal drugs or other controlled substances on university and college premises, or as part of any university or college activity, is prohibited. See www2.cuny.edu/wp-content/uploads/sites/4/page-assets/about/administration/offices/student-affairs/policies/drug-alcohol2011.pdf. In addition, students must comply with the Rules and Regulations for the Maintenance of Public Order (also known as the "Henderson Rules"), which appear below. It is essential that students familiarize themselves with these critical policies as well as the student disciplinary procedures related to enforcement of these policies. See www2.cuny.edu/about/administration/offices/ovsa/policies/ under Student Conduct.

Any student found in violation of these policies or the Henderson Rules is subject to disciplinary action. Sanctions for violations may include admonition, warning, censure, discipline, probation, restitution, suspension, expulsion, complaint to civil authorities, and/or ejection. These sanctions are defined in the appendix to the Henderson Rules.

In addition, all members of the college community are expected to abide by city, state, and federal laws (Board of Trustees Bylaws, Article XV, Section 15.1). The college will not serve as a sanctuary and cannot insulate its members from the consequences of illegal acts. The college will not protect students or other members of the college community from prosecution under the law. Where appropriate, the university will refer persons who violate such laws for prosecution to the relevant governmental authorities and will cooperate fully with such authorities. Criminal sanctions, including fines or imprisonment, may be assessed in addition to sanctions imposed by the student disciplinary process.

Note that students who are employees found in violation of these standards of conduct may be subject to discipline under the provisions of their union contract and/or applicable college and CUNY policies. The sanctions that will be imposed may include, in addition to those found in the various contracts, verified attendance and successful participation in a drug/alcohol assistance program.

Substance Abuse

Serious health risks accompany the use and abuse of alcohol and drugs. A student who is experiencing difficulty with alcohol or chemical/drug dependency may seek assistance directly from, or the Vice President of Student Affairs may refer a student to the College Counseling, Health & Wellness Center. The vice president may recommend that the student meet with a counselor for appropriate referral or assistance through self-help organizations or other outside intervention agencies.

Employees, including student employees, who are experiencing difficulty with alcohol or chemical dependency may, at the request of their supervisor, be asked to meet with a counselor. The counselor, after the interview, may recommend appropriate assistance through self-help organizations or other outside intervention such as drug rehabilitation or employee assistance programs. Employees may also seek assistance on their own.

The University's Drug/Alcohol Use Amnesty Policy is intended to encourage students to seek medical assistance for themselves or others with respect to drug and alcohol use without fear of being disciplined for such use. See www2.cuny.edu/wp-content/uploads/sites/4/page-assets/about/administration/offices/legal-affairs/Drug-and-Alcohol-Use-Amnesty-Policy-10.1.2015.pdf.

Campus/Community-Based Services

These services and information centers for alcohol and drug abuse are available to all members of the college community:

Counseling Services

Frese Hall, 1st Floor • 718-997-5420

Health & Wellness Center
Frese Hall, 3rd floor • 718-997-2760

Office of Human Resources
Kiely Hall 163 • 718-997-4455

New York State Governor's Office Opiate/Heroin Initiative

CUNY has joined the New York State Governor's Office in an important initiative to address a recent increase in heroin overdose. Heroin is an opiate, a class of drugs that is derived from the poppy plant. All opiate abuse, including many prescription painkillers, can lead to addiction, overdose, and even death. If you or someone you know is abusing heroin or prescription painkillers, CUNY's Mental Health and Wellness Offices can provide educational resources and referrals to organizations that can help. In addition, selected CUNY health and public safety staff are trained to administer Naloxone, a drug used to counter the effects of opioid overdose and prevent death. For immediate help, call 911, visit your local emergency room, or call the OASAS HOPEline at 877-846-7369 (24 hours a day, seven days a week) to speak with a trained medical professional. HOPEline staff can answer your questions and help you find treatment. All calls are free and confidential.

TOBACCO-FREE POLICY

The college is a 100% tobacco-free campus, and tobacco may not be used anywhere on the college campus. This applies to all tobacco and related products, including chewing tobacco and e-cigarettes. Restrictions are in effect at all indoor and outdoor facilities under CUNY jurisdiction, including but not limited to entrances and exits to buildings, stairwells, athletic fields, and parking lots. The university policy also prohibits tobacco industry promotions, advertising, marketing, and distribution of marketing materials on campus properties, and tobacco industry sponsorship of athletic events and athletes.

Information on the policy and health-related matters, including assistance in breaking the habit, can be found at www.qc.cuny.edu/about/sustainability/Pages/Tobacco-free.aspx. See https://www.cuny.edu/about/university-resources/healthy-cuny/tobacco-free-cuny/ for the text of the policy.

WORKPLACE VIOLENCE

CUNY and Queens College are committed to the prevention of workplace violence, and will respond promptly to any threats and/or acts of violence.

While the university and college's Workplace Violence Policy applies to employees (including student employees), it is important that all students become familiar with the policy because it defines standards of conduct for all members of the university and college communities in order to provide a safe workplace.

For purposes of this policy, workplace violence is defined as any physical assault or acts of aggressive behavior occurring where an employee performs any work-related duty in the course of his or her employment, including but not limited to: (i) An attempt or threat, whether verbal or physical, to inflict physical injury upon an employee; (ii) Any intentional display of force that would give an employee reason to fear or expect bodily harm; (iii) Intentional and wrongful physical contact with an employee without his or her consent that entails some injury; and (iv) Stalking an employee in a manner that may cause the employee to fear for his or her physical safety and health when such stalking has arisen through and in the course of employment.

All employees and students are responsible for helping to create an environment of mutual respect and for assisting in maintaining a safe and secure work environment. Incidents involving workplace violence will be given the serious attention they deserve. Employees and students are responsible for reporting any incidents of workplace violence of which they become aware to the Public Safety Office. See www.qc.cuny.edu/about/security/Documents/QC%20WORKPLACE%20VIOLENCE%20PREVENTION%20PROGRAM.pdf.

COMPUTING FACILITIES/USE

CUNY's Policy on Acceptable Use of Computer Resources applies to all users of CUNY computer resources, whether affiliated with CUNY or not, and whether accessing those resources on a CUNY campus or remotely. This includes students who have registered for courses requiring the use of a computer and anyone who uses the Queens College computer network.

CUNY and Queens College maintain computer resources for academic and administrative use to support the university's mission of education, research, and public service. The security and good working order of these tools depend on responsible care and use by those who are accorded the privilege of using them. It is imperative that you familiarize yourself with and abide by the Acceptable Use and IT Security policies, which can be found at www.cuny.edu/about/administration/offices/cis/it-policies/, and www.cuny.edu/about/administration/offices/cis/information-security/security-policies-procedures/.

STUDENT RECORDS

Student records and information are maintained by the college, and many records are available in the Registrar's Office (Jefferson Hall, 1st floor; 997-4400). Pursuant to the federal Family Educational Rights and Privacy Act (FERPA), with the exception of "directory information" and some other exceptions, a student's written consent is generally required before an educational institution may disclose personally identifiable information contained in educational records.

The college may provide "directory information" to persons with a legitimate interest in such information upon request, including requests from military recruiters. "Directory information" consists of a student's name, address, telephone number, eight-digit student number (in some circumstances), photograph, email address, full- or part-time status, enrollment status (undergraduate, graduate, etc.), level of education (credits completed), dates of attendance (years, dates, semesters or sessions; not daily records), major field of study, degree(s) enrolled for, participation in officially recognized activities and sports (teams), the height and weight of members of athletic teams, and degrees, honors, and awards received.

Students may request that "directory information" not be released without their prior consent by completing a Non-Disclosure Form in the Registrar's Office. This form also can be downloaded at http://www2.cuny.edu/wp-content/uploads/sites/4/page-assets/about/administration/offices/student-affairs/policies/FERPAForm.pdf and returned to the Registrar's Office. Students should be aware that if they sign a Non-Disclosure Form to block the release of "directory information," they will need to sign and submit a release form to the Registrar's Office to authorize the release of "directory information" to others, such as financial institutions, employers, and other designated persons or entities.

In addition, the college may disclose personally identifiable information from student records to appropriate persons without written consent under a number of other circumstances provided for under FERPA, including in certain emergency situations. For instance, the college may reveal the final results of a disciplinary proceeding against a student accused of a violent crime or non-forcible sex offense, and may notify parent(s) or guardian(s) if the college determines that a student violated a controlled substance or alcohol rule.

Students should familiarize themselves with CUNY's Guidelines for the Implementation of the Student Records Access Policy and FERPA, which can be found at www.cuny.edu/wp-content/uploads/sites/4/page-assets/about/administration/offices/legal-affairs/policies-procedures/FERPA-2.pdf.

STUDENT CONDUCT AND DISCIPLINE

In addition to policies with respect to academic integrity discussed in this *Bulletin,* the university's and college's policies and procedures applicable to student conduct include Article XV of CUNY's By-Laws concerning Student Conduct and Discipline (https://policy.cuny.edu/bylaws/article_xv/text/#Navigation_Location), Rules and Regulations for the Maintenance of Public Order pursuant to Education Law Section 129(a) (also known as the Henderson Rules, reprinted below), Residence Hall Disciplinary Procedures (www2.cuny.edu/wp-content/uploads/sites/4/page-assets/about/administration/offices/ovsa/policies/CUNY-ResidenceHallDisciplinaryProcedures.pdf), and the college's anti-bullying policy (www.qc.cuny.edu/StudentLife/services/Pages/AntiBullying.aspx). Under appropriate circumstances, the Queens College Behavioral Intervention Team will be involved in addressing student conduct.

It is critical that students familiarize themselves with these policies and procedures in order to understand standards of behavior, how to report any concerns, and student disciplinary procedures. In addition, students must be aware of any additional standards of conduct and procedures applicable to certain departments (such as the Athletics Office's special rules applicable to student athletes). For example, CUNY's bylaws require students to meet all college obligations punctually, to use the property of the institution with care and economy, to obey the laws of the city, state, and nation, and to obey the orders of duly established college authorities. The Henderson Rules provide extensive guidance with respect to student conduct. Violation of any of the provisions of these bylaws may result in disciplinary action.

The college handles matters of student discipline through the Vice President for Student Affairs and the Faculty-Student Disciplinary Committee. Note that matters of academic discipline, including the process and procedure for addressing concerns about such conduct, are discussed in CUNY's Policy on Academic Integrity. See www2.cuny.edu/wp-content/uploads/sites/4/page-assets/about/administration/offices/student-affairs/policies/AcademicIntegrityPolicywithoutmemo.pdf.

Please note that college-recognized student organizations (including clubs) are subject to various responsibilities and college policies. While the college does not supervise the use by student groups of leased or purchased off-campus facilities, student organizations are responsible for their conduct and for the management of their off-campus activities and/or housing, and such conduct and activities may be included under Article XV of the bylaws referenced above, and the Henderson Rules articulated below.

RULES AND REGULATIONS FOR THE MAINTENANCE OF PUBLIC ORDER

("Henderson Rules": http://policy.cuny.edu/manual_of_general_policy/article_vi/policy_6.06/text/#Navigation_Location)

CUNY's Rules and Regulations for the Maintenance of Public Order are critical. As the bylaws of the Board of Trustees state: "Each student enrolled or in attendance in any college, school, or unit under the control of the board and every student organization, association, publication, club, or chapter shall obey the laws of the city, state, and nation, and the bylaws and resolutions of the board and the policies, regulations, and orders of the college" (http://policy.cuny.edu/bylaws/article_xv/text/#Navigation_Location).

The Rules and Regulations for the Maintenance of Public Order are as follows:

The tradition of the university as a sanctuary of academic freedom and center of informed discussion is an honored one, to be guarded vigilantly. The basic significance of that sanctuary lies in the protection of intellectual freedoms: the rights of professors to teach, of scholars to engage in the advancement of knowledge, of students to learn and to express their views, free from external pressures of interference. These freedoms can flourish only in an atmosphere of mutual respect, civility, and trust among teachers and students, only when members of the City University community are willing to accept self-restraint and reciprocity as the condition upon which they share in its intellectual autonomy.

Academic freedom and the sanctuary of the City University campus extend to all who share these aims and responsibilities. They cannot be invoked by those who would subordinate intellectual freedom to political ends, or who violate the norms of conduct established to protect that freedom. Against such offenders the City University has the right, and indeed the obligation, to defend itself. We accordingly announce the following rules and regulations to be in effect at each of our colleges, which are to be administered in accordance with the requirements of due process as provided in the Bylaws of the Board of Trustees.

With respect to enforcement of these rules and regulations, we note that the Bylaws of the Board of Trustees provide that:

THE PRESIDENT. The president, with respect to his/her educational unit, shall:

a. Have the affirmative responsibility of conserving and enhancing the educational standards of the college and schools under his/her jurisdiction;

b. Be the adviser and executive agent to the board and of his/her respective college committee and as such shall have the immediate supervision with full discretionary power in carrying into effect the bylaws, resolutions, and policies of the board, the lawful resolutions of any of its committees, and the policies, programs, and lawful resolutions of the several faculties;

c. Exercise general superintendence over the concerns, officers, employees, and students of his/her educational unit.

I. Rules

1. Members of the academic community shall not intentionally obstruct and/or forcibly prevent others from the exercise of their rights. Nor shall they interfere with the institution's educational process or facilities or the rights of those who wish to avail themselves of any of the institution's instructional, personal, administrative, recreational, and community services.

2. Individuals are liable for failure to comply with lawful directions issued by representatives of the City University/college when they are acting in their official capacities. Members of the academic community are required to show their identification cards when requested to do so by an official of the college.

3. Unauthorized occupancy of City University/college facilities or blocking access to or from such areas is prohibited. Permission from appropriate college authorities must be obtained for removal, relocation, and use of City University/college equipment and/or supplies.

4. Theft from or damage to City University/college premises or property, or theft of or damage to property of any person on university/college premises is prohibited.

5. Members of the academic community or their invited guests have the right to advocate a position without having to fear abuse—physical, verbal, or otherwise—from others supporting conflicting points of view. Members of the academic community and other persons on the college grounds shall not use language or take actions reasonably likely to provoke or encourage physical violence by demonstrators, those demonstrated against, or spectators.

6. Action may be taken against any and all persons who have no legitimate reason for their presence on any campus within the City University/college, or whose presence on any such campus obstructs and/or forcibly prevents others from the exercise of their rights or interferes with the institution's educational processes or facilities, or the rights of those who wish to avail themselves of any of the institution's instructional, personal, administrative, recreational, and community services.

7. Disorderly or indecent conduct on City University/college-owned or -controlled property is prohibited.

8. No individual shall have in his/her possession a rifle, shotgun, or firearm or knowingly have in his/her possession any other dangerous instrument or material that can be used to inflict bodily harm on an individual or damage upon a building or the grounds of the City University/college without the written authorization of such educational institution. Nor shall any individual have in his/her possession any other instrument or material which can be used and is intended to inflict bodily harm on an individual or damage upon a building or the grounds of the City University/college.

9. Any action or situation which recklessly or intentionally endangers mental or physical health or involves the forced consumption of liquor or drugs for the purpose of initiation or affiliation with any organization is prohibited.

10. The unlawful manufacture, distribution, dispensation, possession, or use of illegal drugs or other controlled substances by City University employees in the workplace is prohibited. Employees of the City University must also notify the college's human resources director of any criminal drug statute conviction for a violation occurring in the workplace not later than five days after such conviction.

11. The unlawful possession, use, or distribution of alcohol by students or employees on City University/college premises or as part of any City University/college activities is prohibited.

II. Penalties

1. Any student engaging in any manner in conduct prohibited under substantive Rules 1–11 shall be subject to the following range of sanctions as hereafter defined in the attached Appendix: admonition, warning, censure, disciplinary probation, restitution, suspension, expulsion, ejection, and/or arrest by the civil authorities.

2. Any tenured or non-tenured faculty member, or tenured or non-tenured member of the administrative or custodial staff, engaging in any manner in conduct prohibited under substantive Rules 1–11 shall be subject to the following range of penalties: warning, censure, restitution, fine not exceeding those permitted by law or by the Bylaws of the City University, suspension with/without pay pending a hearing before an appropriate college authority, dismissal after a hearing, ejection, and/or arrest by the civil authorities, and, for engaging in any manner in conduct prohibited under substantive Rule 10, may, in the alternative, be required to participate satisfactorily in an appropriately licensed drug treatment or rehabilitation program. In addition, a tenured faculty member, or tenured member of the administrative or custodial staff, engaging in any manner in conduct prohibited under substantive Rules 1–11 shall be entitled to be treated in accordance with applicable provisions of the Education Law or Civil Service Law.

3. Any visitor, licensee, or invitee engaging in any manner in conduct prohibited under substantive Rules 1–11 shall be subject to ejection and/or arrest by the civil authorities.

4. Any organization that authorizes conduct prohibited under substantive Rules 1–11 shall have its permission to operate on campus rescinded.

Penalties 1–4 shall be in addition to any other penalty provided by law or the City University.

APPENDIX A

Sanctions defined:

A. *Admonition.* An oral statement to the offender that he has violated City University rules.

B. *Warning.* Notice to the offender, orally or in writing, that continuation or repetition of the wrongful conduct, within a period of time stated in the warning, may be cause for more severe disciplinary action.

C. *Censure.* Written reprimand for violation of specified regulation, including the possibility of more severe disciplinary sanction in the event of conviction for the violation of any City University regulation within a period stated in the letter of reprimand.

D. *Disciplinary Probation.* Exclusion from participation in privileges or extracurricular City University activities as set forth in the notice of disciplinary probation for a specified period of time.

E. *Restitution.* Reimbursement for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damages.

F. *Suspension.* Exclusion from classes and other privileges or activities as set forth in the notice of suspension for a definite period of time.

G. *Expulsion.* Termination of student status for an indefinite period. The conditions of readmission, if any is permitted, shall be stated in the order of expulsion.

H. *Complaint to Civil Authorities.*

I. *Ejection.*

Resolved. That a copy of these rules and regulations be filed with the Regents of the State of New York and with the Commissioner of Education.

Resolved. That these rules and regulations be incorporated in each college bulletin.

Programs of Study

Scheduling information for courses listed is based on information available when the *Bulletin* went to press. Curricula are subject to change. Students are advised to check with the department office for the most current program requirements and course descriptions.

Course Levels
500-level courses are special purpose courses; graduate students may take these courses at the discretion of each department. 500-level courses *cannot* be credited toward the Master of Arts, Master of Arts in Liberal Studies, Master of Fine Arts, Master of Library Science, or Master of Music degrees, but *are* counted toward the Master of Arts in Teaching and Master of Science in Education degrees.

600-level courses are introductory graduate courses.

700-level courses are intended primarily for master's degree and first-level doctoral students.

Undergraduate Students in Graduate Courses
Graduate 500- and 600-level courses may be taken by undergraduate students provided that all prerequisites are met and departmental permission is obtained.

Upper-division undergraduate students may be admitted to 700-level graduate courses, other than education courses, provided they have a minimum cumulative average of *B* and the permission of the chair or graduate advisor of the department offering the course.

For graduate education courses at the 700 level, students must have the permission of the chair and the dean of the Division of Education. In specific cases, additional prerequisites may be required. With appropriate approval, graduate courses can be counted toward the undergraduate degree.

In some circumstances it is possible that graduate course credits taken by a Queens College undergraduate can be applied toward the master's degree *instead* of toward the undergraduate degree. In such circumstances, the graduate course credits must be in excess of the 120 credits required for the undergraduate degree. In addition, such graduate courses cannot be counted toward the undergraduate major or used to meet other undergraduate requirements.

A Queens College undergraduate who takes graduate courses and later receives approval to use those courses toward the graduate degree will be billed accordingly at the graduate level for the difference in tuition fees. For additional information, undergraduate students should consult the chair or graduate advisor of their academic department. (See also BA/MA Degree Programs in the section on *Degree & Certificate Offerings*.)

Graduate Students in Undergraduate Courses
Graduate students should be aware that undergraduate courses do not accrue credits toward a graduate degree or an advanced certificate.

Graduate Center Courses
The letter "U" preceding a course number indicates that this is a doctoral course. Students must register for doctoral courses through the CUNY Graduate School. These courses may be taken by students who have the prerequisites, whether or not they intend to continue for the doctoral degree. Students are advised to complete the permit process before registering at the Graduate School. (See Transfer Credits and Permits in the *Degree & Certificate Offerings* section.)

Overlapping Courses
Academic policy as passed by the Senate of the college **PROHIBITS** registration into courses with overlapping schedules. Students who register into courses that overlap **WILL BE DROPPED** from one of the courses. **NO EXCEPTIONS** will be made.

Accounting & Information Systems

Chair: Israel Blumenfrucht

Graduate Program Director: Marvin F. Milich

Dept. Office: Powdermaker Hall 215, 997-5070

Website: www.qc.cuny.edu/Accounting

The Master of Science program in Accounting is certified by the New York State Education Department under HEGIS Code 0502.00. This 30–71-credit program provides advanced education in accounting and related areas so that a student completing this program (following a suitable undergraduate program in accounting or completion of the graduate core courses) will meet the fundamental requirements for taking the Uniform CPA Examination in New York State. Students having an undergraduate degree in accounting will require 30 credits to complete the Master of Science Program. Students who possess an undergraduate degree in other than accounting will require 71 credits or less, depending on previous undergraduate coursework completed.

Students successfully completing the program will be well prepared for careers in public, private, or governmental accounting, or for teaching of accountancy in secondary schools. The Queens College MS in Accounting builds upon successful completion of an undergraduate program in accounting or for students not having an undergraduate degree in accounting, completion of up to 41 graduate core credits. In addition to the technically oriented courses in accounting and economics, the Queens College MS in Accounting program allows a set of elective courses outside the technical areas, in liberal arts disciplines, that provide a broader background for the professional accountant.

FACULTY

Blumenfrucht, Israel, Chair, *Professor,* PhD 1981, New York University; CPA: taxation

Milich, Marvin F., Graduate Program Director, *Associate Professor,* JD 1971, New York University School of Law; CPA: law

Adelberg, Arthur H., *Professor,* PhD 1977, City University of New York; CPA: managerial accounting

Balkaran, Dianand, *Lecturer,* MBA 2015, Aspen University; entrepreneurship, tax

Dauber, Nicky A., *Lecturer,* MS 1982, C.W. Post Institute of Finance; CPA: auditing

David, Amy B., *Lecturer*, MS 2006, Queens College; CPA: financial accounting

Hitzig, Neal B., *Professor,* PhD 1985, City University of New York; CPA: business

Hornung, David, *Lecturer,* MBA 1975, Baruch College; financial accounting

Huang, Qianyun Ivy, *Associate Professor*, PhD 2010, Florida Atlantic University: financial accounting

Leibowicz, Barry, *Professor,* LLM 1973, New York University School of Law; taxation

Qureshi, Anique, *Professor,* PhD 1993, Rutgers University; CPA: managerial accounting

Ruthizer, Scott, *Lecturer,* MBA 1984, St. John's University; CPA: taxation, auditing

Satenstein, Jeffrey, *Lecturer*, MS 1974, New York University; CPA: financial accounting

Solieri, Steven A., *Associate Professor,* PhD 2000, Binghamton University; CPA: auditing

Stevens, Michael, *Associate Professor,* LLM 1990, New York University School of Law; CPA: taxation

Sun, Fang, *Associate Professor,* PhD 2011, Temple University, CPA: financial accounting

Sun, Tao, *Assistant Professor,* PhD 2018, Drexel University; CPA: financial and managerial accounting

Weiss, Renee, *Associate Professor,* PhD 1993, Graduate Center, City University of New York; financial accounting

MASTER OF SCIENCE PROGRAM

Requirements for Matriculation into the MS in Accounting Program

(for students having an undergraduate degree in accounting)

These requirements are in addition to the general requirements for admission.

1. An undergraduate Bachelor's degree in accounting from an accredited college or university.
2. All students should have earned an overall GPA of at least 3.0 in their undergraduate program. Additionally, accounting majors must have a GPA of at least 3.0 in their undergraduate accounting courses. For those students with an undergraduate degree in other than accounting, a GPA of at least 3.0 in their major subject is required.
3. GMAT (may be waived under certain circumstances; consult a Graduate Program Director).

Requirements for the MS in Accounting

Students who do not have an undergraduate degree in accounting are required to complete the following graduate core coursework. At the discretion of the Graduate Program Director, the number of required graduate core courses may be reduced for previously completed equivalent undergraduate coursework.

Graduate core coursework is waived for those students who possess an undergraduate degree in accounting. All students are required to complete the 30 graduate credits.

These requirements are in addition to the general requirements for admission.

1. An undergraduate Bachelor's degree from an accredited college or university in a subject other than accounting.
2. All students should have earned an overall GPA of at least 3.0 in their undergraduate program. Additionally, accounting majors must have a GPA of at least 3.0 in their undergraduate accounting courses.

For those students with an undergraduate degree in other than accounting, a GPA of at least 3.0 in their major subject is required.

3. GMAT (may be waived under certain circumstances; consult a Graduate Program Director).

Graduate Core Coursework

ACCT 600. Financial Accounting Theory and Practice: Part 1
ACCT 601. Financial Accounting Theory and Practice: Part 2
ACCT 602. Financial Accounting Theory and Practice: Part 3
ACCT 603. Concepts of Managerial Accounting
ACCT 604. Concepts of Auditing and Computer Auditing
ACCT 605. Introduction to Business Law
ACCT 606. Federal and New York State Taxes on Income
CSCI 688. Advanced Productivity Tools for Business
ECON 601. Introduction to Micro and Macro Economics
ECON 602. Introduction to Corporate Finance and Money and Banking
ECON 649. Statistics as Applied to Economics and Business

Total of 41 credits

Graduate core coursework must be taken in the appropriate sequence, satisfying all prerequisites.

Requirements for the Master of Science Degree

Students who have successfully completed the graduate core courses above (i.e., with a minimum GPA of 3.0) or possess an undergraduate degree in accounting must then complete at least 30 graduate credits with a minimum overall GPA of 3.0. A minimum grade of *C+* must be earned in courses from Accounting (ACCT) in order for the credits to be applied toward the degree. Students must also successfully complete a comprehensive accounting examination, which may be retaken once in the event of initial failure. The 30 graduate course credits include:

a. The seven required courses (21 credits) in accounting:

ACCT 712. Advanced Financial Accounting Theory
ACCT 723. Advanced Auditing Theory and Practice
ACCT 747. Communications and Accountants
ACCT 748. Advanced Accounting Information Systems (students who have received credit for at least two undergraduate or graduate computer science or information systems courses are exempt from ACCT 748, and may substitute an elective from *part d., below).*
ACCT 752. Advanced Studies in Business Law
ACCT 757. Taxation of Business Entities
ACCT 773. Government and Not-For-Profit Accounting and Auditing (students who have received equivalent undergraduate credit must substitute an elective from *part d., below).*

b. The two required courses (6 credits) in economics or risk management:

one course from

ECON 703. Price & Distribution Theory *or*
RM 706. Risk Transfer to Insurance Markets

one course from

ECON 715. Corporate Finance *or*
RM 705. Risk Transfer to Financial Markets

c. One course (3 credits) from the following set of economics or risk management courses (students who have taken ECON 382 or its equivalent are exempt from this requirement and must choose an additional 3-credit course from part d. below):

ECON 705. Mathematical Economics
ECON 721. Econometrics
RM 704. Risk Measurement
ECON 726. Introduction to Operations Research

d. The following elective classes are available to students who have satisfied one or more of the ten required courses through their previous undergraduate or graduate coursework:

ACCT 707. Contemporary Issues in Management Accounting
ACCT 751. Public Interest Law
ACCT 758. State and Local Taxation
ACCT 759. Estate and Gift Taxation and Administration
CSCI 688. Advanced Productivity Tools for Business
ECON 711. Money and Capital Markets
ECON 750. Industrial Organization and Control
ECON 770. Urban Economics: Tools, Methodology, and Applications
HIST 774. History of American Business
PHIL 760. Business Ethics
PSCI 640. Public Administration
PSCI 715. Organization Theory
PSYCH 754. Behavioral Science and Business
SOC 716. Professional Writing and Communication for Social Research
SOC 728. The Sociology of Organizations: Government and Non-Profits
URBST 727. Public Management
URBST 742. Public Budgeting

COURSES IN ACCOUNTING

ACCT 600. Financial Accounting Theory and Practice: Part 1. 4 hr.; 4 cr. Prereq.: Permission of advisor. First required course for students having an undergraduate degree in other than accounting, who are wishing to enter the MS in Accounting Program at Queens College. This course provides the fundamental understanding of the language of business as expressed in financial reports. It continues into an intensive

study of the theories of financial accounting, generally accepted accounting principles, and relevant opinions and statements of the American Institute of Certified Public Accountants, Financial Accounting Standards Board, and the Securities and Exchange Commission.

ACCT 601. Financial Accounting Theory and Practice: Part 2. 4 hr.; 4 cr. Prereq.: ACCT 600. Second required course for students having an undergraduate degree in other than accounting, who are wishing to enter the MS in Accounting Program at Queens College. This course continues the intensive study of the theories of financial accounting, generally accepted accounting principles, and relevant opinions and statements of the American Institute of Certified Public Accountants, Financial Accounting Standards Board, and the Securities and Exchange Commission. It also involves mathematical principles and applications thereof to accounting.

ACCT 602. Financial Accounting Theory and Practice: Part 3. 3 hr.; 3 cr. Prereq.: ACCT 601. Theory of accounting applicable to problems peculiar to large-scale business operations, including the problems of accounting for mergers, insolvencies, branch operations, liquidations, and the preparation of consolidated financial reports. Relevant opinions of the American Institute of Certified Public Accountants, Financial Accounting Standards Board, and the Securities and Exchange Commission.

ACCT 603. Concepts of Managerial Accounting. 4 hr.; 4 cr. Prereq.: ACCT 601. The concepts and procedures used to account for the cost of manufacturing and selling, with their practical application in different types of cost accumulation systems (e.g., job-order, standard, and process costing). The application of various techniques in managerial decision-making, inventory management, capital budgeting, and capital investment decisions.

ACCT 604. Concepts of Auditing and Computer Auditing. 4 hr.; 4 cr. Prereq.: ACCT 601; coreq.: ACCT 602. Auditing and other forms of assurance services applicable to the accounting profession. Auditing procedures, including applications to computerized systems; test of internal controls and substantive audit procedures performed by CPAs. Introduction to statistical sampling applicable to audit engagements. Review of relevant pronouncements of American Institute of Certified Public Accountants, Securities and Exchange Commission, and Public Accounting Oversight Board as well as ethical standards expected of CPAs.

ACCT 605. Introduction to Business Law. 4 hr.; 4 cr. Introduction to key concepts of business law, including contracts, agency, forms of business organization, personal and real property, and employment and elder law. The basic structure through which law is implemented and enforced is reviewed.

ACCT 606. Federal and New York State Taxes on Income. 4 hr.; 4 cr. Prereq.: ACCT 600. An introduction to the federal and state income taxes as they relate to individuals. This accelerated course will emphasize the basic multitiered tax structure. Inclusion, exclusion, and deduction are defined, utilizing the Internal Revenue Code and related material. Special classes of taxpayers (including partnerships and corporations) are considered as well as accounting and procedural rules.

ACCT 707. Contemporary Issues in Management Accounting. 3 hr.; 3 cr. Prereq.: Open to students who have completed an undergraduate degree in accounting or who have completed the graduate core coursework for the MS in Accounting or the MS in Risk Management Accounting/CPA concentration, or permission of the department. The purpose of this course is to build upon the basic concepts of management accounting introduced in ACCT 305 and 306. The most current theories and practices that comprise ACCT 707 have been developed over the past decade in response to rapid changes in the external and internal environment that business organizations face. ACCT 707 will examine in depth the most recent management accounting literature with respect to: (1) information that managers need for decision-making, and (2) the role of the management accountant in the accumulation, analysis, and use of that information.

ACCT 712. Advanced Financial Accounting Theory. 3 hr.; 3 cr. Prereq.: Open to students who have completed an undergraduate degree in accounting or who have completed the graduate core coursework for the MS in Accounting or the MS in Risk Management, Accounting/CPA concentration, or permission of the department. The emphasis of this course is on the examination of current issues and research methodologies related to accounting theory in such areas as the objectives of financial statements, financial statement elements, asset-valuation concepts, income-determination models, and cutting-edge topics under scrutiny by the accounting profession. Students will analyze the literature in accounting theory relating to current pronouncements of the Financial Accounting Standards Board and prior pronouncements of the Accounting Principles Board and Committee on Accounting Procedure. A primary focus will be the application and influence of accounting theory on the development of current generally accepted accounting principles and corporate financial reporting.

ACCT 723. Advanced Auditing Theory and Practice. 3 hr.; 3 cr. Prereq.: Open to students who have completed an undergraduate degree in Accounting or who have completed the graduate core coursework for the MS in Accounting, or the MS in Risk Management Accounting/CPA concentration or permission of the department. This course focuses on the philosophical aspects of the professional accountant's relationship with clients and third parties. Accordingly, the Code of Professional Conduct issued by the American Institute of CPAs (AICPA) is examined in detail. The auditing

pronouncements issued by the AICPA are analyzed in detail. Requirements of the Securities and Exchange Commission are also explored. Other areas scrutinized are compilation and review, attestation engagements, statistical sampling and auditing in an electronic data processing environment. The case method is used in solving problems of a more complex nature.

ACCT 747. Tax and Accounting Communications. 3 hr.; 3 cr. Prereq.: Open to students who have completed an undergraduate degree in accounting or who have completed the graduate core coursework for the MS in Accounting or graduate core coursework for the MS in Taxation or the basic core coursework for the MS in Risk Management, or permission of the department. The examination, both verbally and non-verbally, of communications required in the business life of an accountant. The objectives of this course will be to enhance the ability to write, speak, and listen more effectively in the business environment. Topics covered will be writing a resume and a job application for an accounting position, writing instructions to staff for an audit, writing a letter to a client on the results of an audit, preparing an analysis of an annual report, communicating during an interview and a business meeting, listening skills, and preparing a financial presentation with multimedia aids.

ACCT 748. Advanced Accounting Information Systems. 3 hr.; 3 cr. Prereq.: Open to students who have completed an undergraduate degree in accounting or who have completed the graduate core coursework for the MS in Accounting, or the MS in Risk Management Accounting/CPA concentration, or permission of the department. Methods and techniques of using accounting as an information system. The design, analysis, installation, and evaluation of a system, either manual or computer-based, will be covered. Topics will include accounting systems theory, design theory, accounting file structure, implementation, maintenance, and evaluation of the system. General ledger software and database programs will be discussed and used in the classroom. The use of the Internet and expert systems as they relate to accounting information will be included.

ACCT 751. Public Interest Law. 3 hr.; 3 cr. This course seeks to examine the various aspects of Public Interest Law. It will study public institutions and the phenomenon of bureaucracy in order to gain some understanding of the public law system. Emphasis will focus on the relationship of the government and its citizens with respect to a variety of specific areas of concern. Topics will include administrative law, civil rights and civil liberties, law and education, immigration law, consumer protection, environmental law, poverty law, disability rights, children and the law, and international human rights.

ACCT 752. Advanced Studies in Business Law. 3 hr.; 3 cr. Prereq.: Open to students who have completed an undergraduate program in accounting or who have completed the graduate core coursework for the MS in Accounting, or the MS in Risk Management Accounting/CPA concentration, or permission of the department. This course examines the Uniform Commercial Code, with particular emphasis on sales law, commercial paper, and the laws of secured transactions. Laws relating to bankruptcy, suretyship, as well as laws specifically applicable to accountants' professional responsibilities, including securities laws and corporate governance, will also be examined.

ACCT 757. Federal Taxation of Business Entities. 3 hr.; 3 cr. Prereq.: Open to students who have completed an undergraduate degree in accounting or or who have completed the graduate core coursework for the MS in Accounting or graduate core coursework for the MS in Taxation or the basic core coursework for the MS in Risk Management Accounting/CPA concentration, or permission of the department. This course focuses on the taxation of the primary forms of business entities: sole proprietorship, corporations, including S corporations, and partnerships, including limited liability companies (LLCs). The decision process necessary to select a particular type of business entity as well as the tax advantages and disadvantages inherent in the operations, liquidation, and termination of these entities will be stressed. Emphasis is placed on tax planning, problem-solving, and research.

ACCT 758. State and Local Taxation, and Tax-Exempt Entity. 3 hr.; 3 cr. Prereq.: Open to students who have completed an undergraduate degree in accounting or who have completed the graduate core coursework for the MS in Accounting or graduate core coursework for the MS in Taxation or the basic core coursework for the MS in Risk Management Accounting/CPA concentration, or permission of the department. This course examines the laws of state and local taxation with a particular emphasis on the tax laws of the State of New York. Income, corporate franchise, inheritance, and sales taxes are studied where appropriate, distinguished from the rules of federal taxation that apply (including tax-exempt entity). Both substantive and procedural rules are studied. Problems of multistate residence and taxation, related constitutional issues, and conflict of laws are studied. The course addresses ongoing compliance issues as well as tax dispute resolution mechanisms such as making and pleading disputes to the Tax Tribunal.

ACCT 759. Estate, Gifts, and Trust Taxation. 3 hr.; 3 cr. Prereq.: Open to students who have completed an undergraduate degree in accounting or who have completed the graduate core coursework for the MS in Accounting or graduate core coursework for the MS in Taxation or the basic core coursework for the MS in Risk Management Accounting/CPA concentration, or permission of the department. This course focuses on the rules and regulations governing estate, gifts, and trust taxation and the administration of estates. Topics covered include the rules and regulations governing gifts and bequests, both from the standpoint of tax

compliance and tax planning. The administrative rules governing probate administration are covered, as is the role of the accountant in the administrative process.

ACCT 760. IRS Ethical Tax Practice, Procedures, and Research Methods. 3 hr.; 3 cr. Prereq. or coreq.: ACCT 747. Open to students who have completed an undergraduate degree in accounting or who have completed the graduate core coursework for the MS in Accounting or the MS in Risk Management Accounting/ CPA concentration, or permission of the department. The focus of this course is to provide students with a working knowledge of federal tax procedure and practice. The course concentrates on the process and procedures of the federal tax system beginning with the filing of a return, and includes the structure and authority of the IRS, voluntary compliance, enforcement, federal tax disputes, and related issues. Students will learn to identify and analyze the procedural issues involved in a tax controversy in order to represent a client in a civil federal tax dispute from its inception through the administrative process (i.e., up through the commencement of litigation). This course will also cover the full range of tax research techniques/ methods incorporating statutory interpretation and legislative history; administrative interpretation, including regulations, published rulings, and letter rulings (involving an analysis of the relative weight accorded to each); judicial authority (including use of citators and other means to check current status of decisional law); and computerized legal research. Proper drafting of technical memos and opinion letters will be presented, and problems and research projects will be assigned for work outside class.

ACCT 761. Taxation of Partnership and S Corporation. 3 hr.; 3 cr. Prereq.: ACCT 757. Open to students who have completed an undergraduate degree in accounting or who have completed the graduate core coursework for the MS in Accounting or the MS in Risk Management Accounting/ CPA concentration, or permission of the department. This course gives special attention to all aspects of partnership taxation. Subjects include partnership formation and liquidation, special allocations, basis adjustments for operating items, and deductions, losses, and credits to partners. Research into difficult partnership issues is also stressed. It will then cover analysis of tax considerations in acquiring real property as an investment, choice of business entity, corporate ownership of real property, depreciation methods and issues, passive activity losses and credits affecting real estate, alternative minimum tax, uniform capitalization rules, installment sales and repossessions, like-kind exchanges and involuntary conversions, leases, rehabilitation and low-income housing credits, qualified residence interest, vacation homes, home office deductions, and homeowners associations. Tax treatment of REITS and REMICS will be discussed as well. This course will also examine the following: What is and why elect to be an S corporation? Electing and maintaining S corporation status, S corporation requirements, advantages and disadvantages of S corporations, shareholder taxation, distributions, basis adjustments, terminating S corporation status, self-employment and payroll taxes for S corporation shareholders, among a host of other relevant S corporation topics.

ACCT 762. Deferred Compensation and Employee Benefits. 3 hr.; 3 cr. Open to students who have completed an undergraduate degree in accounting or who have completed the graduate core coursework for the MS in Accounting or the MS in Risk Management Accounting/ CPA concentration, or permission of the department. This course provides an introduction to retirement plans and employee benefits at the graduate level of study. The emphasis is on the decision-making process of the individual. After a thorough review of retirement funding, this course discusses qualified pension plans, profit-sharing plans, and stock bonus plans as well as distributions from and administration of these plans. Other topics include IRAs, SEPs, 401(k), 403(b), and 457 plans, social security, deferred compensation, and nonqualified plans. Employee benefits are explored in two key areas: fringe and group benefits. Covers defined benefit, defined contribution, and welfare benefit plans; equity awards granted by corporations as well as equity awards granted by LLCs and partnerships; nonqualified deferred compensation and Section 409A of the IRC; golden parachutes and Sections 280G and 4999 of the IRC.

ACCT 763. International Taxation. 3 hr.; 3 cr. Prereq.: ACCT 757. Open to students who have completed an undergraduate degree in accounting or who have completed the graduate core coursework for the MS in Accounting or the MS in Risk Management Accounting/ CPA concentration, or permission of the department. This course is designed to provide an overview of common international tax planning issues in which the U.S. tax system asserts taxing jurisdiction over cross-border activities, and will focus on inbound taxation: the U.S. taxation of non-resident aliens and foreign corporations with respect to their activities conducted within the territory of the United States; and outbound taxation: the U.S. taxation of U.S. persons with respect to their activities conducted outside the territory of the United States. Major subjects will include relevant provisions included in the Internal Revenue Code and in U.S. income tax treaties, sourcing rules for allocating income and deductions among several national taxing jurisdictions, extraterritorial taxation of U.S. citizens and enterprises realizing income in foreign locations (including the mechanics of the U.S. foreign tax credit), income tax incentives for exports, reallocation of income and deductions between U.S. and related foreign enterprises (i.e., transfer pricing), taxation of foreign persons with respect to their income derived from U.S. portfolio investments, from U.S. trade or business activities, and from U.S. real property investments.

ACCT 764. Reorganization, Liquidations, and Consolidated Returns. 3 hr.; 3 cr. Prereq.: ACCT 757. Open to students who have completed an undergraduate degree in accounting or who have completed the graduate core coursework for the MS in Accounting

or the MS in Risk Management Accounting/CPA concentration, or permission of the department. This course provides a comprehensive examination of the principal U.S. federal income tax rules applicable to corporations and their shareholders governing the structuring or restructuring of a business enterprise. Transactions that will be covered include mergers and acquisitions, joint ventures, taxable and tax-free reorganizations, spinoffs, and post-merger integration. Emphasis will be placed on mastery of technical rules and their practical application (including drafting of tax-related contract provisions). The objective of this class is to consider (1) the technical federal income tax rules, (2) the underlying fundamental tax policy objectives of the federal corporate income tax rules, and (3) the major tax-planning considerations that must be addressed in corporate structuring. Provides an in-depth coverage of the federal consolidated group regulations. Emphasis placed upon consolidated issues arising from acquisitions and dispositions of members, including the ramifications of section 338 and section 338(h)(10) elections. Additional topics covered include affiliated group status, intercompany transactions, limitations pertaining to the use of net operating loss carryovers and other tax attributes, stock basis calculations, the loss disallowance rules relating to dispositions, unique elections available to consolidated groups, and consolidated group tax-planning opportunities.

ACCT 765. Capstone. 3 hr.; 3 cr. Prereq.: ACCT 747, 757, and 760; or coreq.: one of ACCT 758, 759, 761, 763, or 764. Open to students who have completed an undergraduate degree in accounting or who have completed the graduate core coursework for the MS in Accounting or the MS in Risk Management Accounting/CPA concentration, or permission of the department. This capstone course is intended to employ the students' mastery of tax research and technical knowledge learned throughout the program. Each student will be required to complete a well-written, comprehensive professional research paper on a current tax topic addressed during the program, utilizing the skills and experience gained in the program, in a deadline-oriented environment that will mimic the practice the student will encounter in a real-world tax research setting.

ACCT 773. Government and Not-For-Profit Accounting and Auditing. 3 hr.; 3 cr. This course focuses on accounting, financial reporting, and auditing relevant to governmental and not-for-profit entities. Financial information that is required internally by public officials and governmental and not-for-profit managers is discussed. The financial reporting standards covered are those of the Government Accounting Standards Board (GASB) and the Financial Accounting Standards Board (FASB). Auditing standards set out in the "Yellow Book" issued by the General Accounting Office (GAO) and by the Office of Management and Budget (OMB) circulars of the Federal Office of Management and Budget are discussed. The "single audit" approach is covered. The foundation of accounting and reporting for governmental entities is developed in terms of public goods theories of governmental activities.

ACCT 791.1–791.3. Special Problems in Accounting. 1–3 hr.; 1–3 cr. Prereq.: Permission of the department. Open to students of advanced standing who receive permission of the department to register. Recommended for students of high academic standing who want to undertake some special research topic related to accounting.

COURSES IN ECONOMICS

ECON 601. Introduction to Micro and Macro Economics. 4 hr.; 4 cr. Prereq.: MATH 131 or equivalent. Principles of microeconomics and macroeconomics. Analysis of the economy as a distinctive whole that is also composed of multiple small parts. Critical examination of economic theories and policies, especially as they are used by government officials to shape and guide the economy.

ECON 602. Introduction to Corporate Finance and Money and Banking. 4 hr.; 4 cr. Prereq.: ECON 601 or equivalent. Principles of banking and financial economics. Topics include interest rates, financial markets, financial institutions, the money supply and monetary policy, and how the financial system operates in a macroeconomy.

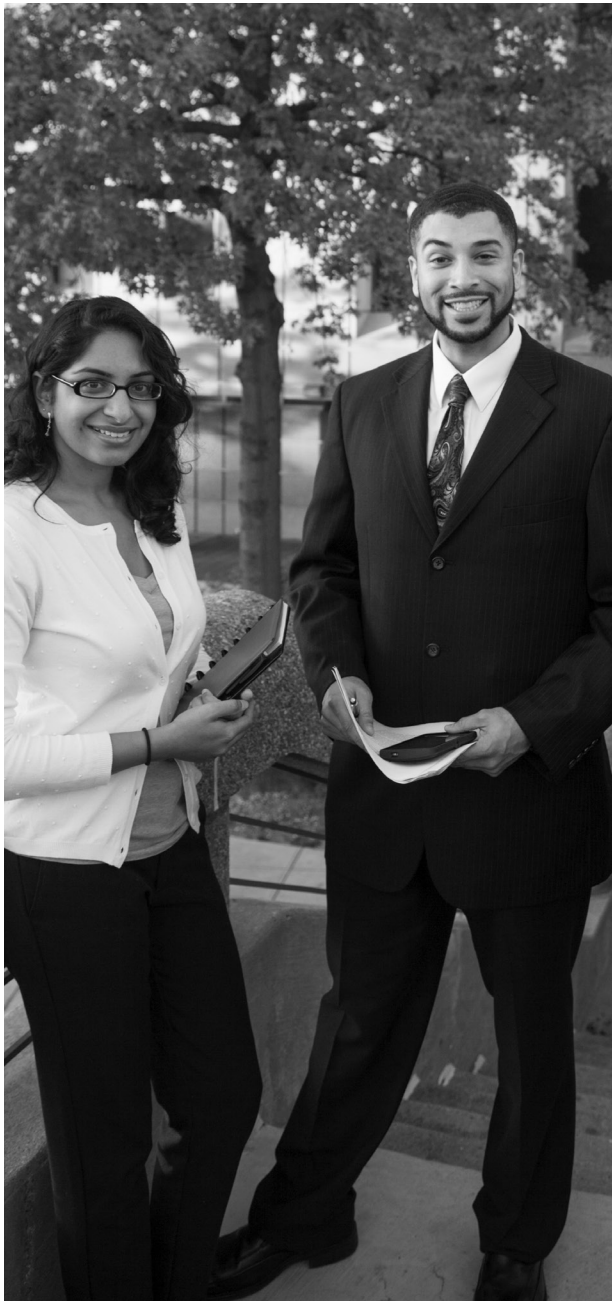
ECON 649. Statistics as Applied to Economics and Business. 3 hr. plus 1 lab. hr.; 3 cr. Prereq.: ECON 601 or equivalent, and MATH 131 or equivalent. Descriptive statistics, elementary probability theory, sampling statistical inference, estimation, correlation, and regression. Statistical applications will be on business and economics-related topics.

ECON 703. Price and Distribution Theory. 2 hr. plus conference; 3 cr. A one-semester course in microeconomic theory.

ECON 705. Mathematical Economics. 3 hr.; 3 cr. Prereq.: A one-semester course in differential calculus and a course in price theory; and either graduate matriculation or permission of the chair. An introduction to applications of mathematics to economic theory and problems. Illustrations are drawn from linear programming, theory of games, and difference equations.

ECON 711. Money and Capital Markets. 2 hr. plus conference; 3 cr. Examination of the sources and uses of funds in financial markets; market structure of interest rates; flow-of-funds analysis.

ECON 715. Corporate Finance. 2 hr. plus conference; 3 cr. Prereq.: BUS 241 or equivalent. Students who have taken BUS 341 will not receive credit for this course. The theory of investor and firm behavior in financial markets under uncertainty. Among the topics discussed are portfolio theory, the capital asset pricing model, arbitrage pricing theory, asset valuation theory, and optimum firm decision-making rules with regard to capital budgeting, capital structure, and dividend policy.



ECON 721. Econometrics. 2 hr. plus conference; 3 cr. Prereq.: One semester of calculus and ECON 249 or equivalent. Analysis of the classic single equation regression models (simple and multiple), simultaneous equation models, and special problems associated with time series and qualitative data.

ECON 726. Introduction to Operations Research. 3 hr.; 3 cr. Prereq.: ECON 249 or equivalent; calculus recommended. Methods of operations research in economic and business decision-making. Topics include linear and nonlinear programming, queuing, theory, and sensitivity analysis.

ECON 750. Industrial Organization and Control. 2 hr. plus conference; 3 cr. Structure of the American economy; governmental policies aiming at the preservation of competition in industrial markets and regulation of trade practices.

ECON 770. Urban Economics: Tools, Methodology, and Applications. 2 hr. plus conference; 3 cr. Introduces students to major subject areas, theories, and research tools of urban and regional economics and their applications.

COURSES IN OTHER DEPARTMENTS

(see department listings for complete course information)

CSCI 688.	**Advanced Productivity Tools for Business.**
HIST 774.	**History of American Business.**
PHIL 760.	**Business Ethics.**
PSCI 640.	**Public Administration.**
PSCI 715.	**Organization Theory.**
PSYCH 754.	**Behavioral Science and Business.**
SOC 716.	**Professional Writing and Communication for Social Research.**
SOC 728.	**The Sociology of Organizations: Government and Non-Profits**
URBST 727.	**Public Management.**
URBST 742.	**Public Budgeting.**

Art

Chair: Michael Nelson
Graduate Advisors: MA, Art History, Lawrence Waldron; MFA, Fine Arts, Sin-ying Ho
Dept. Office: Klapper Hall 172, 997-4800
Website: www.qc.cuny.edu/Art

The Master of Arts program in art history offers students the opportunity to expand their knowledge of the art and architecture created by the many cultures, civilizations, and artists around the globe from antiquity to today. Students work with and engage faculty who research, teach, and publish in a wide range of periods, styles, and media. In addition, students will find a greater variety of topics with the option to enroll in art history graduate courses at another CUNY campus (including the Graduate Center, Hunter College, Brooklyn College, and the City College of New York). Faculty at Queens as well as at the other CUNY campuses take advantage of New York City with its host of world-renowned museums, galleries, libraries, and some of the most prominent edifices and landscapes in the history of world architecture.

The Master of Fine Arts program in studio art is designed to assist serious artists in the development of their work. The heart of the program is independent work in the fine arts in the student's chosen specialty, complemented by required courses and electives. Attendance usually is full time, with four semesters required to complete the program. Admission is selective, limited to those who have already demonstrated both a commitment to art and the promise of further development. Students are provided with individual studios and share additional workspace in wood, printmaking, 3-D printing, bronze foundry and metal workshops. Shared ceramics, computer, and photography facilities are also available. MFA concentrations include Painting, Sculpture, Installation, Photography, Ceramics, Media, and Social Practice. The MFA degree is generally recognized as the appropriate academic credential for teaching art in college.

The department also provides both art history and art studio courses to students seeking the Master of Science in Education degree.

FACULTY

Nelson, Michael, Chair, *Associate Professor,* PhD 2001, University of Toronto: ancient art and architecture
Bass, Chloë, *Assistant Professor,* MFA 2011, Brooklyn College: performance and interactive media
DeRosa, Andrew, *Assistant Professor*, MFA 2008, Cranbrook Academy of Art: 2D design
Goldberg, Glenn, *Associate Professor,* MFA 1981, Queens College, CUNY: drawing and painting
Gonzalez, Antonio L., Chair, *Professor,* MFA 1989, Yale University: photography
Grella, Dustin, *Assistant Professor,* MFA 2009, School of Visual Arts: computer art
Ho, Sin-ying, *Associate Professor,* MFA 2001, Louisiana State University: ceramics
Kauper, Kurt, *Associate Professor,* MFA 1995, UCLA: painting and drawing
Mitchell, Tyrone, *Professor,* Art Students League, New York Studio School: sculpture
Powers, Edward, *Associate Professor,* PhD 2003, New York University: modern and contemporary art
Priestly, Debra, *Professor,* MFA 1996, Pratt Institute: painting, drawing
Sholette, Gregory, *Professor,* MFA 1995, University of California at San Diego: sculpture, art criticism
Smith, Ryan Hartley, *Assistant Professor,* MFA 2011, School of Visual Arts: illustration
Sund, Judy, *Professor,* PhD 1986, Columbia University: nineteenth-century art
Waldron, Lawrence, *Assistant Professor,* PhD 2010, CUNY Graduate Center: Latin American art
Weinstein, Kathryn, *Associate Professor*, MFA 1994, San Francisco State University: graphic design
Woo, Danne, *Assistant Professor,* MPS 2013, New York University: technology and design
Woodfin, Warren, *Associate Professor,* PhD 2002, University of Illinois at Urbana-Champaign: Byzantine art

MASTER OF ARTS PROGRAM IN ART HISTORY

Requirements for Matriculation

These requirements are in addition to the general requirements for admission.

1. The applicant must be approved by the department's Committee on Graduate Study in Art History, which has the authority to recommend acceptance or rejection to the Office of Graduate Admissions. In making its selection, the committee will consider such factors as breadth and depth of preparation, level of achievement, and the suitability of the applicant's interests to the curriculum.
2. Applicants must have completed a minimum of four courses (normally 12 credits) in art history beyond the introductory level.
3. Applicants must have completed at least two documented semesters of college-level study of a foreign language or the equivalent; equivalencies will be determined by the graduate committee. Applicants whose native language is not English may satisfy the first foreign language requirement with a TOEFL score of 575 or higher.
4. A student may be conditionally admitted with the stipulation that any deficiencies in preparation be removed in the first year.

Requirements for the Master of Arts Degree

These requirements are in addition to the general requirements for the Master of Arts degree. Full details about program policies and expectations may be found in the handbook for MA candidates; each incoming student may obtain a copy of this handbook from the department office and is responsible for all schedules and guidelines outlined in it.

Students admitted into the program may pursue the MA degree along two tracks of matriculation. The *Research Track* is designed for students who wish to pursue advanced scholarly studies beyond the MA degree and prepares them for PhD studies in art history or allied disciplines. The *Professional Track* is designed for students who consider the MA degree a professional degree that enhances a current profession or leads to a new career. Potential students choose which of the two tracks they wish to pursue on their program application in order to receive the proper matriculation advice and guidance from department faculty.

Matriculation Requirements: Research Track (30 credits)

1. ARTH 740 (Art History Methods Colloquium) or undergraduate equivalent (3 cr.)
2. Art History Electives (24–27 cr.). Students must pass at least one course in three of five broad areas: Ancient, Medieval, Renaissance-Baroque, Modern-Contemporary, and Asia/Americas. Two courses must be seminars. Students may opt to take two graduate courses (6 cr.) in allied disciplines such as History, Literature, and Media Studies.
3. Successful completion of the Art History Qualifying Exam (normally taken within the first semester of matriculation). The exam is intended to demonstrate a general knowledge of the major monuments in the history of art.
4. Demonstration of proficiency in two foreign languages relevant to art historical research and scholarship.
5. A Master's Thesis proposal prepared under the supervision of the student's MA thesis advisor (a full time faculty member in the department) and approved by all full-time members of the faculty.
6. A Master's Thesis (3 cr.). The thesis is an original, lengthy art historical argument supported by extensive research in primary and secondary sources. It is written under the supervision of a faculty advisor and approved by both the faculty advisor and a second reader.

Matriculation Requirements: Professional Track (30 credits)

1. ARTH 740 (Art History Methods Colloquium) or undergraduate equivalent (3 cr.)
2. Art History Electives (27–30 cr.). Students must pass at least one course in three of five broad areas: Ancient, Medieval, Renaissance-Baroque, Modern-Contemporary, and Asia/Americas. Two courses must be seminars. Students may opt to take two graduate courses (6 cr.) in allied disciplines such as History, Literature, and Media Studies.
3. Successful completion of the Art History Qualifying Exam (normally taken in the first semester of matriculation). The exam is intended to demonstrate a general knowledge of the major monuments in the history of art.

Accelerated Masters of Arts Degree

For undergraduates majoring in Art History, the department also offers an accelerated master's program. This course of study enables qualified undergraduates to finish their MA degree in as little as one year. Speak to the graduate advisor for more information.

MASTER OF FINE ARTS PROGRAM

Requirements for Matriculation

These requirements are in addition to the college's general requirements for admission to the Master of Arts program. Alternatively, the Bachelor of Fine Arts degree from a recognized institution shall be considered as an acceptable equivalent for the general requirements of the BA, subject to the determination of the department's MFA Committee in concurrence with the Office of Graduate Studies.

1. In addition to three letters of reference, each candidate for admission shall submit a portfolio of work as prescribed by the committee (as jpegs). This portfolio shall be examined by the committee, which shall have the authority to accept or reject the candidate.
2. Undergraduate study should consist of at least 30 credits in art; students shall have taken the equivalent of a two-semester survey course plus two elective courses in the history of art.
3. Applicants must demonstrate satisfactory standards of spoken and written English. For applicants whose first language is not English: (a) Interviews are required of those applicants who hold an undergraduate or graduate degree from an accredited American institution of higher education; (b) All other applicants must submit proof of having achieved a score of 600 or higher on the Test of English as a Foreign Language (TOEFL).

Requirements for the MFA

1. Completion of 54 credits consisting of the following:
   a. Two courses in the history of art. (See graduate-level art history electives.)
   b. ARTS 724, Contemporary Issues in the Visual Arts.
   c. Two seminar courses, each with a different topic, must be taken under ARTS 730 and/or 731 (6 credits)
   d. Two elective courses to be selected with departmental approval from ARTS 727.1, 727.2, 728.
   e. ARTS 721 (.1, .2, .3, .4) MFA Graduate Seminar (12 credits))
   f. MFA Writing Seminar (3 credits)
   g. Individual Studio Practice (12 credits)
   h. 6 credits may be a continuation of individual studio work or additional electives or seminars.
2. Each candidate for the MFA is required to submit for the record documentation of his or her Thesis Project that elaborates upon and/or depicts in printed or digital form the student's research, which will be kept on file for future reference at the Queens College Art Library. The dimensions and content of the document will be defined by the candidate and advisor in scheduled meetings.

3. Students may declare a concentration in the areas of Painting, Sculpture, Installation, Photography, Ceramics, Media, Social Practice Art. This designation will be registered in the Art Office.
4. Student work in the specialized area shall be reviewed and graded by the MFA Committee each semester. The Committee shall be authorized to approve or reject a student for continuation in the program, to place a student on probation, and to approve a student for the MFA degree.
5. A grade-point average of 3.0 shall be maintained.
6. Participation in the program is usually full-time, and the degree is normally completed within two years (exceptions may be granted by the Committee).
7. Students will do all their creative work on campus except by permission of the Committee.

Student work in the specialized area shall be reviewed and graded by the MFA Committee each semester. The committee shall be authorized to approve or reject a student for continuation in the program, to place a student on probation, and to approve a student for the MFA degree.

COURSES IN ART HISTORY

Courses numbered in the 500s (see Art Education) are intended for graduate students whose primary area of study is not art history, including MFA candidates; these courses may not be credited toward the Master of Arts degree in art history.

Matriculation for the Master of Arts degree in art history or permission of the instructor is required for admission to courses at the 700 level, which assume a good background in art history and, in some instances, the ability to read in foreign languages. In addition, seminars and ARTH 740 assume prior study in the area and a knowledge of appropriate languages. Students will be expected to do independent work and present reports and an extended paper. Admission to seminars for all students is by permission of the instructor.

Not all courses will be offered each semester. Consult the department for announcements of forthcoming offerings. In the past, course topics have ranged from major artists like Michelangelo and Vermeer, to seminars in women's imagery and mythology, to lecture courses on numerous periods and cultures worldwide.

ARTH 700. Museum Studies. 3 hr.; 3 cr. The course will acquaint students with museum work by providing supervised participation in the functioning of the Godwin-Ternbach Museum. Students will engage in such museum activities as the preparation of exhibitions and care of the collection. Practical experience will be supplemented by lectures.

ARTH 701. Topics in the History of Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 702. Seminar in the History of Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 740. Art History Methods Colloquium. 2 hr. plus conf.; 3 cr. Prereq.: Permission of the instructor. The basic problems and techniques of art historical scholarship, stylistic and iconographic analysis, sources, and documentation.

ARTH 770. The Major Artist. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The artist to be studied will be announced each time the course is given. May be repeated for credit when the topic is different.

COURSES IN ANCIENT ART

ARTH 741.1. Ancient Painting. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. Greek and Roman paintings and mosaics, with emphasis on Roman wall decoration, its origins and originality.

ARTH 741.2. Greek Sculpture. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The leading masters and centers: Athens, Olympia, Delphi, Pergamon.

ARTH 741.4. Studies in Ancient Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 751.1–751.9. Seminar in Ancient Art. 2 hr. plus conf.; 3 cr. Prereq.: Permission of the instructor. The particular area to be studied may vary and will be announced prior to each offering. May be repeated for credit when the topic is different.

COURSES IN MEDIEVAL ART

ARTH 742.1. Late Antique and Early Medieval Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor.

ARTH 742.2. Gothic Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. Stylistic evolution in architecture, sculpture, the minor arts, or painting.

ARTH 742.3. Studies in Medieval Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 752.1–752.9. Seminar in Medieval Art. 2 hr. plus conf.; 3 cr. Prereq.: Permission of the instructor.

The particular area to be studied may vary and will be announced prior to each offering. May be repeated for credit when the topic is different.

COURSES IN RENAISSANCE AND BAROQUE ART

ARTH 743.2. Art of the High Renaissance in Italy. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor.

ARTH 743.3. Renaissance and Baroque Architecture. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. Development of the classical tradition from 1400 to 1800 and its spread across the globe.

ARTH 743.4. Early Netherlandish Painting. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor.

ARTH 743.5. Studies in Renaissance Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 744.1. Dutch Painting in the Seventeenth Century. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor.

ARTH 744.2. Italian Painting in the Seventeenth Century. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. Antimannerist reform, the Carracci, Caravaggio, and the impact of their styles on later generations.

ARTH 744.3. Studies in Baroque Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 753.1–753.9. Seminar in Renaissance Art. 2 hr. plus conf.; 3 cr. Prereq.: Permission of the instructor. The particular area to be studied may vary and will be announced prior to each offering. May be repeated for credit when the topic is different.

ARTH 754.1–754.9. Seminar in Baroque Art. 2 hr. plus conf.; 3 cr. Prereq.: Permission of the instructor. The particular area to be studied may vary and will be announced prior to each offering. May be repeated for credit when the topic is different.

COURSES IN MODERN ART

ARTH 745.1. Impressionism and Post-Impressionism. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor.

ARTH 745.3. Modern Architecture. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor.

ARTH 745.4. Art of the United States from the Colonial Era to 1900. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor.

ARTH 745.6. Studies in 18th-Century Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 745.7. Studies in Modern Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 745.8. Studies in Contemporary Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 745.9. Studies in the Art of the United States. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 755.1. Seminar in 18th-Century Art. 2 hr. plus conf.; 3 cr. Prereq.: Permission of the instructor. The particular area to be studied may vary and will be announced prior to each offering. May be repeated for credit when the topic is different.

ARTH 755.2–755.5. Seminar in Modern Art. 2 hr. plus conf.; 3 cr. Prereq.: Permission of the instructor. The particular area to be studied may vary and will be announced prior to each offering. May be repeated for credit when the topic is different.

ARTH 755.6. Seminar in Contemporary Art. 2 hr. plus conf.; 3 cr. Prereq.: Permission of the instructor. The particular area to be studied may vary and will be announced prior to each offering. May be repeated for credit when the topic is different.

ARTH 755.7. Seminar in Art of the United States. 2 hr. plus conf.; 3 cr. Prereq.: Permission of the instructor. The particular area to be studied may vary and will be announced prior to each offering. May be repeated for credit when the topic is different.

ARTH 755.8. Seminar in Photography. 2 hr. plus conf.; 3 cr. Prereq.: Permission of the instructor. The particular area to be studied may vary and will be announced prior to each offering. May be repeated for credit when the topic is different.

ARTH 770.1–770.3. Internship in Art History. 1–3 hr; 1–3 cr. An independent course in which a student works for a defined period of time on a weekly basis as

an intern in a public or private institution or agency related to or concerned with the study, preservation, and presentation of art and architecture. The course permits the student to develop and undertake research related to the specific requirements and duties of the internship while under the supervision of both the on-site internship supervisor and an art department faculty member sponsor. Evaluation of the student will be based on a report from the internship supervisor on the student's work and a research project submitted by the student to the faculty member sponsor.

COURSES IN ART OF ASIA AND THE AMERICAS

ARTH 747.1. Studies in Asian Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 747.2. Studies in Chinese Art and Architecture. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 747.3. Studies in Japanese Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 747.4. Studies in Indian Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 748.1. Studies in Mesoamerican Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 748.2. Studies in Andean Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 757.1. Seminar in Asian Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 757.2. Seminar in Buddhist Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 757.3. Seminar in Chinese Painting. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 757.4. Seminar in Contemporary Chinese Art. 2 hr. plus conf.; 3 cr. Prereq.: Matriculation for the MA in art history *or* permission of the instructor. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

INDEPENDENT RESEARCH

ARTH 760. Special Problems. Hr. to be arranged; 3 cr. Work in some particular area of research for advanced candidates in Art History. Approval of the department's graduate committee is required. A student may take only one course at this level.

ARTH 760.1. Special Problems in Ancient Art.

ARTH 760.2. Special Problems in Medieval Art.

ARTH 760.3. Special Problems in Renaissance Art.

ARTH 760.4. Special Problems in Baroque Art.

ARTH 760.5. Special Problems in Modern Art.

ARTH 760.6. Special Problems in American Art.

ARTH 760.7. Special Problems in Photography.

ARTH 760.8. Special Problems in Asian Art.

ARTH 760.9. Special Problems in Art of the Americas.

ARTH 790. Thesis. Hr. to be arranged; 3 cr. Prereq.: Approval of a thesis advisor and the department's graduate committee. Supervised thesis writing.

COURSES IN FINE ART

REQUIRED SEMINARS

ARTS 721. MFA Graduate Seminar. 12 cr. Matriculation in the MFA program and completion of appropriate prior courses. In each of the course sequences the student will be assigned an instructor as advisor, with whom he or she shall meet weekly for criticism, as well as with visiting critics as assigned. The work of the final semester shall be submitted in the form of a self-selected one-person exhibition of the coursework for the MFA Committee, and open to the college community, in lieu of a comprehensive examination. (Course is repeated over four semesters as: 721.1, 721.2, 721.3, 721.4.)

ARTS 723. MFA Writing Seminar. 3 cr. This required seminar offers students a series of exercises focused on developing their artistic statement of purpose as well as the basic elements of the essay form, while preparing them for their graduating thesis.

ARTS 724. Contemporary Issues in the Visual Arts. 3 hr.; 3 cr. Prereq.: A course in the history of modern art. Limited to students matriculated in the MFA program. Diverse critical views on selected topical issues concerning contemporary art will be discussed. Students will further be asked to locate, describe, and discuss their own work and one another's work in relation to present-day art practices and concerns. A paper on an approved topic will be presented by each participant.

ELECTIVE COURSES

ARTS 713. Computer Imaging. 4 hr.; 3 cr. An introduction to basic concepts of computer graphics in the context of the full range of visual media traditions, with contemporary applications in the fine and applied arts. Individual projects will further define different areas inherent in the newer media.

ARTS 727.1. Printmaking. 4 hr.; 3 cr.

ARTS 727.2. Photography. 4 hr.; 3 cr. May be repeated for credit. This course is designed for graduate students who are interested in pursuing the study of photography, and to give them information which will allow them to use photography in conjunction with other mediums.

ARTS 728. Sculpture Techniques. 4 hr.; 3 cr. Individual and group projects in metal casting, including investment and chasing; advanced technical problems in plaster; techniques of construction and assemblage in metal, wood, ceramics in handbuilding, slip casting, mold making, wheel throwing, kiln firing, clay and glaze technology, and plastics. May be repeated for credit.

ARTS 729. Individual Criticism/Problems. Hr. to be arranged; 3 cr. Prereq.: Permission of the MFA Committee. The work will consist of a particular topic or focus established between the individual student and a faculty member. It will not consist of work undertaken in either ARTS 721.1, 721.2, 721.3, or 721.4, or ARTS 722.1, 722.2, 722.3, or 722.4. May be repeated for credit.

STUDIO SEMINARS

ARTS 730. Seminar in Problems of New Forms. 4 hr.; 3 cr.

ARTS 731. Seminar in Problems of Representation. 4 hr.; 3 cr. In each of these areas a particular topic will be announced for study each semester. Each seminar includes execution of an appropriate project, the study of historical and recent precedents, and studio problems as indicated. A research paper may be assigned. May be repeated for credit if the topic is different. Seminars will comprise 60 contact hours each; however, meetings may be scheduled so that the course does not extend over the entire semester.

DRAWING COURSE

ARTS 735.VT: Advanced Problems in Studio. 4 hr.; 3 cr. May be repeated for credit. Advanced Problems in Studio is taught with a variety of approaches, ranging from traditional to conceptual, theoretical to experimental.

ADVANCED CERTIFICATE IN CRITICAL SOCIAL PRACTICE

POST-GRADUATE CERTIFICATE IN CRITICAL SOCIAL PRACTICE

Admission Requirements

These 24-credit certificates are designed for advanced cultural practitioners who can show significant experience with social practice projects in one or more of the following areas: art, architecture, activism, urban studies, public interest law, community organizing, social work or related fields. In order to be admitted, applicants with MAs or MFAs from a U.S. institution or a non-U.S. equivalent institution of higher education shall be preferred. However, we will give consideration to exceptional students with BAs or BFAs. Either a 79 TOEFL score or a 6 IELTS score is preferred.

Courses

There are 12 core credits each social practice student must take, followed by an equal number of flexible credit options that together add up to 24 credits. Each admitted candidate is assigned an individual mentor whose research is closest to that of the incoming student. It is this mentor's responsibility to take a lead role advising students and selecting the flexible seminars and classes best suited for their specific course of study. For example, someone whose research project involves redesigning a blighted urban location might take classes in Urban Studies, while someone interested in ecological art would be guided toward Environmental Studies. These, however, are only illustrations of possibilities. In theory, a social practice student might engage with sociology, anthropology, law, media, philosophy, education, women's studies, or a host of potential areas of interdisciplinary focus, subject to the approval of the advisor.

Below are the required and optional courses for the certificates.

Required Core Courses

	credits
ARTS 777. History & Theory of Social Art Practice	3
ARTS 778. Seminar in Project Management	3
ARTS 772. Two semesters Individual Criticism/ Individual Research (may be repeated)	6

Flexible Course Options

	credits
(Individual mentor advises on all choices.)	
ARTS 730. Seminar in Problems of New Forms (may be repeated)	3–6

	credits
Two or three interdisciplinary seminars related to research project; must be at the 700 graduate level (see examples below; again the advisor helps select)	6–9
Minimum number of credits to complete the certificate	24

REQUIRED COURSES

ARTS 777. History and Theory of Social Art Practice. 3 hr.: 3 cr. The aim of this seminar is to survey, critique, and historicize the theory and practice of activist, interventionist, public, participatory and community-based art that operates within and across fields such as performance, urban studies, environmental science and other socially engaged disciplines. The class will focus on such questions as: Why is it useful, even necessary, to understand the history and theory of social practice art? Where should we look to find the historical roots of social practice art? Are these within the history of art, or external to it, in the broader social sphere? In an increasingly privatized society how do we define and operate within a concept of the public sphere? And how are both mainstream and alternative type cultural institutions responding to the increasing interest in socially engaged art by emerging artists? Through lectures, readings, discussions, student presentations, group activities, guest speakers and off-site visits to galleries and museums we will seek to position socially engaged visual culture and the shifting role of the artist within an historical, ideological, and critical framework.

ARTS 778. Seminar in Project Management. 3 hr.; 3 cr. The primary goal of this course is to offer students a step-by-step investigation into how to develop and successfully carry out a socially engaged, public art project. Its secondary aim is to critically compare and contrast traditional forms of organizing with experimental institutional forms. The class will cover such things as NGOs and 501(c)3 not-for-profit corporations, as well as cooperative alternative spaces, participatory public projects and informal interdisciplinary art collectives and coalitions. This pragmatic and critical approach to contemporary administrative practices will be approached using a combination of select readings and class discussions, guest lectures presenting tutorials, and a practicum that draws together all phases of the seminar including concept development, budget preparation, grant writing, and networking focused on a specific, social practice project initiated by either individual students working alone or students collaborating in small groups.

Interdisciplinary Elective Courses

Among the possible electives certificate candidates might consider taking, depending on the course of their research, are the following. (Other electives may be selected from other CUNY schools) All selections are made with the advice of the mentor.

ANTH 397.6. Ethnographic Fieldwork in Flushing
ENGL 327, 327W. Environmental Literature
GEOL 504. Environmental Problems and Solutions.
GEOL 768. Soils, Wetlands, and Bioremediation.
MEDST 270. Media and the Environment
PHIL 125. Philosophy of the Environment
PHIL 302. Ecology and Culture.
PHIL 308. Urban Anthropology
PSCI 216. Immigration Law and Procedures
PSCI 230. Intellectual Property
URBST 702. Urban Social Movements
URBST 712. Urban Labor and Labor Movements
URBST 724. Introduction to Public Policy
URBST 745. Community Organization
URBST 758. Climate Change and Public Policy
URBST 756. The Law and Urban Society
URBST 763. Race, Ethnicity, and Public Policy
URBST 773. Labor and Globalization
URBST 730. The Urban Economy
URBST 780. Field Work I. Urban Studies

MASTER OF SCIENCE IN EDUCATION PROGRAM (ART EDUCATION)

Requirements for Admission

These requirements are in addition to the general requirements for admission.

1. Applicants must have the equivalent of 20 credits in studio art and at least 6 credits in art history, including a general survey of Western Art. The minimum grade-point average acceptable in these courses is *B* (3.0).
2. Two letters of recommendation and a 500-word statement of purpose are required. In addition, the applicant must submit a portfolio of artwork consisting of 15 slides. The following information about each slide must be provided on a separate page: title (if any), size, material, and date. (Photos or other flat images, no larger than 10 x 13 inches may also be included and may be substituted for some of the slides).
3. Students should consult the listing under Secondary Education & Youth Services for education requirements for admission.

Requirements for the Degree

1. 15 credits of art courses on the graduate level are required for the degree.
2. Art History requirement: Of the 15 art credits, 3 credits (one course) must be in art history, to be chosen from 500- and 700-level course offerings.
3. Studio Art requirement: 12 credits from the graduate offerings in Studio Art are required. With permission of the graduate advisor, students may take ARTS 620.3, Special Projects in Design, and ARTS 621.3, Special Projects in Fine Arts. Without obtaining permission of the graduate advisor, students may take any offering in the MFA program, with the exception of courses in the ARTS 721 and 722 series, which are not open to Master of Science in Education students.
4. Students should consult the listing under Secondary Education & Youth Services for education

requirements for the degree.

COURSES IN ART HISTORY

Any of the art history courses may be taken for credit toward the degree of Master of Science in Education. Courses on the 500 level are primarily arranged for students in this program; these courses are also open to qualified undergraduates who have had two courses in art history. Courses on the 700 level (see above) are designed for art history students who have a reading knowledge of foreign languages and research skills. MS in Education candidates must obtain permission of the instructor before registering in these courses.

ARTH 501. The Language of Art. 2 hr. plus conf.; 3 cr. Prereq.: Two semesters of art history. A survey of the principal categories of visual experience, the conceptual terms for describing it, and the criteria used to analyze and evaluate the arts. Includes an exercise in designing classroom applications of aesthetic theory, history, and/or criticism.

ARTH 502. Topics in Ancient Art. 2 hr. plus conf.; 3 cr. Prereq.: Two semesters of art history. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 503. Topics in Medieval Art. 2 hr. plus conf.; 3 cr. Prereq.: Two semesters of art history. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 504. Topics in Renaissance and Baroque Art. 2 hr. plus conf.; 3 cr. Prereq.: Two semesters of art history. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 505. Topics in Modern Art. 2 hr. plus conf.; 3 cr. Prereq.: Two semesters of art history. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 506. Topics in Art of the United States. 2 hr. plus conf.; 3 cr. Prereq.: Two semesters of art history. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 507. Topics in Asian Art. 2 hr. plus conf.; 3 cr. Prereq.: Two semesters of art history. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 508. Topics in Art of the Americas. 2 hr. plus conf.; 3 cr. Prereq.: Two semesters of art history. The topic may vary and will be announced each time the course is given. May be repeated for credit when the topic is different.

ARTH 556. Independent Study in Art History. Hr. to be arranged; 3 cr. Prereq.: Permission of the instructor. Work in some particular area of research for candidates for the Master of Science in Education and Master of Fine Arts degrees.

COURSES IN STUDIO ART

ARTS 603. Advanced Design Studio. 4 hr.; 3 cr. Prereq.: Two semesters of work in design principles or workshop experience in applied design.

ARTS 607, 608. Advanced Drawing Studio I, II. 4 hr.; 3 cr. Prereq.: A two-semester course in drawing.

ARTS 609. Advanced Painting. 4 hr.; 3 cr. Prereq.: Two semesters of work in the principles and practice of painting. May be repeated for credit if the project is different.

ARTS 610, 611. Graphic Design I, II. 4 hr.; 3 cr. Prereq.: Two semesters of graphic design principles or workshop experience in graphic design.

ARTS 612. Advanced Sculpture Studio. 4 hr.; 3 cr. Prereq.: Two semesters of work in sculpture.

ARTS 620.3. Special Projects in Design. 4 hr.; 3 cr. May be repeated for credit if the project is different.

ARTS 621.3. Special Projects in Fine Arts. 4 hr.; 3 cr. May be repeated for credit if the project is different.

Biology

Chair: Nathalia Holtzman

Doctoral Studies Advisor: John Dennehy

MA Program Advisor: David Lahti

Department Office: Science Building D346, 718-997-3400; Fax 718-997-3445

Website: http://biology.qc.cuny.edu

The Biology Department offers programs of courses and research leading to the Master of Arts degree at Queens College. It also offers programs of courses and research leading to the PhD at the CUNY Graduate Center in the subprograms of cellular, molecular, and developmental biology; evolution, ecology, and behavior; physiology and neurosciences; and plant sciences. Refer to the *Bulletin* of the Graduate Center for application, financial aid, and course information for the PhD program. Opportunities for specialization in applied and basic research are included below in the listing of the supervising faculty.

The department offers a variety of graduate courses appropriate for master's-level students in education. Students should meet with the department's graduate advisor for guidance in the selection of biology courses. It also offers an accelerated graduate track that allows qualifying students to apply credit for advanced courses taken as undergraduates to both their bachelor's and master's degrees.

In addition to the program of courses described below, students are encouraged to participate in the extensive research programs of the biology faculty. Their research activities have recently been funded by various agencies, including the National Science Foundation, National Institutes of Health, Howard Hughes Medical Institute, and a number of private foundations, including the American Cancer Society and American Heart Association. Participation in research is one of the best ways for students to learn biology first-hand, and to appreciate how scientific methodology is used to answer important biological questions. A description of current faculty research can be found below.

Opportunities are enhanced by affiliation with other city institutions and cooperative efforts with other divisions of the City University of New York and the American Museum of Natural History.

FACULTY

Weinstein, Daniel C., Chair, *Professor,* PhD 1995, Rockefeller University: vertebrate molecular embryology, signal transduction

Dennehy, John, Doctoral Studies Advisor, *Professor,* PhD 2003, Clark University: microbial evolutionary ecology, experimental evolution

Lahti, David, Master's Program Advisor, *Associate Professor,* PhD 1998, Whitefield Institute, Oxford: philosophy; PhD 2003, University of Michigan: evolutionary biology, behavioral ecology, human social evolution

Alvarado, Sebastian, *Assistant Professor,* PhD 2013, McGill University: plasticity, DNA methylation, social behavior, pigmentation

Baker, Mitchell B., *Associate Professor,* PhD 1998, University of California at Davis: behavioral ecology, dispersal, evolution, arthropods, birds

Cheema, Saima, *Lecturer,* PhD 2006, City University of New York: microbiology

Fath, Karl, *Assistant Professor,* PhD 1997, Case Western University: cell biology of intracellular transport, molecular motors, and cytoskeleton

Glickman Holtzman, Nathalia, *Associate Professor,* PhD 2000, University of Oregon: cardiac morphogenesis in zebrafish, regulation of morphogenesis at the cellular and molecular levels

Ma, PoKay M., *Associate Professor,* PhD 1986, Washington University: neuroscience, neural control of behavior, structure, and development of *locus coeruleus* in zebrafish

Meléndéz, Alicia, *Professor,* PhD 1995, Columbia University: role of autophagy in *C. elegans* development, genetics of aging

Muehlbauer, Esther, *Lecturer,* PhD 1987, New York University: estuarine ecology, herpetology

Savage-Dunn, Cathy, *Professor,* PhD 1992, Columbia University: development, molecular genetics, signal transduction, *C. elegans*

Short, Timothy W., *Associate Professor,* PhD 1991, Stanford University: plant physiology and molecular biology, light control of plant development

Sperling, Jon A., *Associate Professor,* PhD 1972, University of Wisconsin: algal and bryophyte ecology and physiology, limnology

Tajerian, Maral, *Assistant Professor,* PhD 2012, McGill University: neuroscience, mechanism and treatments of pain

Vesanen, Mika, *Lecturer,* PhD 1995, University of Helsinki: virology and immunology

Waldman, John R., *Professor,* PhD 1986, City University of New York: ecology, evolution, conservation biology of fish

Zakeri, Zahra F., *Professor,* PhD 1984, St. John's University: molecular developmental biology, regulation of gene expansion in aging and cell death

FACULTY EMERITI

Professors Emeriti: Chabora, Greller, Michels, Roze, Szalay

Associate Professors Emeriti: Alsop, Calhoon, Koepfer, Rifkin

MASTER OF ARTS PROGRAM

Requirements for Matriculation

These requirements are in addition to the general requirements for admission.

1. Students are expected to have a minimum of 20 credits in biology beyond the introductory level. Undergraduate courses in physics, chemistry, and

* MAT charges are possible.

mathematics are required. A course in statistics is highly recommended.

2. The credentials of each applicant will be examined by the departmental admissions committee. This committee may request an interview with a candidate for admission.

Requirements for the Master of Arts Degree

These requirements are in addition to the general requirements for the Master of Arts degree.

1. Each student's program will be approved by a supervising professor chosen by the student with the approval of the graduate advisor.
2. Students who have taken a 300-level Queens College biology course that is also offered at the 600-level may not take that 600-level course for credit. All graduate students must take at least 10 credits of 700-level lecture courses. Only 600- and 700-level courses may be applied toward degree requirements. Furthermore, the combination of BIOL 788 (Cooperative Education Placement), BIOL 799 (Research), BIOL 791 (Colloquium), and BIOL 792 (Tutorial) may not exceed 12 credits.
3. Depending on personal interests and career goals, candidates for the MA degree in Biology may choose one of two tracks to fulfill the degree requirements:
   A. Research-intensive track (30 credits required). Students in this track are expected to present significant independent research in a written Master's thesis, followed by an oral examination/defense, conducted by an Examination Committee established for each candidate. The chair of this committee shall be a member of the Queens College Biology Department, chosen by the candidate in consultation with the Biology MA advisor. The remaining members of the committee shall be chosen by the committee chair in consultation with the candidate. The content and nature of the oral examination shall be determined by the chair of the committee in consultation with the student to be examined. Each student will be limited to two attempts to pass this examination.
   B. Course-intensive track (32 credits required). Students in this track are required to write a literature-based review paper, followed by an oral examination/defense conducted by an Examination Committee composed of Queens College Biology Department faculty. Each student will be limited to two attempts to pass this examination, which can be taken only after at least 24 course credits have been completed. Students in this track are eligible to take BIOL 788 (Cooperative Education Placement) and participate in the Graduate Cooperative Education Program.

Accelerated MA Degree in Biology

If you are an undergraduate Biology major, have at least a 3.0 GPA in the major (meaning all science and math courses), and have taken at least 60 credits, you are eligible for our accelerated MA. This will save you both time and money in attaining both a BA and an MA degree in Biology.

As an undergraduate, a student can take up to 12 credits of 600- or 700-level courses (with instructor permission), and these will count toward both the undergraduate (BA) and graduate (MA) degrees. Students who maintain at least a 3.0 GPA average as an undergraduate will automatically be accepted into the Biology master's program upon completion of the BA. Other students may apply to the Accelerated MA track through the regular procedure. No more than 12 graduate credits may count toward both the BA and the MA. Some rules and limitations:

- Students must maintain a 3.0 GPA until receiving their MA.
- Each course that counts toward the MA must be a *B-* (2.7 GPA) or better. This is a general rule that applies to any Queens College Biology MA students, not just students in the accelerated MA. Grades as low as *C-* still count toward the undergraduate degree.
- Colloquium (BIOL 791) and Research (BIOL 799) are not included in the courses that may be taken as an undergraduate. Undergraduate students should take the 300-level versions of these courses.
- The 600- or 700-level courses taken as undergraduates may count either toward required 300-level undergraduate courses for the Biology major, or as electives. Laboratory field courses may count as undergraduate laboratory requirements.

Students interested in this option should speak to Professor David Lahti, graduate advisor for the Biology Department. An application consists of an application form and a personal statement of your reasons for requesting admission to this track, why you want a master's in biology, and a bit about your broader goals (to whatever extent you have considered them). Please request one letter of reference from a Queens College faculty member, such as your undergraduate advisor.

Other Information

Arrangements may be made for students to take courses for graduate credit in other departments at Queens College or within CUNY in order to fulfill particular career requirements (i.e., resource management, environmental impact assays, etc.).

Faculty in the Biology Department at Queens College participate actively in the CUNY PhD program in biology. Arrangements can be made to transfer graduate credits earned at Queens College to the PhD program at CUNY. Students are encouraged to discuss their long-range goals with the master's program graduate advisor as soon as possible.

The CUNY doctoral program in Biology is described in the *Bulletin* of the Graduate Center.

COURSES IN BIOLOGY*

500-Level Courses

BIOL 585. Genetics. 3 lec., 1 rec. hr.; 4 cr. Prereq.: BIOL 105 and CHEM 114 or equivalent. Not open to students who have completed BIOL 285 except by permission of the chair. The inheritance, structure, and mode of genetic material. Designed for the Master of Science in Education candidates who are concentrating in science education. Cannot be used to fulfill requirements for the Master of Arts degree in biology.

BIOL 586. Cell Biology. 3 hr.; 3 cr. Prereq.: BIOL 105 and CHEM 114 or equivalent. Not open to students who have completed BIOL 286 except by permission of the chair. Structure, function, and regulation of cells, including cell cycle, subcellular compartmentalization, signal transduction, and cell-cell interactions. Designed for the Master of Science in Education candidates who are concentrating in science education. Cannot be used to fulfill requirements for the Master of Arts degree in biology.

BIOL 587. Evolutionary Biology. 3 lec., 1 rec. hr.; 4 cr. Prereq.: BIOL 105. Not open to students who have completed BIOL 287. The mechanisms and processes of biological evolution. Designed for the Master of Science in Education candidates who are concentrating in science education. Cannot be used to fulfill requirements for the Master of Arts degree in biology.

600-Level Courses

BIOL 610. Lower Plants. 2 lec., 1 rec., 3 lab. hr.; 4 cr. A survey of algae, bryophytes, and fungi of the northeastern United States, with an emphasis on identification, morphology, physiology, and ecology. A library or field research paper is required.

BIOL 611. Mycology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: One semester of genetics and permission of the instructor. A survey of the major taxa of fungi, including slime molds, with emphasis on their morphology and taxonomy. The importance of fungi as causal agents in diseases of man, other animals, and plants, as experimental tools of genetic, biochemical, and physiological research will be considered. Basic techniques of culturing fungi will be utilized in the execution of individual projects.

BIOL 612. Morphology and Evolution of Plants. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Permission of the instructor. Comparison of plant form and function. Lectures will emphasize the structure and origin of plant organs, and the use of this information in classifying major plant groups. Information from paleobotany will be integrated with comparative morphology of living plants. A library research paper will be required. Laboratory includes several field trips.

BIOL 613. Field Botany. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Permission of the instructor. Introduction to local flora and vegetation. Lectures will emphasize the structure and composition of local vegetation. Laboratories will consist mainly of field trips to parks, preserves, and botanical gardens. Students will submit a field trip report, a plant collection, and a library research paper.

BIOL 614. Plant Systematics. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Permission of the instructor. Survey of the vascular plants with emphasis on flowering plants. Lectures will emphasize taxonomic characters useful in identification of major plant groups. Laboratories will be devoted to techniques of identification. Students will submit a plant collection and a library research paper. Field trips will occupy half days or full days; they will comprise a large part of the lab component.

BIOL 621. Entomology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Course in invertebrate zoology. Anatomy, physiology, and ecology of insects. Identified insect collection required of each student. Students should expect to reside at a field station for at least one week of the course (dormitory fees will be announced and collected at time of registration). Summer Sessions 1 and 2 only.

BIOL 626. Vertebrate Phylogeny. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: A course in comparative anatomy. Phylogeny and interrelationships of the important major groups of the phylum Chordata, emphasizing the origins of higher categories and their adaptive radiation into sub-groups. Laboratory on representatives of fishes, amphibians, reptiles, birds, and mammals, emphasizing differences in locomotion, feeding mechanisms, and sense organs found within the same sub-classes, infra-classes, super-orders, and orders, with practice in the identification of typical specimens likely to be found in the field.

BIOL 630. Biometrics. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: Courses in genetics and calculus. Probabilistic models in biology, field, and laboratory sampling, tests of hypotheses; uses of statistics for estimation. Topics selected will include growth processes of organisms and populations, discriminant functions, and genetic descriptions of evolving populations. The laboratory includes computational procedures in evaluating biological data.

BIOL 640. General Ecology. 2 lec., 1 rec., 2 lab. hr.; 4 cr. Prereq.: A course in field biology. Theory and analysis of structure, growth, biological communities in terms of their structure, species abundance and diversity, interspecific interactions, and integration with the physical environment.

BIOL 644. Biology and Society. 3 hr.; 3 cr. Prereq.: Courses in genetics and in cell biology. Critical analysis of selected subjects encompassing current biological research and related technological developments in context of their ethical, scientific, and economic impact on the human social systems.

BIOL 645. Evolution and Cultural Behavior. 3 hr.; 3 cr. Prereq.: BS or BA, a major *or* minor in biology, zoology, or equivalent, or permission of the instructor. A lecture/seminar course that examines several recent evolutionary theories associated with culture, i.e. behavioral ecology, evolutionary psychology, memetics, and biocultural coevolution. These theories are compared

and assessed in seminars on current research, critiques, and application to human and animal cultures.

BIOL 646. Limnology. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: A course in field biology. Survey of the physical, chemical, and biological properties of streams, rivers, and lakes. A comparative analysis of inland waters. Students should expect to reside at a field station and/or the Audubon Center at Greenwich, CT. The site selected depends on scheduling and the availability of space. Three to five other field trips, including two all-day trips are planned. Students should expect to be involved full-time during the duration of this summer course.

BIOL 666. Immunology. 3 lec. hr.; 3 cr. Prereq.: A course in cell biology. The components and mechanisms of action of the immune system. Topics include requirements for antigenicity, types of antibodies, humoral and cell-mediated responses including allergy, graft rejection, and autoimmune diseases.

BIOL 668. The Biology of Cancer. 3 hr.; 3 cr. Prereq.: BIOL 285 and 286, completed with a *C*+ or better, *or,* BIOL 366, completed with a *C*+ or better. This course will describe the underlying mechanisms of tumorigenesis. Topics cover the genetic basis of cancer, cancer stem cells, tumor microenvironment, metabolism, angiogenesis, metastasis, and treatments, including cancer immunotherapies. Students are also required to write a comprehensive essay on one topic in cancer. Each student is expected to select a specific topic of their own interest, and validate it with the instructor before performing the assignment.

BIOL 674. Plant Physiology and Development. 4 hr.; 4 cr. Prereq.: Accelerated Master's students taking this course must have a grade of *C* or better in BIOL 286, CHEM 114, or equivalents, or permission of the instructor. This course integrates major aspects of plant anatomy, physiology, biochemistry, cellular and molecular biology, and influences of the biotic and abiotic environment on growth and development at the intercellular, intracellular, organismal, and community levels.

BIOL 680. Field Biology Studies. Prereq.: Variable prerequisites and permission of the instructor(s). A variable-content course encompassing field studies in the areas of botany, ecology, entomology, invertebrate and vertebrate zoology, and limnology. Usually offered summers only, with 3–6 credits, depending on the subjects included and the time involved. The focus of the course is the comparative study of habitats and their components. Format and destinations are variable, and costs reflect the mode of travel, destination, and type of accommodations. A term paper is required.
BIOL 680.3. 9 hr.; 3 cr.
BIOL 680.4. 12 hr.; 4 cr.
BIOL 680.5. 15 hr.; 5 cr.
BIOL 680.6. 18 hr.; 6 cr.

BIOL 685. Special Topics. 2–6 hr.; 2–4 cr. Special topics in various areas of cellular, developmental, environmental, or evolutionary biology to be taken by arrangement with the instructor and graduate advisor. May be repeated for credit if the topic is different. May include laboratory or field experience.

700-Level Courses

BIOL 700. Genetics. 4 hr.; 4 cr. Prereq.: Undergraduate degree in biology or biochemistry and an undergraduate course in genetics, or permission of the instructor. Structure and function of genes and genomes. Topics will include genetic model organisms and recombinant DNA technology.

BIOL 700.4. Laboratory Techniques in Molecular Genetics. 4 lab. hr.; 2 cr. Prereq. or coreq.: BIOL 700.

BIOL 705.3. Evolution. 3 hr.; 3 cr. Prereq.: Courses in genetics, vertebrate zoology or invertebrate zoology, botany, historical geology, or permission of the department. Study of the mechanisms and processes of evolution based on the results and concepts of population genetics, speciation, and mega-evolutionary processes.

BIOL 705.4. Laboratory in Evolution. 4 lab. hr.; 2 cr. Prereq. or coreq.: BIOL 705.3.

BIOL 705.6. Macroevolution: Patterns of Evolution above the Species Level. 3 hr.; 3 cr. Prereq.: A course in graduate evolution and undergraduate genetics. A course in evolution above the species level analyzing the interface between evolution at the species level and higher systematic and ecological hierarchies. The discussion will include origin, diversification, and extinction patterns of lineages; rates of evolution, deterministic versus stochastic patterns; the problem of adaptation and diversification; developmental aspects of phylogeny; taxic distribution in space and time; phylogenetic inference; morphological versus paleontological data; the molecular clock; ecological versus historical biogeography; gradualism versus saltationalism; neodarwinian paradigm versus others at supra-specific levels.

BIOL 706.3. Systematics. 3 hr.; 3 cr. Prereq.: A course in evolution or in some major group of organisms. Principles of classification, phylogenetic inference, methods of systematics.

BIOL 706.7. Topics in Systematics. 3 hr.; 3 cr. Prereq.: A course in evolution or in some major group of organisms. Topics in classification, phylogenetic inferences, and systematics of a group of organisms. Course may be taken more than once if topic changes.

BIOL 707.1, 707.3, 707.5, 707.7. Zoology and Phylogeny of the Chordata. 2 lec. hr.; 2 cr. each semester. Prereq.: For BIOL 707.1, courses in comparative vertebrate anatomy and graduate courses in evolution, advanced genetics, and systematics; for BIOL 707.3, BIOL 707.1 or permission of the instructor; for BIOL 707.5, BIOL 707.3 or permission of the instructor; for BIOL 707.7, BIOL 707.5. The first semester to emphasize

the fishlike chordates; the second semester to emphasize the amphibia, reptiles; the third semester to emphasize mammals; and the fourth semester to emphasize birds.

BIOL 707.2, 707.4, 707.6, 707.8. Laboratory in Zoology and Phylogeny of the Chordata. 4 lab. hr.; 2 cr. each semester. Prereq. or coreq.: For BIOL 707.2, BIOL 707.1; for BIOL 707.4, BIOL 707.3; for BIOL 707.6, BIOL 707.5; for BIOL 707.8, BIOL 707.7. Examination of living, fossil, and other museum materials illustrating techniques and problems in research. The first semester to emphasize the fishlike chordates; the second semester to emphasize the amphibia, reptiles; the third semester to emphasize mammals; and the fourth semester to emphasize birds.

BIOL 709.1. Population Genetics. 3 hr.; 3 cr. Prereq.: A course in statistics and a course in general genetics, evolution, or permission of the instructor. Study of single gene systems on the population level with emphasis on the mechanisms of evolution/speciation.

BIOL 709.3. Quantitative Genetics. 3 hr.; 3 cr. Prereq.: A course in statistics and a course in general genetics or permission of the instructor. Study of genetic selection, heritability, inbreeding, genetic drift, and the mathematical models that describe these processes.

BIOL 710. Molecular Biology. 5 hr.; 5 cr. Prereq.: Undergraduate degree in biology or biochemistry to include a one-year course in organic chemistry, or permission of the instructor. Structure, function, and synthesis of DNA, RNA, and proteins.

BIOL 710.3. Cellular Physiology. 3 hr.; 3 cr. Prereq.: Courses in physiology and cytology or permission of the department. The functions of acellular organisms and the cells of metazoa and metaphyta, including the normal internal-external environment of the cell; permeability and cell membranes; contractility; action potentials; specialized cells and their functions.

BIOL 710.4. Laboratory in Cellular Physiology. 4 lab. hr.; 2 cr. Prereq. or coreq.: BIOL 710.3.

BIOL 711.3. Experimental Microbiology. 3 lec. hr.; 3 cr. Prereq.: One year of organic chemistry, one year of physics, one-half year of microbiology. The processes whereby microorganisms (1) obtain energy and cellular materials, (2) synthesize cell constituents, and (3) interact with their environment.

BIOL 711.4. Experimental Microbiology Laboratory. 4 lab. hr.; 2 cr. Prereq. or coreq.: BIOL 711.3. The study of the metabolism of selected microorganisms by chemical and physical methods.

BIOL 712.3. Comparative Biochemistry. 3 hr.; 3 cr. Prereq.: Courses in general biochemistry and evolution or permission of the department. Comparison of the chemical constitution and metabolism of major groups of organisms.

BIOL 712.4. Laboratory in Comparative Biochemistry. 4 lab. hr.; 2 cr. Prereq. or coreq.: BIOL 712.3.

BIOL 714. Cell Biology. 4 lec. hr.; 4 cr. Prereq.: Either BIOL 700, or 710, or permission of the instructor. Characteristics and properties of cells and cellular components. Mechanisms underlying cell function and interactions of cells with their environment.

BIOL 717.1. Virology. 3 hr.; 3 cr. Prereq.: One course in genetics, biochemistry, or equivalent. The structure and diversity of viruses will be discussed. The mechanisms of viral infection and multiplication, as well as host cell responses, will be studied. Several types of viruses will be analyzed in detail (e.g., human immunodeficiency virus, herpes viruses, hepatitis viruses, influenza virus).

BIOL 718. Immunology. 3 hr.; 3 cr. Principles of immunology including discussions of relevant experimental techniques and contemporary topics.

BIOL 719. Molecular Communication in Microorganisms. 3 hr.; 3 cr. Prereq.: A course in organic chemistry or biochemistry, or permission of the instructor. A study of the surface of microbial cells and how microbial cells interact by means of molecules between cells of the same or different species. The role of these molecules in the regulation of morphogenesis, sexual and asexual reproduction, life cycles, metabolic regulation, genetic recombination, and bioengineering will be examined. Comparison of these communicating molecules will be made with hormones of higher plants and animals.

BIOL 722.1. Endocrinology. 3 hr.; 3 cr. Prereq.: Courses in physiology (preferably vertebrate) or biochemistry, or permission of the instructor. Study of the mechanisms of hormone action and survey of the major mammalian endocrine systems.

BIOL 723. Ornithology. 3 lec., 3 lab. hr.; 3 cr. Prereq.: A course in evolution or in some major group of organisms is expected. Permission of the instructor required. The evolution, classification, origin of flight, anatomy, physiology, migration, ecology, and reproductive behavior, and conservation of birds. Laboratory includes techniques used in ornithological research and field trips to focus on bird identification and behavior. Students will be expected to attend at least one overnight field trip (e.g., to Cape May, NJ). A library research paper will be submitted and presented in class.

BIOL 724.6. Behavior and Evolution. 3 hr.; 3 cr. A reading, discussion, and seminar course focusing on two basic questions asked by ethnologists: (1) What is the ecological (adaptive) significance of behavior? and (2) What is the evolutionary history of behavior? Gene (biological) evolution is the prime focus; cultural evolution is also examined.

BIOL 726.3. Comparative Animal Physiology. 3 hr.; 3 cr. Prereq.: Courses in invertebrate zoology, vertebrate zoology, physiology, and organic chemistry,

or permission of the department. Physiological processes in invertebrates and vertebrates are compared. Osmoregulation, respiration, circulation of body fluids, receptors, and effector and integrating mechanisms are explored. Emphasis is placed on an examination of functional homology and analogy as evidence for phylogeny.

BIOL 726.4. Laboratory in Comparative Animal Physiology. 4 lab. hr.; 2 cr. Prereq. or coreq.: BIOL 726.3. Laboratory work will involve qualitative as well as quantitative techniques for measuring environment-organism interaction. Marine, freshwater, and terrestrial invertebrates and vertebrates will be utilized for investigations into the effects on the organism of pressure, temperature, radiant energy, etc.

BIOL 731.3. Microbial Ecology. 3 hr.; 3 cr. Prereq.: General microbiology or protozoology or phycology or mycology or lower plants, or permission of the instructor. Study of the relationships of microorganisms to their natural environments (air, water, soil, higher animals, or plants) and each other.

BIOL 741.3. Radiation Biology. 3 hr.; 3 cr. Prereq.: Courses in organic chemistry, general physics, two advanced courses in biology, or permission of the department. Interaction of radiation with living matter, the effect of such interactions on a variety of plants and animals, and methods for detecting and measuring radiation.

BIOL 741.4. Laboratory in Radiation Biology. 4 lab. hr.; 2 cr. Prereq. or coreq.: BIOL 741.3.

BIOL 750. Developmental Biology. 4 hr.; 4 cr. Prereq.: Either BIOL 700, or 710, or permission of instructor. Cellular and molecular mechanisms underlying axis specification, organogenesis, and cell differentiation.

BIOL 750.4. Laboratory in Developmental Biology. 4 lab. hr.; 2 cr. Prereq. or coreq.: BIOL 750.

BIOL 753.3. Molecular Basis of Development. 2 hr.; 2 cr. Prereq.: A course in developmental biology or biochemistry, or permission of the instructor. Analysis of selected topics in developmental biology at the molecular level, e.g., biochemical basis of induction, hormonal regulation of gene expression in development.

BIOL 760.1. Ecology. 3 hr.; 3 cr. Prereq.: Courses in vertebrate zoology. A general course in ecology covering theoretical and experimental aspects at the population, community, and ecosystem levels of organization. Emphasis is placed on the studies of populations—their organization, growth, and regulation—and interactions within and between species. Basic concepts concerning community organization and dynamics are considered.

BIOL 760.2. Laboratory in Ecology. 4 lab. hr.; 2 cr. Coreq.: BIOL 760.1.

BIOL 760.3. Community Ecology. 3 hr.; 3 cr. Prereq.: A course in botany (higher plants). Analysis of selected topics in synecology. Emphasis will be on structural and temporal relationships of plants, animals, and climate–plant community relationships.

BIOL 760.5. Population Ecology. 3 hr.; 3 cr. Prereq.: Courses in botany, zoology, or permission of the instructor. Study of the composition and dynamics of populations, including age structure, sex ratio, mating systems, growth patterns, life table analysis, regulation, and intraspecific interactions.

BIOL 760.7. Limnology. 3 hr.; 3 cr. The study of the physical, chemical, and biological features of freshwater systems.

BIOL 760.8. Laboratory in Limnology. 4 hr.; 2 cr. Coreq.: BIOL 760.7. This laboratory course must be taken simultaneously with the lecture. Laboratory testing and analysis along with considerable field exercises are designed to provide a survey of physical, chemical, and biological sampling techniques involved in limnological studies. A portion of the course period will be held at a field station, where intensive day and night sampling and measurements will be conducted. Along with written reports, an identified collection of aquatic specimens is required. Several additional all-day field trips are planned.

BIOL 764.3. Plant Ecology: Vegetation of the World. 3 hr.; 3 cr. Prereq.: A course in botany. A survey of world vegetation, with emphasis on North and Central America. Structural and floristic composition of major vegetation types will be emphasized. Schemes of vegetation classification will be compared and contrasted. Latitudinal and altitudinal zones will be discussed in the context of bioclimatic parameters.

BIOL 768.3. World Vegetation. 3 hr.; 3 cr. A survey of vegetation of the earth touching on paleogeofloristics, from the Paleophytic to Cenophytic Eras. Changes in the Earth's vegetation and present distributions of zonal plant communities are discussed in the light of plate tectonics and bioclimatology. Contemporary world vegetation types are analyzed structurally, physiognomically, and floristically. Systems of vegetation classification are compared and contrasted. Emphasis is placed on New World vegetation. A library research paper is required.

BIOL 772. Theory and Biological Applications of Electron Microscopy. 2 lec., 1 rec., 3 lab. hr.; 4 cr. Prereq.: A course in histological techniques or permission of the instructor. Study of the theory of electron microscopy plus practice of electron microscope operation and preparation of tissues for fine structure studies.

BIOL 780.1. Biostatistics. 2–4 lec. hr.; 2–4 cr. Prereq.: Mathematics through calculus and permission of the instructor. Descriptive and inferential biostatistics, including analysis of variance, regression, and other selected methods.

BIOL 780.2. Laboratory in Biostatistics. 1 rec., 3–6 lab. hr.; 2–3 cr. Prereq. or coreq.: BIOL 780.1 or equivalent. The laboratory work consists of individual student projects and introduction to computer programming.

BIOL 781.1. Applied Multivariate Statistics. 2 hr.; 2 cr. Prereq.: BIOL 780.1, 780.2, or equivalent; coreq.: BIOL 781.2. This course will involve principal components, factor analysis, discriminant analysis, multivariate analysis of variance, distance statistics, and multiple regression. Material will be covered in the context of biological problems in the laboratory and field.

BIOL 781.2. Applied Multivariate Statistics Laboratory. 3 lab., 1 conf. hr.; 2 cr. Prereq.: BIOL 780.1, 780.2, or equivalent; coreq.: BIOL 781.1. Data analysis and problem-solving using multivariate data from experiments and the field. Use of SAS statistical package, including some programming in matrix algebra.

BIOL 788. Cooperative Education Placement. Hr. to be arranged; 1 to 4 cr. Prereq.: Permission of the department. Opportunities to apply academic learning in biology in a work environment. The student will develop a learning contract with an on-site supervisor and a departmental advisor. A written report and an oral or written examination are required. Open only to students who pursue the 32-credit-coursework track; a maximum of 4 credits may be applied toward the MA in biology.

BIOL 790.1. Seminar in Evolution. 2 hr. plus conf.; 3 cr. Topics relating to the general subject of evolution. Course may be taken more than once if topic changes.

BIOL 790.2. Seminar in Genetics. 2 hr. plus conf.; 3 cr. Heredity and genetics of plants and animals, and applications to other areas.

BIOL 790.4. Seminar in Molecular Genetics. 3 hr.; 3 cr. Prereq.: BIOL 710 or equivalent or permission of the instructor. Seminar course on a specified topic in the field of molecular genetics. Course may be taken more than once if topic changes.

BIOL 790.5. Seminar in Developmental Biology. 3 hr.; 3 cr. Prereq.: BIOL 750 or equivalent and/or permission of the instructor. Special topics in developmental biology, emphasizing recent work relating to problems of chemical embryology, induction and tissue interaction, genes in development, hormones in development, differentiation and growth, teratology, and regeneration. Course may be taken more than once if topic changes.

BIOL 790.6. Seminar in Ecology. 2 hr. plus conf.; 3 cr. Prereq.: BIOL 760.1 or equivalent and/or permission of the instructor. Seminar in topics of the interrelationships of plants and animals with their biotic and abiotic environments. Course may be taken more than once if topic changes.

BIOL 790.7. Seminar in Cytology. 3 hr.; 3 cr. Special topics in cytology.

BIOL 790.8. Seminar in Biomathematics. 3 hr.; 3 cr. Prereq.: BIOL 780.1 and 780.2 or equivalent or permission of the instructor. Seminar-format course on a specified topic in the field of biomathematics and its applications. Course may be taken more than once if topic changes.

BIOL 791. Colloquium. 1 hr.; 1 cr. Graded on pass/fail basis only. Biology department seminar series. Course may be taken more than once if topic changes.

BIOL 792. Tutorial. 1–4 hr.; 1–4 cr. Prereq.: A minimum of two 600- or 700-level courses in biology. Repeatable for credit.

BIOL 793.1. Seminar in Systematics. 3 hr.; 3 cr. Problems in modern classification and phylogeny, with emphasis on areas such as vertical vs. horizontal classification, convergent and parallel evolution, adaptive radiation, behavioral aspects, biochemical systematics, computer methods, etc.

BIOL 793.2. Seminar in Zoogeography. 3 hr.; 3 cr. Prereq.: A course in evolution or permission of the instructor. Seminar-format course on a specified topic in the field of zoogeography. Course may be taken more than once if topic changes.

BIOL 793.3. Seminar in Physiology. 3 hr.; 3 cr. Special problems in physiology.

BIOL 793.4. Seminar in Animal Behavior. 3 hr.; 3 cr. Prereq.: A course in animal behavior or permission of the instructor. Seminar-format course on a specified topic in the field of animal behavior. Course may be taken more than once if topic changes.

BIOL 793.5. Seminar in Cell Biology. 3 hr.; 3 cr. Prereq.: BIOL 714 or equivalent or permission of the instructor. Seminar course on a specified topic in the field of cell biology. Course may be taken more than once if topic changes.

BIOL 793.9. Seminar in Special Topics. 2 hr.; 2 cr. Course may be taken more than once if topic changes.

BIOL 794.1. Ecology and Evolutionary Biology Data/Journal Club. 1 hr.; 1 cr. Prereq.: At least one graduate-level course in ecology, evolution, or systematics. Seminar-format course consisting of student and faculty oral presentations. Topics of the presentations will be taken from the student's or faculty member's own research or from journal articles in the scientific literature. Course may be taken more than once if topic changes.

BIOL 795, 796. Basic Laboratory Techniques for Research. 2 lec., 3 lab. hr.; 3 cr. per course. Lecture and laboratory work on modern instrumentation and experimental design used to solve biological problems. The theory underlying the experimental design and equipment will be discussed.

BIOL 797.1. Molecular, Cellular, and Developmental Biology Journal Club. 1 hr.; 1 cr. Prereq.: At least one graduate-level course in molecular genetics, cell biology, developmental biology, or biochemistry. Seminar-format course consisting of student and faculty oral presentations. Topics of the presentations will be taken from journal articles in the scientific literature. Course may be taken more than once if topic changes.

BIOL 798.1. Molecular, Cellular, and Developmental Biology Data Club. 1 hr.; 1 cr. Prereq.: At least one graduate-level course in molecular genetics, cell biology, developmental biology, or biochemistry. Seminar-format course consisting of student and faculty oral presentations. Topics of the presentations will be taken from the student's or faculty member's own research. Course may be taken more than once if topic changes.

BIOL 799.1, 799.2, 799.3, 799.4, 799.5, 799.6. Research. Prereq.: A minimum of two 600- or 700-level courses in biology. Research under the guidance of a faculty advisor.

Chemistry & Biochemistry

Chair: Seogjoo J. Jang

Graduate Advisors: Uri Samuni (Chemistry); Sanjai K. Pathak (Biochemistry)

Dept. Office: Remsen 206, 997-4100/4482

Secretaries: Elizabeth Zoiner, Kelly Barth

Website: www.qc.cuny.edu/Chemistry

The Department of Chemistry & Biochemistry offers programs leading to the degree of Master of Arts with concentrated study in chemistry or biochemistry. These programs include course and standard laboratory work designed to prepare the student for employment in the chemical industry, government, or teaching, or for continuation of study for an advanced degree. The department participates in the Ph.D. Programs in Chemistry, Biochemistry and Physics at the CUNY Graduate Center.

In addition to the programs of courses outlined below, students are strongly encouraged to participate in the extensive research programs of the department, which in recent years have been funded by the National Science Foundation, the U.S. Department of Energy, National Institutes of Health, Camille and Henry Dreyfus Foundation, Research Corporation, Pfeiffer Research Foundation, Howard Hughes Medical Institute, U.S. Department of Education, Air Force Research Laboratory, and the U.S. Department of Defense. Participation in research is one of the best ways for the student to gain an appreciation for the daily activities of a working chemist. The research interests of the faculty are described on the department's website.

FACULTY

Jang, Seogjoo, Chair, *Professor,* PhD 1999, University of Pennsylvania: theoretical physical chemistry, computational chemistry: energy transfer theory; electron transfer theory; nanoscale conductance; computational modeling of photosynthetic systems, conjugated polymers, and DNA; path integral theory and simulation. seogjoo.jang@qc.cuny.edu

Liu, Jianbo, Deputy Chair, *Professor,* PhD 1997, Tsinghua University (China): physical and analytical chemistry: application of spectroscopy, mass spectrometry, and ion-molecule reaction techniques to biologically relevant processes; ab initio/statistical calculation and direct dynamics trajectory simulation; nonmaterials. jianbo.liu@qc.cuny.edu

Pathak, Sanjai K., Associate Chair, Graduate Advisor (Biochemistry), *Professor,* PhD 2002, Wesleyan University: chemical biology, bio-organic and medicinal chemistry, enzymology, signal transduction, design and development of inhibitors and probes, molecular modeling. sanjai.kumar@qc.cuny.edu

Samuni, Uri, Graduate Advisor (Chemistry), *Assistant Professor,* PhD 1998, Hebrew University of Jerusalem: physical chemistry, biophysics: resonance Raman and surface-enhanced Raman spectroscopy (SERS); sol-gel encapsulation of proteins; development of nanogels and their applications in imaging and drug delivery; photonics and nanobiophotonics applications. uri.samuni@qc.cuny.edu

Chen, Yu, *Associate Professor,* PhD 2005, University of Toronto: organic and organometallic chemistry: asymmetric synthesis and catalysis; late-transition-metal catalysis; heterocyclic chemistry; combinatorial chemistry; microwave synthesis; design and synthesis of homochiral biaryl ligands. yu.chen@qc.cuny.edu

Choi, Junyong, *Assistant Professor,* PhD 2009, Stony Brook University: bioorganic chemistry: medicinal chemistry, computer-aided drug design, molecular modeling. junyong.choi@qc.cuny.edu

Evans, Cherice M., *Associate Professor,* PhD 2000, Louisiana State University: physical chemistry: applications of synchrotron radiation in chemistry, laser spectroscopy, solvation in supercritical fluids, molecular Rydberg–Rydberg transitions, field effects on molecular Rydberg states, non-linear dynamical systems, oscillatory chemical reactions. cherice.evans@qc.cuny.edu

Hersh, William H., *Professor,* PhD 1980, Columbia University: organic and organometallic: synthesis of chiral phosphorus compounds for antisense oligonucleotides; chiral catalysis of Diels-Adler reactions and hydroformylation; synthesis of electron-deficient phosphorus compounds and chiral phosphorus compounds. william.hersh@qc.cuny.edu

Hu, Guoxiang, *Assistant Professor,* PhD 2018, University of California, Riverside: physical chemistry/computational chemistry; new energy solutions with computational chemistry and machine learning. guoxiang.hu@qc.cuny.edu

Mirkin, Michael V., *Professor,* PhD 1987, Kazakh State University: electrochemistry/physical/analytical: reactions at liquid interfaces; bioelectrochemistry; electrochemical kinetics; scanning electrochemical microscopy; electrochemical systems approaching molecular dimensions, mathematical modeling of electrochemical processes. michael.mirkin@qc.cuny.edu

Rotenberg, Susan A., *Professor,* PhD 1985, Brown University: biochemistry, enzymology, protein chemistry, enzyme inhibitors, site-directed mutagenesis, signal transduction, anti-neoplastic drug design. susan.rotenberg@qc.cuny.edu

Sanders, Sheila, *Lecturer,* Ph.D. 1999, University of Kansas: bio-analytical chemistry; general chemistry instruction; advanced instrumentation methods instruction; environmental chemistry; chemical education. ssanders@qc.cuny.edu

Subramaniam, Gopal, Higher Education Officer, PhD 1990, Vanderbilt University: NMR spectroscopy, chemical education

Wang, Chen, *Assistant Professor,* PhD 2014, University of California, San Diego, physical chemistry: exciton dynamics, photochemistry and photocatalysis of semiconductor nanocrystals, quantum dots, ultrafast optical spectroscopy, transient absorption, femtosecond stimulated resonance Raman spectroscopy. chen.wang@qc.cuny.edu

Emeriti

Baker, A. David, *Professor Emeritus*, PhD 1968, University of London: heterocyclic chemistry: synthesis and study of heterocyclic molecules and their metal ion complexes that undergo specific interactions (e.g., enantiospecific) with nucleic acids; synthesis of drugs that inhibit protein kinase C activity. arthur.baker@qc.cuny.edu

Engel, Robert R., *Professor Emeritus,* PhD 1966, Pennsylvania State University: organic and biochemistry: design and synthesis of metabolic regulators; phosphonic acids as analogues of natural phosphates; phosphonate and phosphinate synthesis; synthesis and investigation of dendrimeric phosphorus species; chemical architecture, polycationic organic salts; ionic liquids. robert.engel@qc.cuny.edu

Gafney, Harry D., *Professor Emeritus,* PhD 1970, Wayne State University: inorganic chemistry and material science: photochemistry of transition and main group metal complexes, hybrid catalysis, photoinduced electron transfer; excited state acid-base chemistry; photodeposition and characterization of metal and metal oxide clusters in glass; photochemical generation of gradient indices in glass. harry.gafney@qc.cuny.edu

Koeppl, Gerald W., *Professor Emeritus*, PhD 1969, Illinois Institute of Technology: physical chemistry: theory of molecular rate processes; classical mechanical trajectory studies of chemical reaction dynamics; formulation of variational versions of the transition state theory of chemical reaction rates. gerald.koeppl@qc.cuny.edu

Locke, David C., *Professor Emeritus*, PhD 1965, Kansas State University: analytical separations; chemistry of biosolids. david.locke@qc.cuny.edu

Strekas, Thomas C., *Professor Emeritus,* PhD 1973, Princeton University: inorganic and biochemistry: Raman and resonance Raman studies of transition metal diimine complexes; metal complex interactions with nucleic acids. thomas.strekas@qc.cuny.edu

Tropp, Burton E., *Professor Emeritus*, PhD 1966, Harvard University: biochemistry: genetic and pharmacological aspects of phosphoglyceride metabolism. burton.tropp@qc.cuny.edu

MASTER OF ARTS PROGRAM

Requirements for Matriculation

These requirements are in addition to the general requirements for admission.

1. Undergraduate credits in chemistry should include one full year each of general, organic, and physical chemistry, and one-half year of quantitative analysis. Mathematics through integral calculus and one year of physics are required. Students planning to concentrate in biochemistry should have completed at least one year of biology and one semester of biochemistry (lecture and laboratory). Deficiencies may be removed by coursework or individual study.
2. Three written recommendations from undergraduate chemistry instructors are required (preferably from instructors who have taught the applicant during the junior or senior year).
3. An interview with a member of the Chemistry and Biochemistry Graduate Committee may be requested. The committee decides on deficiencies, conditions, exceptions, and special permissions.
4. Students whose native language is not English must submit Test of English as a Foreign Language (TOEFL) scores.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE

These requirements are in addition to the general requirements for the Master of Arts degree.

A minimum of 30 graduate course credits, including

a. One of the two following sets of required courses:

For a specialization in Chemistry:

	credits
CHEM 710 – Advanced Inorganic Chemistry	3
CHEM 750 – Advanced Organic Chemistry I	3
CHEM 760 – Introductory Quantum Chemistry	3
A second course in physical chemistry	3
CHEM 780 or 781 – Advanced Seminar	2
CHEM 790.1 – Basic Laboratory Techniques for Research	4
CHEM 795 – Research	10 (max.)

or, alternatively

For a specialization in Biochemistry:

BIOCHEM 710 – Advanced Biochemistry	3
BIOCHEM 711.1 & 711.2 – Basic Laboratory Techniques for Research in Biochemistry	8
CHEM 750 – Advanced Organic Chemistry I	3
CHEM 760 – Introductory Quantum Chemistry	3
or	
CHEM 770 – Chemical Thermodynamics	3
or	
BIOCHEM 770 – Physical Biochemistry	3
CHEM 780 or 781 – Advanced Seminar	2
or	
BIOCHEM U810A – Seminar in Biochemistry	2
CHEM 790.1 (or BIOCHEM 796) – Basic Laboratory Techniques for Research	4

The Chemistry and Biochemistry Graduate Committee may waive or modify some of these requirements for students who have had equivalent training. In some cases the student may be required to show competence by formal or informal examination.

b. Remaining credits may be taken, with the prior approval of the graduate committee, in 700-level graduate courses in the Division of the Natural Sciences. A maximum of 2 credits in seminars will be

credited toward the Master of Arts degree. Students are encouraged to audit additional seminars.

The required courses for the Master of Arts degree, described above in Part a, are similar to the core courses for the University doctoral programs in chemistry and biochemistry, which are described in the *Bulletin* of the CUNY Graduate Center.

PROGRAM FOR THE MASTER OF SCIENCE IN EDUCATION DEGREE

Requirements for Matriculation

In general students should have an undergraduate major or minor in chemistry. Students lacking this but showing promise to succeed in master's-level chemistry courses may be permitted to enter as probationary matriculants and may be required to make up undergraduate course deficiencies. Probationary status will be removed upon completion of 9 credits of approved coursework with a minimum average of *B*.

Requirements for the Degree

1. Candidates in this program have two advisors, one in the Division of Education and one in the Department of Chemistry and Biochemistry. Both advisors must be consulted before registering in the program, and both must sign the approved program of studies. The education advisor should be consulted *first.*

2. Course requirements include 15 credits in 700-level courses in chemistry and/or biochemistry. CHEM 504 is also acceptable toward this degree.

Relationship to the CUNY PhD Programs in Chemistry and Biochemistry

1. The doctoral programs in chemistry and biochemistry based at the Graduate Center are described in the *Bulletin* of the CUNY Graduate Center. Up to 30 credits of 700-level coursework in chemistry or biochemistry taken at Queens College may be transferred to meet the PhD programs' course requirements.
2. Although the required MA courses listed above are similar to the core courses for the CUNY doctoral programs in chemistry and in biochemistry, students should be aware that if they wish to enter the corresponding CUNY PhD program after earning a Queens College MA degree, they must still pass the doctoral programs' first-level examinations. This may be accomplished through exemption examinations or by taking or auditing U700-level courses at the Graduate Center.
3. Consequently, students who anticipate proceeding to the PhD should consider applying directly to those programs rather than to the Queens College MA program. Inquiries should be addressed to the Executive Officer of the PhD Program in Chemistry or Biochemistry, CUNY Graduate Center, 365 Fifth Avenue, New York, NY 10016.

COURSES IN CHEMISTRY & BIOCHEMISTRY

CHEM 501, 502. Modern Concepts of General Chemistry. 2 hr.; 2 cr. each. Prereq.: Permission of the department. An introduction or review for the present teacher, with emphasis on background information helpful to the high school chemistry teacher. Not open to candidates for the MA degree in chemistry. Spring

CHEM 503. Selected Topics in Chemistry. 3 hr.; 3 cr. Prereq.: Matriculation for the Master of Science Degree in Education and an undergraduate major in biology, geology, or physics. With particular emphasis on the high school chemistry curriculum, the course is designed for matriculants in a science educational program for high school teachers of general science and biology, physics, or geology. Not open to candidates for the MA degree in chemistry.

CHEM 504. Environmental Chemistry. 3 hr.; 3 cr. Prereq.: General and organic chemistry. A general overview of the chemistry of our environment, focusing on pollution of the atmosphere and hydrosphere, hazardous wastes, heavy metals, and pesticides. Topics of current interest such as the greenhouse effect, stratospheric ozone depletion, acid deposition, and indoor air pollution are emphasized. Also the systems used by the City of New York for provision of drinking water, treatment of waste water, and disposal of solid waste are considered.

BIOCHEM 650. Biochemistry. 4 hr.; 4 cr. Prereq.: An approved two-semester course in college organic chemistry and a bachelor's degree in chemistry or biology. Structure, properties, biosynthesis, and metabolism of major groups of compounds of biological importance, such as amino acids, nucleic acids, carbohydrates, lipids, and vitamins. Not to be used for credit toward the master's degree in chemistry and biochemistry. Fall, Spring

CHEM 710. Advanced Inorganic Chemistry. 3 hr.; 3 cr. Prereq.: An advanced undergraduate course in inorganic chemistry or CHEM 760. The theoretical and experimental fundamentals of atomic and molecular structure. Emphasis is on physical interpretation. Fall

BIOCHEM 710. Advanced Biochemistry. 3 hr.; 3 cr. Prereq.: A one-semester course in biochemistry or equivalent, and physical chemistry. Biosynthesis, especially of macromolecules and complex cellular constituents such as membranes. Specialized topics of current interest. Spring

BIOCHEM 711.1, 711.2. Basic Laboratory Techniques for Research in Biochemistry. 8 lab. hr.; 4 cr. each semester. Prereq. or coreq.: BIOCHEM 710 and BIOCHEM 796, and permission of the instructor. Laboratory work dealing with the theories and application of modern approaches to the solution of biochemical problems.

CHEM 715. Special Topics in Inorganic Chemistry. 3 hr.; 3 cr. Prereq.: CHEM 710. Topic can change from semester to semester.

CHEM 740. Special Topics in Analytical Chemistry. 3 hr.; 3 cr. Prereq.: Undergraduate course in quantitative analysis and instrumental analysis. Topics of current interest in important areas of analytical chemistry, such as analytical separations, electroanalytical chemistry, and analytical spectroscopy will be covered.

BIOCHEM 740. Enzyme Function and Applications. 3 hr.; 3 cr. Prereq. or coreq.: BIOCHEM 710 (Advanced Biochemistry) or equivalent. A consideration of enzymatic function in the cell and of the several applications of enzymes in analytical, preparatory, and drug discovery.

CHEM 742. Environmental Analytical Chemistry. 2 lec., 4 lab. hr.; 4 cr. Prereq.: Undergraduate course in quantitative analysis. Environmental analytical chemistry is an instrumental methods-of-analysis course oriented specifically toward the needs of those concerned with natural waters, soils, sediments, and related media. Emphasis is placed on sampling, maintenance of sample integrity, and sample preparation for analysis. Modern spectrophotometric, electrochemical, and high-resolution chromatographic methods are used for the determination of organic and inorganic compounds in environmental media.

CHEM 750. Advanced Organic Chemistry I. 3 hr.; 3 cr. Fundamentals of organic chemical principles, reactions, and structures. Fall

CHEM 755. Special Topics in Organic Chemistry. 3 hr.; 3 cr. Prereq.: CHEM 750. Topic can change from semester to semester.

CHEM 760. Introductory Quantum Chemistry. 3 hr.; 3 cr. Systematic development of the theories of chemistry, including mathematical development and structural effects and the application of these theories to chemical systems. Spring

CHEM 761. Spectroscopy. 3 hr.; 3 cr. A continuation of CHEM 760.

CHEM 765. Special Topics in Physical Chemistry. 3 hr.; 3 cr. Prereq.: CHEM 760. Topic can change from semester to semester.

CHEM 770. Chemical Thermodynamics. 3 hr.; 3 cr. The development of the thermodynamic foundations of chemical processes; both the classical and statistical mechanical approaches will be used.

BIOCHEM 770. Physical Biochemistry. 3 hr.; 3 cr. Prereq.: Permission of the chair or graduate advisor. Structure and conformation of proteins, nucleic acids, and other biopolymers; physical techniques for study of macromolecules; behavior and properties of biopolymers. Among the topics to be discussed are the theories and applications of the following techniques: a) spectroscopic studies (absorption, fluorescence, magnetic resonance, infrared and Raman, circular dichroism, and optical rotary dispersion); b) size, shape, and molecular weight methods (sedimentation, diffusion, viscosity, osmometry, and light scattering); c) kinetics and equilibria; d) diffraction methods (Xray and neutron). Specific examples of the structures and functions of macromolecules will be examined. Fall

CHEM 780, 781. Advanced Seminar. 2 hr.; 2 cr. each semester. Seminars will consist of reading and discussion of the literature on selected topics from the various branches of chemistry, or the presentation of experimental results. CHEM 780– Fall; CHEM 781– Spring

CHEM 786. Spectroscopic Methods of Structure Determination. 3 lec. hr.; 3 cr. Prereq.: Permission of the department. A survey of the main methods for determining the structures of compounds from physical measurements. Interpretation of data from infrared, mass, and nuclear magnetic resonance spectrometry. Discussion of other physical methods such as diffraction techniques and ultraviolet spectroscopy.

CHEM 788. Cooperative Study. Prereq.: Permission of the department. Cooperative study is performed by students participating in the Cooperative Education program. It involves employment of the student in one of a variety of chemistry-related jobs with direct supervision of the employer and overview guidance provided by a faculty advisor. Cooperative study is intended to supplement the traditional classroom and laboratory programs of study. The student shall prepare a report for the chemistry and biochemistry graduate committee upon completion of the experience. No more than 6 credits may be taken in cooperative study.
CHEM 788.1. 1 hr.; 1 cr.
CHEM 788.2. 2 hr.; 2 cr.
CHEM 788.3. 3 hr.; 3 cr.
CHEM 788.4. 4 hr.; 4 cr.
CHEM 788.5. 5 hr.; 5 cr.
CHEM 788.6. 6 hr.; 6 cr.

BIOCHEM 789. Special Topics in Biochemistry. 3 hr.; 3 cr. Prereq.: BIOCHEM 650 or equivalent. Will cover topics of current interest in areas of critical importance to biochemistry.

CHEM 790.1. Basic Laboratory Techniques for Research in Analytical and Physical Chemistry. 2 lec., 6 lab. hr.; 4 cr. Prereq.: Permission of the department. Modern instrumental methods of analysis including high-performance liquid chromatography; gas chromatography; gas chromatography/mass spectrometry; capillary electrophoresis; flame and graphite furnace atomic absorption spectrophotometry; and UV-visible, fluorescence, and Fourier transform infrared spectrophotometry applied to various organic and inorganic materials.

CHEM 790.2. Basic Laboratory Techniques for Research in Organic and Inorganic Chemistry. 1 rec., 5 lab. hr.; 3 cr. Prereq. or coreq.: CHEM 786. Modern techniques for the preparation and characterization of organic and inorganic substances,

including spectroscopic techniques, chromatographic separations, vacuum distillation, use of inert atmosphere and related syringe techniques.

CHEM 793. Tutorial in Chemistry. Prereq.: Matriculation in the chemistry Master of Arts program and completion of 9 MA credits in chemistry. Tutorial in advanced topics to be performed under the supervision of a department faculty member with the approval of the graduate advisor. May be taken more than once for different topics.
CHEM 793.1. 1 hr.; 1 cr.
CHEM 793.2. 2 hr.; 2 cr.
CHEM 793.3. 3 hr.; 3 cr.

CHEM 795. Research. Prereq.: Permission of the chemistry and biochemistry graduate committee. Research under the guidance of a faculty advisor. Fall, Spring
CHEM 795.1. 1 hr.; 1 cr.
CHEM 795.2. 2 hr.; 2 cr.
CHEM 795.3. 3 hr.; 3 cr.
CHEM 795.4. 4 hr.; 4 cr.
CHEM 795.5. 5 hr.; 5 cr.
CHEM 795.6. 6 hr.; 6 cr.

BIOCHEM 796. Introduction to Laboratory Techniques for Research in Biochemistry. 10 lab. hr.; 4 cr. Laboratory work dealing with the theories of modern experimental techniques and their applications to biochemical research; development of experimental rationale for biochemical research.

COURSE IN RESERVE

CHEM 751. Advanced Organic Chemistry II.

Classical, Middle Eastern & Asian Languages & Cultures

Chair: Yunzhong Shu

Dept. Office: Queens Hall 215, 997-5570; Fax 997-5577

The department offers only Classics courses on a graduate level. Courses in the other languages and literatures of the department (Arabic, Chinese, Japanese, Korean, Hebrew, Yiddish) are offered only on an undergraduate level. MA and PhD degrees in Classical studies are offered by the City University Graduate Center with a faculty drawn from the Classics faculties of the CUNY senior colleges.

FACULTY

Shu, Yunzhong, Chair, *Professor,* PhD 1994, Columbia University: modern Chinese literature
Alcalay, Ammiel, *Professor*, PhD 1989, City University of New York: Hebrew literature, Middle Eastern studies, modern literature and theory
Beck, Kirsten, *Assistant Professor,* PhD 2016, University of Texas at Austin: Arabic literature
Capra, Raymond, *Lecturer,* PhD 2010, Fordham University: classical philology
Fujimoto, Mari, *Lecturer,* PhD 2008, City University of New York: Japanese language and linguistics
Han, Namhee, *Assistant Professor,* PhD 2014, University of Chicago: cinema and media studies
Kim, Ji Young, Assistant Professor, PhD 2016, University of Chicago: Korean literature
Ko, Seongyeon, *Assistant Professor,* PhD 2012, Cornell University: Korean language and linguistics
Li, Xiao, *Associate Professor,* PhD 2008, Rutgers University: Chinese language and linguistics
McClure, William, *Dean of Arts & Humanities*, *Professor,* PhD 1994, Cornell University: Japanese language and linguistics
Nir, Oded, *Assistant Professor,* PhD 2014, Ohio State University: comparative studies
Segal, Miryam, *Associate Professor,* PhD 2004, University of California: Hebrew literature
Segal, Miryam, *Associate Professor,* PhD 2004, University of California: Hebrew literature
Sukhu, Gopal, *Professor,* PhD 1993, Columbia University: Chinese poetry, philosophy, and East Asian religion
Taleghani, Shareah Rebecca, *Assistant Professor,* PhD 2009, New York University: Middle Eastern and Islamic Studies

COURSES IN RESERVE

CMAL 504. Studies in Classical Mythology.

CMAL 505. Studies in Greek Tragedy in Translation.

CMAL 506. Studies in Ancient Comedy in Translation.

Computer Science

Chair: Zhigang Xiang

Dept. Office: Science Building A202, 997-3500

Website: www.cs.qc.cuny.edu

The dynamic and growing field of computer science provides opportunities for intellectual activity, research, and future employment. The aim of the master's program is to prepare students for professional careers in private industry, government, and academe. The department also offers a BA/MA Program for its most outstanding undergraduate majors. For those who seek academic careers and

opportunities for more advanced research, the master's program may constitute a significant portion of the PhD program offered by the CUNY Graduate Center. For information on the PhD program, consult the department.

The department's faculty members conduct a wide range of research in computer science, and received external funding from such federal agencies as the National Science Foundation, National Institutes of Health, and Department of Defense, as well as from corporate sources. Current areas of faculty research include algorithms, computational topology, computer vision, database system, data mining, machine learning, medical informatics, modeling, natural language processing, networking, parallel processing, and security, among others.

The department's multiplatform computing infrastructure consists of 3 class-C subnets, numerous routers and switches, scores of computing, storage and other shared resource servers, and hundreds of desktops and laptops in our instructional labs and faculty research labs.

FACULTY

Xiang, Zhigang, Chair, *Associate Professor,* PhD 1988, State University of New York at Buffalo: computer graphics, image processing, interactive techniques

Boklan, Kent D., *Professor,* PhD 1992, University of Michigan at Ann Arbor: cryptography and computer security

Brown, Theodore D., *Professor,* PhD 1971, New York University: simulation methodology, analytic modeling, parallel algorithms, analysis of algorithms

Fluture, Simina, *Lecturer,* PhD 2004, City University of New York: medical applications of computer vision, bio-informatics

Goldberg, Robert R., *Professor,* PhD 1989, Courant Institute of Mathematical Science, New York University: biomedical image processing, computer vision, formal languages and automata, genetic algorithms, graphics, scheduling theory

Goswami, Mayank, *Associate Professor,* PhD 2013, State University of New York at Stony Brook: algorithms for big data, networks, databases, computational geometry, computer vision

Kong, T. Yung, *Professor,* PhD 1986, Oxford University, England: geometrical and topological problems related to computer vision graphics and image processing

Lord, Kenneth J., Assistant Chair for Undergraduate Studies, *Lecturer,* PhD 1995, City University of New York: web programming: web programming

Obrenic, Bojana, *Associate Professor,* PhD 1993, University of Massachusetts at Amherst: algorithm design, especially for parallel and concurrent systems, databases, computational combinatorics, graph theory

Phillips, Tsaiyun Ihsin, *Professor,* PhD 1984, University of Maryland at College Park: computer vision, image processing, performance evaluation, document image analysis

Rozovskaya, Alla, *Assistant Professor,* PhD 2013, University of Illinois at Urbana-Champaign: natural language processing, computational linguistics, machine learning

Ryba, Alexander, *Professor,* PhD 1985, Cambridge University, England: computational group theory, finite group theory, combinatorial game theory

Svadlenka, John, *Lecturer,* PhD 2020, City University of New York: algorithms, operating systems, software engineering

Svitak, Joseph, *Lecturer,* PhD 2008, City University of New York: genetic algorithms, optical character recognition, and finite state automata

Sy, Bon K., *Professor,* PhD 1988, Northeastern University: uncertain reasoning, use of AI augmentative communication, recognition of impaired speech, data mining, data warehouse, wireless networking, VolP technology

Tsai, Chia-ling, *Associate Professor,* PhD 2003, Rensselaer Polytechnic Institute: biomedical image analysis, computer vision, assistive technology in literacy education

Vickery, Christopher, *Professor,* PhD 1971, City University of New York: computer organization and architecture, software design, logic design

Waxman, Jerry J., *Professor,* PhD 1973, New York University: voice/data systems, algorithms, computer science education

Yuan, Changhe, *Associate Professor,* PhD 2006, University of Pittsburgh: probabilistic graphical models, decision making under uncertainty, computational biology

Yukawa, Keitaro, *Assistant Professor,* PhD 1987, University of Waterloo: database systems, database aspects of multimedia documents, programming languages

PROGRAM FOR THE MASTER OF ARTS DEGREE

The Master of Arts in computer science includes courses in four areas of study: software, theoretical foundations, hardware, and mathematical applications and algorithms.

The *Software* area is the primary focus of the program, and includes courses in fundamental algorithms, software design, database systems, distributed software systems, operating systems, compiler design, graphics, information organization and retrieval, and artificial intelligence. The *Theoretical Foundations* courses include the mathematical treatment of such topics as formal language theory, automata theory, and computability theory. The *Hardware* area course offerings cover topics including computer systems design, networking principles, and distributed hardware systems. The *Mathematical Applications and Algorithms* area includes courses covering sequential and parallel numerical algorithms, applications of probability and statistics to the study of hardware and software systems, and principles of simulation and modeling.

All 700-level courses in the department are applicable to the CUNY doctoral program in computer science. Some graduate courses are open to students who are not matriculated in the master's program. Consult the department for details.

Requirements for Matriculation

These requirements are in addition to the general requirements for admission.

Matriculation is based on merit as judged by the Graduate Admissions Committee of the department. The committee will expect each candidate for matriculation to have an adequate mathematics background, including integral calculus, probability and statistics, and discrete mathematical structures.

Matriculation requirements also include a working knowledge of at least one high-level, object-oriented programming language (some courses, including core courses, require knowledge of specific languages; consult the department for current requirements), assembly language programming, data structures, principles of programming languages, operating systems, computer organization, and theory of computation. A candidate who is partially deficient in the above requirements may, at the discretion of the Admissions Committee, be admitted subject to the requirement that the deficiencies be rectified. Appropriate means to fulfill this requirement are provided by the department. Courses taken to meet admissions deficiencies do not count toward the credit requirements for the degree; the average (mean) grade in these courses must be at least *B* (3.0), and each one of these courses must be completed with a grade of *B*– or better.

The Jacob Rootenberg Fellowship Award

Each semester an award from the Jacob Rootenberg Fellowship Fund will be made to a new matriculant with an outstanding record of scholarship.

Program Requirements

These requirements are in addition to the general requirements for the Master of Arts degree as specified in this *Bulletin*.

Each student must complete 30 credits of 700-level courses, including the core courses (Algorithms I, Distributed Computing, Computability and Complexity, and Computer Architecture and Networks). In addition, the student must choose one course in each of the three semi-core categories: software, hardware, and mathematical applications and algorithms. After completion of 21 credits, each student must satisfy a "capstone requirement" by completing a Software Development Practicum, a Hardware Design Practicum, a Research Practicum, an approved research project, or a master's thesis. The remaining courses may be freely chosen from a variety of other 700-level courses, including "special topics" and seminar courses.

BA/MA Program

On acceptance by the Office of Graduate Studies and the department, the students' major code will be changed to that appropriate for their program (e.g., 025 for the Computer Science BA/MA). Students will receive a Declaration of Undergraduate Major form with their letter of acceptance from the Office of Graduate Studies that must be filed with the Registrar. They will have a single transcript reflecting the single program they are in, and both degrees will appear on the transcript on completion of the program. Their GPA on the transcript will be calculated on the basis of all the courses taken in the combined program.

COURSES IN COMPUTER SCIENCE

The second digit of each course number represents a particular area.

0 or 1 Software
2 Foundations
4 Hardware
6 Mathematical Applications and Algorithms

Any course designated as "scs," "sch," and "scm" (respectively: software, hardware, and mathematical applications and algorithms) satisfies the semi-core requirement in that particular area.

Core Courses (Students must take all four courses):
CSCI 700. Algorithms I
CSCI 715. Distributed Computing
CSCI 722. Computability and Complexity
CSCI 744. Computer Architecture and Networks

Note: Students who passed CSCI 323 or 344 with a grade of *B*+ or better may apply for a waiver from CSCI 700 or 715, respectively. Students who receive this waiver will still be required to complete 30 credits of 700-level courses.

Software Semi-core Courses (Students must take at least one):
CSCI 701. Software Design
CSCI 707. Compiler Construction
CSCI 718. Computer Graphics

Hardware Semi-core Courses (Students must take at least one):
CSCI 745. Switching Theory
CSCI 746. Computer Systems
CSCI 748. Computer Networks

Mathematical Applications and Algorithms Semi-core Courses (Students must take at least one):
CSCI 762. Algorithms II
CSCI 764. Topics in Systems Simulation
CSCI 766. Probabilistic Models in Computer Systems

Elective Courses
CSCI 711. Database Systems
CSCI 780, 782, 784, 786, or 783. Special Topics in Computer Science
CSCI 790, 792, 794, 796, or 793. Seminars in Computer Science
CSCI 799.1–3. Research

Note: In the seminar and special topic courses the third digit represents the subject area. (The numbers 783 and 793 will be given to courses that resist categorization with respect to subject area.)

Capstone Courses (Students must take one, after completing 21 credits)
CSCI 731. Software Development Practicum
CSCI 732. Research Practicum
CSCI 733. Master's Thesis
CSCI 734. Hardware Design Practicum
CSCI 799.3. Research

Note: The programming project reports, research reports, and master's theses submitted by the students shall be placed in the departmental files.

Other Courses
CSCI 788.1–3. Computer Science: Cooperative Education Placement.

MAT/MSED COURSES

CSCI 611. Advanced Programming in C++. 2 lec., 2 lab hr.; 3 cr. Prereq.: CSCI 111 or 112. Systematic treatment of object-oriented algorithmic problem-solving in C++ beyond the level of introductory programming, with attention to general as well as language-specific issues including pointer and pointer arithmetic; linked lists; heap memory management including effective use of destructors; recursion; operator overloading; inheritance, polymorphism and dynamic binding of function code, virtual functions; stream and file I/O; exception handling; templates and STL; applications of data structures; testing and debugging techniques.

CSCI 612. Advanced Programming in Java. 2 lec., 2 lab hr.; 3 cr. Prereq.: CSCI 111 or 112. Systematic treatment of object-oriented algorithmic problem-solving in Java beyond the level of introductory programming, with attention to general as well as language-specific issues including applications, event-driven programming; elements of graphical user interfaces (GUIs); linked lists; heap memory management and garbage collection; recursion; inheritance, polymorphism and dynamic binding of function code, abstract classes; file I/O; exception handling; packages; applications of data structures; applets; concept of multithreading; testing and debugging.

CSCI 613. Data Structures. 3 hr.; 3 cr. Prereq.: CSCI 612, and 620. Fundamental data structures and their implementations: stacks, queues, trees (binary and AVL), heaps, graphs. Hash functions and hash tables. Algorithms for searching, sorting, graph traversal, and topological sorting. Best, worst, and average-case runtime analysis. Examples of problem-solving using greedy algorithm, divide-and-conquer, and backtracking.

CSCI 620. Discrete Structures. 3 hr.; 3 cr. Prereq.: CSCI 111 or 112; MATH 120 or 220; and MATH 141 or 151. Algorithms, recursion, counting problems, recurrences and their closed-form solutions, asymptotic analysis of functions, relations, graphs and trees, applications to computational problems.

CSCI 640. Computer Organization and Assembly Language. 3 hr.; 3 cr. Prereq.: CSCI 111 or 112. Elements of digital logic, combinational and sequential circuits. Data representation. Principles of computer design and implementation. Instruction set architecture and register-transfer level execution. Memory hierarchy and storage formats. Bus structures. Assembly language programming.

CSCI 655. Internet and Web Technologies. 3 hr.; 3 cr. Prereq.: CSCI 613. Internet protocol stack, analysis of representative protocols; Internet applications: client-server architecture, popular Internet application protocols, Internet application design, client-side programming, server-side programming, Web application and website design; programming projects.

CSCI 688. Advanced Productivity Tools for Business. 2 lec., 2 lab. hr.; 3 cr. Prereq.: CSCI 012 or equivalent. Computing technology for students in business and finance-related disciplines. Advanced analytic techniques with an emphasis on spreadsheet topics such as financial functions and formulas, pivot tables, charting, and macro programming. Integration of spreadsheets, databases, and presentation tools for analysis and report generation.

MA COURSES

CSCI 700. Algorithms I. 3 hr.; 3 cr. Fundamental algorithms, their use, analysis, and the data structures used in their formulation. Programming paradigms such as dynamic programming, divide and conquer, greedy algorithms, branch and bound, backtracking, and their applications. Parallel algorithms.

CSCI 701. Software Design. 3 hr.; 3 cr. Prereq.: CSCI 700. Techniques and principles of systematic software development. Review of current software development tools. Top-down design and structured programming. History and concepts of modular design. Graphical user interfaces. Object-oriented design including data abstraction by classes and type polymorphism. Significant programming projects will be assigned.

CSCI 707. Compiler Construction. 3 hr.; 3 cr. Prereq.: CSCI 700. Theory and practice of compiler construction. Topics include theoretical and practical studies of lexical analysis, syntax analysis, type checking, semantic analysis, object code generation and optimization.

CSCI 711. Database Systems. 3 hr.; 3 cr. Prereq.: CSCI 700. In-depth review of database systems and extensive survey of the current literature on the topic.

CSCI 715. Distributed Computing. 3 hr.; 3 cr. Distributed systems design and implementation. Concurrency and modularity. Operating system considerations. Transport-level communication protocols. RPCs. Examples of distributed systems.

CSCI 718. Computer Graphics. 3 hr.; 3 cr. Prereq.: CSCI 700. Digital image fundamentals, scan-conversion algorithms, organization of graphics systems, 2D/3D primitives and their attributes, curve and surface representations, transformations, projections, hidden line/surface removal and clipping algorithms, color and illumination models, shading methods, interactive devices and techniques, graphics API. Significant

programming projects to illustrate the rendering process as well as the design of user interfaces will be assigned.

CSCI 722. Computability and Complexity. 3 hr.; 3 cr. Prereq.: CSCI 320. Models of computation such as Turing machines, random access machines, and circuits. Time complexity classes, including P and NP, space complexity classes, including L and NL, and the interrelationships among them. Mapping reducibility and its specializations, including polynomial-time and log-space reducibility. Establishing a first NP-complete problem, such as circuit satisfiability or Boolean-formula satisfiability. P-complete decision problems; NP-complete decision problems; and related approximation algorithms.

CSCI 731. Software Development Practicum. Hours to be arranged; 3 cr. Prereq.: Completion of 21 credits, including any software semi-core course. Each student will complete a significant software development project, either of his/her own choosing or one selected by the instructor. In general, projects will incorporate the following features in their design: A graphical user interface, concurrent processing, and persistent state across invocations. All projects will include complete and separate documentation for end-users, for installation, and for software maintenance. Project management tools for version and module management, and a complete record of the development stages are required.

CSCI 732. Research Practicum. 3 hr.; 3 cr. Prereq.: Completion of 21 credits. Critical review of research in computer science. Students will conduct research on one of the topics given by the instructor, and gain experience in writing research proposals, actual research process (including the use of libraries and the reading of papers), and in writing research reports. The instructor will give lectures on the selected topics as well as on general research methods, and closely monitor the students' research process.

CSCI 733. Master's Thesis. 3 cr. Prereq.: Completion of 21 credits. A master's thesis must be accepted by a sponsoring member of the department and by a thesis committee chosen by the department. (For college requirements regarding theses, see section on Degree & Certificate Offerings.)

CSCI 734. Hardware Design Practicum. Hours to be arranged; 3 cr. Prereq.: Completion of 21 credits, including a hardware semi-core course. Each student will complete a significant hardware development project approved by the instructor. Projects may be based on existing development platforms, or may involve construction of a hardware platform specific to the project. Designs may involve various areas of digital design, such as signal processing, robotics, networking, or peripheral interfacing.

CSCI 744. Computer Architecture and Networks. 3 hr.; 3 cr. The design of CPU, memory, and I/O systems. Performance evaluation. Pipeline processor design. SIMD architecture. Communication issues in a distributed computing system. Design of interconnection networks and their applications. Fault-tolerant computer systems.

CSCI 745. Switching Theory. 3 hr.; 3 cr. Boolean algebra. Symmetric and iterative circuits. Fault detection and location. State equivalence and reduction of completely and incompletely specified machines. State identification and experiments. Linear sequential circuits. Current research topics.

CSCI 746. Computer Systems. 3 hr.; 3 cr. Prereq.: CSCI 744. Parallel computer models. Program and network properties. Performance metrics and measures. Advanced processor technology, RISC and CISC processors. Software for parallel programming. Current research topics.

CSCI 748. Computer Networks. 3 hr.; 3 cr. Prereq.: CSCI 744. Basic communication concepts, connectivity analysis, delay analysis, and the International Standards Organization Reference Model of Open Systems Interconnection (ISO-OSI).

CSCI 761. Numerical Methods. 3 hr.; 3 cr. Prereq.: CSCI 220 and 313, MATH 143 (or 152) and 231. Error analysis, propagation of input and machine errors, interpolation, functional approximation, numerical differentiation, integration and summation, numerical solution of systems of linear equations and systems of nonlinear equations.

CSCI 762. Algorithms II. 3 hr.; 3 cr. Prereq.: CSCI 700. A continuation of the material of CSCI 700, including algorithms for numerical computation, algorithms for parallel or distributed computers, and probabilistic analysis of algorithms.

CSCI 764. Topics in Systems Simulation. 3 hr.; 3 cr. Prereq.: CSCI 700. Introduction to simulation and comparison with other techniques. Discrete simulation models and introduction to, or review of, queuing theory and stochastic processes. Comparisons of discrete change simulation languages. Simulation methodology including generation of random numbers and variates, design of simulation experiments for optimization, analysis of data generated by simulation experiments and validation of simulation models and results. Selected applications of simulation.

CSCI 765. Computational Finance. 3 hr.; 3 cr. Prereq.: CSCI 700 or the equivalent of CSCI 314 and ECON 249 for students in the Risk Management Program. Valuation of financial derivatives is presented as a family of algorithmic computations, centering on understanding and implementation of about fifty selected algorithms. Concepts include time value of money; market risk and credit risk; arbitrage; forwards and futures on stocks, currencies, interest rates, indices, commodities; collateral, marking-to-market, margining, netting; fundamentals of capital asset pricing; yield curves, bond prices, forward rates; swaps; options, claim synthesis; binomial trees; Weiner processes, Itô's Lemma, Black-Scholes-Merton model for options; Greeks; implied volatility and term structure; credit risk,

estimates of credit default probabilities, credit default spreads and default intensities; introduction to some path dependent and exotic derivatives.

CSCI 766. Probabilistic Models in Computer Systems. 3 hr.; 3 cr. Prereq.: CSCI 700. This course deals with analytical modeling as a means of analyzing computer hardware and software through the application of fundamental concepts of probability theory, statistics, random processes such as queuing theory and Markov chains to problems encountered in queuing models of time-sharing systems, multiprocessor interference, statistical evaluation of sorting techniques, and reliability of computer systems and networks.

CSCI 780, 782, 783, 784, 786. Special Topics in Computer Science. 3 hr.; 3 cr. May be repeated for credit for differing titles.

CSCI 788.1–3. Computer Science: Cooperative Education Placement. 1–3 hr.; 1–3 cr. Prereq.: Completion of at least three 700-level computer science courses and approval by the department's Graduate Curriculum and Advisement Committee of a detailed project description submitted by the student. Experiential learning through job placements developed by the Queens College Cooperative Education program. Opportunities are provided to test, demonstrate, and expand on academic learning in an organizational setting. This course does not count toward the 30 credits required for the Master of Arts degree in computer science. The grade for this course will be given on a pass/fail basis.

CSCI 790, 792, 793, 794, 796. Seminars in Computer Science. 3 hr.; 3 cr. May be repeated for credit if the topic changes.

CSCI 799.1–3. Research. 1–3 hr.; 1–3 cr. Prereq.: Permission of the department. May be repeated for credit for different topics, to a maximum of 3 credits. Student research reports shall be written; they will be placed on file with departmental technical reports. CSCI 799.3 can be used to satisfy the capstone requirement if the proposal is approved for such by the department. Students may take such a course only after they have completed at least 21 credits of 700-level courses with a cumulative GPA of 3.3 or better, and the research involved must be an individual work.

Data Analytics and Applied Social Research

Chair: Dana Weinberg

Graduate Advisor: Sophia Catsambis

Dept. Office: Powdermaker Hall 252, 997-2800

Website: www.qc.cuny.edu/bigdata

The Master's Program in Data Analytics and Applied Social Research provides students with the educational foundation and technical skills necessary to prepare for a professional career in market research, program evaluation, media and public opinion research, public health research, institutional research and assessment, or other applied social research fields. The program teaches students to use data to answer questions and support decision-making. The program emphasizes advanced analytic skills, including data handling, manipulation, interpretation, and analysis. It also emphasizes research process, preparing students to conduct independent projects using a variety of research methods and designs. The program offers five concentrations, all sharing the basic core of data analytics and applied research: Applied Social Research, Market Research, Program Evaluation and Policy Analysis, Media and Marketing, and Data Science ("Big Data").

An Accelerated MA program is also available for undergraduate students majoring in Sociology. This program allows students to take four MA courses for joint credit toward both the Sociology BA and the MA in Data Analytics and Applied Social Research. Subject to capacity, requirements for admission to the Accelerated MA program are an overall undergraduate GPA of 3.5 and a grade of *B*+ or better in SOC 205 and SOC 334 or equivalent.

The department's full-time faculty members maintain a very active research agenda. Faculty members include nationally recognized scholars, senior marketing executives, and award-winning demographers with extensive networks. Faculty research areas are: social stratification of urban areas; demography and public health; film and society; the impact of digital technology on society; workforce diversity; migration and immigration; ethnicity, race, class and gender; organizational and economic sociology; education; and Jewish culture in America. The facilities in the department include computer laboratories along with a new multimedia lab and full Internet connections to assist graduate students in their research.

FACULTY

Weinberg, Dana B., Chair, *Professor,* PhD 2000, Harvard University: medical sociology, organizational sociology, sociology of work and professions

Catsambis, Sophia, Graduate Advisor, *Professor,* PhD 1988, New York University: education, social inequality, quantitative methods

Alexiou, Nicholas, *Chancellor's Lecturer*: theory, ethnicity, Greek-Americans, mass media, statistics

Bennett, Pamela R., *Associate Professor,* PhD 2002, University of Michigan: education, race/ethnicity, social stratification, residential segregation

Beveridge, Andrew A., *Professor,* PhD 1973, Yale University: social history, quantitative methods, demography, education

Bounds, Anna, *Lecturer*, PhD 2006, Milano, the New School in Urban and Public Policy: urban tourism, public space, network management

Browne, Basil R., *Associate Professor,* PhD 1989,

University of California at Berkeley: deviant behavior, race/ethnic/minority relations, methodology, qualitative approaches

Cohen, Bernard, *Professor,* PhD 1968, University of Pennsylvania: criminology, police research, deviance

Cohen, Joseph N., *Associate Professor*, PhD 2007, Princeton University: political economy, capitalism, government, quantitative methods

Eisenstein, Hester, *Professor,* PhD 1967, Yale University: sociology of gender, feminist theory, globalization

Font, Mauricio A., *Professor,* PhD 1983, University of Michigan: development and social change, comparative and historical sociology

Gallo, Carmenza L., *Associate Professor,* PhD 1985, Boston University: comparative sociology, family

Gomez, Charles J., *Assistant Professor*, PhD 2016, Stanford University: global science, knowledge flows, social networks, computational linguistics, Big Data, and computational social science

Gorman, Thomas J., *Associate Professor,* PhD 1994, State University of New York at Stony Brook: social stratification, education, family sport

Heilman, Samuel C., *Distinguished Professor,* PhD 1973, University of Pennsylvania: symbolic interaction, social theory, sociology of religion, Jewry

Hsin, Amy, *Associate Professor,* PhD 2008, University of California, Los Angeles: Social stratification, sociology of the family, race/ethnicity

Kapsis, Robert E., *Professor,* PhD 1973, University of California at Berkeley: art and culture, mass media

Levine, Harry G., *Professor,* PhD 1978, University of California at Berkeley: criminology, drugs, American historic culture

Min, Pyong Gap, *Distinguished Professor,* PhD 1983, Georgia State University: family, ethnicity, and race, Asian Americans, immigrant entrepreneurship

Reed, Holly E., *Associate Professor,* PhD 2008, Brown University: demography, migration, immigration, sub-Saharan Africa, fertility and reproductive health, urbanization, African immigrants

Rhindress, Mindy, *Adjunct Professor,* PhD 2007, CUNY Graduate Center: marketing research, research methods, transportation, urban planning

Rogers-Dillon, Robin H., *Associate Professor,* PhD 1998, University of Pennsylvania: political sociology, medical sociology, poverty and social welfare

Savage, Dean B., *Professor,* PhD 1975, Columbia University: organization, science, work

Seiler, Lauren H., *Professor Emeritus,* PhD 1970, University of Illinois at Urbana: post-human society, futurism, methods, technology

Song, Shige, *Associate Professor,* PhD 2004, University of California Los Angeles: demography, quantitative methods, China

Sperry, Ryan, *Adjunct Assistant Professor*, PhD 2008, Columbia University: organizational sociology, social networks, and technology

Strickland, Suzanne, *Chancellor's Lecturer*, economic development

Tang, Joyce, *Professor,* PhD 1991, University of Pennsylvania: stratification, mobility, science and technology, methodology

Turner, Charles F., *Professor*, PhD 1978, Columbia University: HIV and STDs, survey research, research methods

Vesselinov, Elena, *Associate Professor,* PhD 2004, SUNY Albany: urban sociology, social and spatial inequality, housing

Vilardrich, Anahi, *Professor*, PhD 2003, Columbia University: immigration, health, ethnicity, gender

Xu, Hongwei, *Associate Professor*, PhD 2002, Brown University: social determinants of health, population aging, child development, place and space effects, residential segregation

MASTER OF ARTS PROGRAM

Requirements for Matriculation

These requirements are in addition to the general requirements for admission.

1. Sufficient work in sociology or related fields to pursue graduate work in sociology. Successful completion of undergraduate courses in research methods and statistics.
2. Undergraduate cumulative grade-point average (GPA) of 3.2 or higher.
3. The department reserves the right to impose additional requirements upon any candidate for the degree who, in its opinion, enters with insufficient undergraduate work in sociology.
4. Personal interview with a graduate advisor whenever feasible.

Departmental Requirements

These requirements are in addition to the general requirements for the Master of Arts degree.

1. Students must satisfy the following requirements:

	credits
a. Sociological Theory or Substantive Topics in Sociology: DATA 701, 702, 728, 736, MEDST 752, or other courses with approval	3
b. Quantitative Research Methods and Statistics (Basic and Advanced Analytics): DATA 710 and 712	8
c. Applied Social Research Methods: DATA 734 and 735 OR DATA 754 and 755	6
d. Qualitative Methods or Special Topics in Research Methods, DATA 711 *or* 765	3 or 4
e. Professional Communication in Social Research, DATA 716 or equivalent	3
f. DATA 793 and submission of an approved thesis or thesis-length paper based upon supervised independent research	3
g. Elective courses appropriate to selected track:	
Applied Social Research	6
Leadership, Management, and Data Analytics	9

Program Evaluation and Policy Analysis	6
Market Research	6
Media and Marketing: advanced courses in Media Studies	9
Data Science: advanced courses in Computer Science	9
Total	35–38

2. The progress of all students will be reviewed every semester by the Graduate Committee. Satisfactory progress toward the degree requires a minimum grade of *B* (3.0) in the courses enumerated in *a* through g above. Additional work, a qualifying examination, or dismissal from the program will be prescribed for those students not satisfying the minimum requirements. Necessary action will be decided upon by the Graduate Committee and communicated to the student in writing.

MASTER OF ARTS IN DATA ANALYTICS

Departmental Requirements

These requirements are in addition to Sociology's general requirements for the Master of Arts degree.

1. Students must satisfy the following requirements:

	credits
a. Sociological Theory or Substantive Topics in Sociology: DATA 701, 702, 704, 715, 728, 736, MEDST 752, or other courses with approval	3
b. Quantitative Research Methods and Statistics (Basic and Advanced Analytics): DATA 710 and 712	8
c. Applied Social Research Methods: DATA 734 and 735 *or* DATA 754 and 755	6
d. Qualitative Methods or Special Topics in Research Methods: DATA 711 or DATA 765 or MEDST 754	6
e. Professional Communication in Social Research: DATA 716 or equivalent	3
f. DATA 793 and submission of an approved thesis or thesis-length paper based upon supervised independent research	3
g. Elective courses appropriate to selected track: Leadership, Management, and Data Analytics	9
Total	38

2. The progress of all students will be reviewed every semester by the Graduate Committee. Satisfactory progress toward the degree requires a minimum grade of *B* (3.0) in the courses enumerated in *a* through *g* above. Additional work, a qualifying examination, or dismissal from the program will be prescribed for those students not satisfying the minimum requirements. Necessary action will be decided upon by the Graduate Committee and communicated to the student in writing.

ADVANCED CERTIFICATE IN DATA ANALYTICS AND MANAGEMENT

Departmental Requirements

These requirements are in addition to Sociology's general requirements for the Master of Arts degree.

1. Students must satisfy the following requirements:

	credits
a. Basic Quantitative Research Methods and Statistics (Basic and Advanced Analytics): DATA 605 or 710	4
b. Applied Social Research Methods: DATA 634 or 712	3
c. Qualitative Methods or Special Topics in Research Methods: DATA 711 or 765	3
d. Professional Communications: DATA 716 or equivalent	3
e. Special topics in Leadership, Management, and Organizations	6
Total	19

2. The progress of all students will be reviewed every semester by the Graduate Committee. Satisfactory progress toward the degree requires a minimum grade of *B* (3.0) in the courses enumerated in *a* through *e* above. Additional work, a qualifying examination, or dismissal from the program will be prescribed for those students not satisfying the minimum requirements. Necessary action will be decided upon by the Graduate Committee and communicated to the student in writing.

ADVANCED CERTIFICATE IN LEADERSHIP AND MANAGEMENT

Departmental Requirements

These requirements are in addition to Sociology's general requirements for the Master of Arts degree.

1. Students must satisfy the following requirements:

	credits
a. Professional Communications: DATA 716 or equivalent	3
b. Special topics in Leadership, Management, and Organizations	12
c. Cooperative Field Placement	3
Total	18

2. The progress of all students will be reviewed every semester by the Graduate Committee. Satisfactory progress toward the degree requires a minimum grade of *B* (3.0) in the courses enumerated in *a* through *c* above. Additional work, a qualifying examination, or dismissal from the program will be prescribed for those students not satisfying the minimum requirements. Necessary action will be decided upon by the Graduate Committee and communicated to the student in writing.

COURSES

DATA 605. Introduction to Social Statistics. 3 hr., 3 cr. Introduction to descriptive, inferential, bivariate, and multivariate statistical techniques used to analyze social science data. Students generate and interpret output produced by standard statistical computer packages and acquire theoretical and practical skills foundational to the graduate data analytics courses DATA 710 and 712.

DATA 634. Social Science Research Methods. 3 hr., 3cr. Introduction of the theoretical and methodological approaches to conducting social science research, analyzing social science data, and communicating scientific findings. Survey of various scientific research methods, combined with understanding of their practical applications in social science settings. Students acquire theoretical and practical skills foundational to the graduate data analytics courses DATA 754 and 755.

DATA 701.The Development of Sociological Theory. 2 hr. plus conf.; 3 cr. Critical examination of the major treatises and schools in the development of sociological theory from Comte to twentieth-century theorists.

DATA 702. Contemporary Sociological Theory. 2 hr. plus conf.; 3 cr. Critical discussion of current sociological theory. Relationship of contemporary theory to empirical research.

DATA 710. Basic Analytics. 6 hr. plus conf. and lab, 6 contact hr.; 4 cr. Prereq.: Introductory undergraduate course in statistics. This course focuses on basic statistical concepts and analytic techniques with an emphasis on application to real-world problems and issues. It is the first in a two-semester sequence. Emphasizes describing and summarizing data, statistical inference procedures and reasoning, and use of statistical software in analysis.

DATA 711. Qualitative Methods. 2 hr. plus conf.; 3 cr. Qualitative concepts and methods of sociological research; application of such concepts and methods in representative published studies.

DATA 712. Advanced Analytics. 6 hr. plus conf. and lab, 6 contact hr.; 4 cr. Prereq.: DATA 710 or equivalent. An examination of advanced statistical methods, inference, and multivariate techniques, such as ANOVA, linear regression, and logistic regression.

DATA 716. Professional Writing and Communication for Social Research. 2 hr. plus conf.; 3 cr. An applied course stressing succinct and meaningful communication. The course will include proposals, analytical reports, and presentations. Essential concepts will be drawn from a wide variety of professional experiences.

DATA 728. The Sociology of Organizations: Government and Non-Profits. 2 hr. plus conf.; 3 cr. This course explores issues of organization and management of government and non-profit organizations with an emphasis on applying research and theory to case studies of government and non-profit organizations.

DATA 734. Applied Social Research in Marketing I. 2 hr. plus conf.; 3 cr. A survey of the techniques used in marketing research with an emphasis on developing skills needed to carry out research.

DATA 735. Applied Social Research in Marketing II. 2 hr. plus conf.; 3 cr. Prereq.: DATA 734. Continuation of DATA 734. Students carry out a marketing research project.

DATA 736. Demography. 2 hr. plus conf.; 3 cr. Survey of population studies, including: basic demographic processes and population structures; overview of demographic data, methods, and concepts; and discussion of population issues.

DATA 754. Applied Social Research I. 2 hr. plus conf.; 3 cr. Special topics in Applied Social Research.

DATA 755. Applied Social Research II. 2 hr. plus conf.; 3 cr. Prereq.: DATA 754 and permission of the department. Special topics in Applied Social Research.

DATA 765. Special Topics in Research Methods. 2 hr. plus conf. and lab.; 4 cr. Special topics in research methods. This course may be repeated for credit by permission of the department as the topic changes.

DATA 788. Cooperative Education Field Placement. Hr. and cr. vary. Prereq.: Permission of the department. Students will apply skills learned in courses in paid positions. A written report linking experience with skills and concepts learned in the classroom is required.

DATA 789. Internship in Social Research. Hr. and cr. vary. Prereq.: Permission of the department. Students will apply skills learned in courses in volunteer positions. A written report linking experience with skills and concepts learned in the classroom is required.

DATA 790. Seminar in Selected Topics in Sociology. 2 hr. plus conf.; 3 cr. Content will be determined by the special interest of students and the instructor. This course may be repeated for credit by permission of the department as the topic changes.

DATA 791.Tutorial. 3 hr.; 3 cr. Prereq.: Permission of the graduate advisor in Data Analytics and Applied Social Research. Independent study under the guidance of a faculty director.

DATA 792. Research. 3 hr.; 3 cr. Prereq.: Permission of the graduate advisor in Sociology. Research conducted under the guidance of a faculty director.

DATA 793.Thesis Research. 3 hr.; 3 cr. Prereq.: Completion of requirements *a* through *e* (23 credits) in the list of departmental requirements on the previous page. Student will carry out a research project, which will culminate in a master's thesis or a research report of comparable significance.

School of Earth & Environmental Sciences

Chair: Jeffrey Bird

Graduate Advisor: Gregory O'Mullan

Office: Science Bldg. D216, 997-3300

Website: http://sees.qc.cuny.edu

The school offers programs leading to a Master of Arts degree in Geological and Environmental Sciences, and a Master of Science degree in Applied Environmental Geosciences. In addition, SEES faculty participate in the CUNY doctorate programs in Earth and Environmental Sciences, Biology, and Chemistry. The school's location provides abundant space for laboratories and equipment. Cooperative research projects exist with local researchers, including from the CUNY Advanced Science Research Center, the American Museum of Natural History, Brookhaven National Laboratory, Lamont-Doherty Earth Observatory, and the Smithsonian Institution in addition to several universities and national laboratories in the United States and internationally. Coursework and research opportunities are available to specialize in atmospheric sciences, global climate change, chemical oceanography, environmental geology, biogeochemistry, environmental geochemistry, soil science, groundwater and surface water hydrology, urban ecology, environmental microbiology, geomorphology and quaternary studies, sedimentation, sedimentary petrology, paleontology, and petrology.

Faculty are involved in field activities from areas around New York City to the northern Appalachians of New England and continental United States to numerous localities around the world (e.g., the Southern and North Atlantic Oceans, Mediterranean Sea, Japan, the Caribbean, South America, South and East Asia, and Europe). Major equipment capability includes x-ray diffraction, electron transmission and scanning electron microscopy, inductively coupled plasma emission spectrometry, gas chromatography, lab and field infrared CO_2 analyzers, multimode and absorbance plate reader, CHN combustion analyzer, dissolved C analyzer, FTIR spectroscopy, microbial and molecular genetic characterization, electrochemical analysis, and alpha spectrometry. Field instrumentation for watershed characterization, subsurface imaging, atmospheric, groundwater, and soil monitoring and sampling, and estuary studies enable field data collection under faculty guidance. Currently, SEES is expanding our field and laboratory instrumentation to meet the needs of sustainable growth of New York City.

Exciting projects are being performed by students and faculty, including in areas of water quality, soil microbiology and ecology, hydrology, geochemistry, biological and chemical oceanography, mineralogy, volcanology, environmental health and safety, paleoclimatology, seismology, climate change, tectonic history, plant-atmosphere CO_2 fluxes, environmental microbiology, and geologic hazards.

Current and recent funding for faculty research includes grants from the National Science Foundation, the U.S. Department of Energy, the National Oceanic and Atmospheric Administration, the U.S. Department of Education, the U.S. Environmental Protection Agency, the Sloan Foundation, Riverkeeper, the Hudson River Foundation, NYSERDA, and PSC/CUNY Research Awards. Students who have successfully completed the program have found employment in industry or government or have entered PhD programs. Students in the Master of Science program in Applied Environmental Geosciences are eligible for the Roux Scholarships, which are awarded annually.

SEES also participates in the Accelerated Master's Program at QC for Environmental Science BS or Geology BS majors interested in the MS in Applied Environmental Geosciences. See http://accelerate.qc.cuny.edu/.

FACULTY

Bird, Jeffrey, *Chair* and *Professor,* PhD 2001, University of California at Davis: soil biogeochemistry and ecosystem ecology, microbial community ecology, C and N fluxes and cycling. jbird@qc.cuny.edu

McHugh, Cecilia M.G., *Professor,* PhD 1993, Columbia University; Assistant to the Dean; Adjunct Associate Research Associate, Lamont-Doherty Earth Observatory: marine geology, sedimentology, sedimentary petrology, geomorphology. cecilia.mchugh@qc.cuny.edu

O'Mullan, Gregory, MA and MS Advisor, *Professor,* PhD 2005, Princeton University: microbial ecology, geomicrobiology, estuarine water quality. gregory.omullan@qc.cuny.edu

Blanford, William, *Assistant Professor*, PhD 2000, University of Arizona: bioremediation and contaminant hydrology. william.blanford@qc.cuny.edu

Bracco, Jacquelyn, *Assistant Professor,* PhD 2015, Wright State University: geochemistry, mineralogy. jbracco@qc.cuny.edu

Eaton, Timothy T., *Associate Professor,* PhD 2002, University of Wisconsin at Madison: hydrogeology, estuarine and surface-water hydrology, wetlands, water resources management. timothy.eaton@qc.cuny.edu

Greenfield, Dianne I., *Associate Professor,* PhD 2002, Stony Brook University: biological oceanography, phytoplankton ecology and climate change. dgreenfield@qc.cuny.edu

Hendrey, George R., *Distinguished Professor,* PhD 1973, University of Washington at Seattle: earth systems science. george.hendrey@qc.cuny.edu

Longpre, Marc-Antoine, *Associate Professor*, PhD 2009: volcanology and igneous petrology. mlongpre@qc.cuny.edu

Ludman, Allan, *Professor,* PhD 1969, University of Pennsylvania: field geology, metamorphic petrology, tectonics. allan.ludman@qc.cuny.edu

Markowitz, Steven, *Professor,* MD 1981, Columbia College of Physicians and Surgeons; Director, Barry Commoner Center for Health and the Environment: occupational and environmental medicine, occupational health and safety. steven.markowitz@qc.cuny.edu

Morabia, Alfredo, *Professor*, PhD 1990, Johns Hopkins University; MD 1978, University of Geneva: Barry Commoner Center for Health and the Environment; community-based risk factors, cancer and genetic epidemiology, historical methods and concepts in epidemiology. alfredo.morabia@qc.cuny.edu

Pekar, Stephen F., *Professor,* PhD 1999, Rutgers University, State University of New Jersey: sedimentology, stratigraphy, paleontology. stephen.pekar@qc.cuny.edu

Soule, Dax, *Assistant Professor,* PhD 2016, University of Washington: marine seismology. dsoule@qc.cuny.edu

Stewart, Gillian M., *Professor,* PhD 2005, Marine Sciences Research Center, State University of New York at Stony Brook: trophic transfer and bioaccumulation of contaminants, ocean sequestration of atmospheric carbon dioxide. gillian.stewart@qc.cuny.edu

Yi, Chuixiang, *Professor,* PhD 1991, Nanjing University: micrometeorology, land-atmosphere exchange of carbon dioxide, vegetation canopy fluid mechanics, eddy covariance flux. chuixiang.yi@qc.cuny.edu

PROGRAM FOR THE MA AND MS DEGREES

Requirements for Matriculation

These requirements are in addition to the college requirements for admission.

1. The department requires that all students have taken a course in physical geology and a course in historical geology. However, recognizing that undergraduates may have studied in many different fields of earth sciences, additional expected undergraduate training may be in a broad array of subjects, including most of the following:

- minerals; igneous, sedimentary and metamorphic petrography;
- surficial processes/geomorphology;
- sedimentation and stratigraphy;
- structural geology and earth internal processes;
- oceanography, climatology;
- evolution and paleontology;
- geochemistry, geophysics, and ecology;
- field geology (an approved field course)

The department's graduate committee may waive the above requirements— except physical geology and historical geology—for students with a strong background in science who may wish to pursue studies in special fields such as hydrology, geophysics, geochemistry, or environmental sciences.

2. The Graduate Record Exam (GRE), verbal and quantitative, with official scores submitted to the department.

3. Differential and integral college calculus, two semesters of college physics, and two semesters of college chemistry. College biology may be substituted for one semester of physics if appropriate.

4. Students may be accepted with deficiencies in mathematics or allied sciences but must remove those deficiencies by taking the necessary undergraduate courses without credit. Deficiencies must be removed before the student may proceed beyond 12 credits of graduate work in geology.

5. Advanced standing (not exceeding 12 credits) may be granted to students who have taken graduate courses in geology at other institutions with a minimum grade of *B* or the equivalent.

Requirements for the Master of Arts Degree in Geological and Environmental Sciences

These requirements are in addition to the general master's degree program requirements:

1. Residence: A minimum of two full semesters, and 18 credits of coursework in the School of Earth and Environmental Sciences at Queens College.

2. Satisfactory completion of an approved course of study for a minimum total of 30 credits in graduate geology courses (700 or higher), including a thesis. Individual programs are organized to permit specialization in most areas of geology and related earth sciences. Unless they have an undergraduate geology major, students must take GEOL 701 and GEOL 702 during their first year. A student's advisory committee, established in the first year, must approve his/her individualized course of study. At the discretion of the committee and the graduate advisor, courses in other science departments may be included in the course of study.

3. Thesis: The thesis problem and mentor must be approved by the department.

4. Certification: Upon receipt of confirmation from the student's advisory committee that the program of study, thesis, and thesis defense have been completed, the graduate advisor will certify to the Office of Graduate Studies that the student is qualified to receive the degree.

Requirements for the Master of Science Degree in Environmental Geosciences

These requirements are in addition to the general master's degree program requirements:

1. Residence: A minimum of two full semesters, and 18 credits of coursework in the School of Earth and Environmental Sciences at Queens College.

2. Satisfactory completion of the following curriculum of coursework: 30 credits, and a 6-credit internship. In exceptional cases, some courses may be waived because of transfer credits or professional experience. In addition, unless they have an undergraduate geology major, students must take GEOL 701 and GEOL 702 during their first year.

a. Environmental Geosciences Core Courses
GEOL 745. Hydrology
or
GEOL 746. Groundwater Hydrology
GEOL 760. Environmental Geochemistry
GEOL 762. Shallow Subsurface Geophysics
GEOL 763. Geographic Information Systems and Geologic Mapping

b. Environmental Geosciences Methods Courses
GEOL 761. Field Methods in Hydrology
GEOL 767. Field Techniques in Environmental Sciences
GEOL 766. Analytical Techniques in Environmental Geosciences

c. Three elective courses from among the following, to which others may be added
GEOL 742. Stratigraphy
GEOL 747. Coastal and Estuarine Geology
GEOL 750. Environmental Geology
GEOL 764. Contaminant Hydrology
GEOL 765. Surface Processes and Products
GEOL 768. Soils, Wetlands, and Bioremediation

d. Internship
GEOL 788.6. Cooperative Education Placement

Note: This semester- or summer-long internship is in lieu of a thesis project and must be arranged with an organization, firm, or agency in which hands-on experience is obtained. A program of internship work must be approved by the department's internship committee and representatives of the internship organization. A substantive final report must be prepared and presented by the student.

3. Certification: The student's advisors shall oversee the internship work and shall certify to the Office of Graduate Studies the satisfactory completion of all academic requirements for the Master of Science in Education degree by the candidate.

COURSES IN GEOLOGY

Courses on the 500 level may not be applied toward the Master of Arts in geology. Courses on the 700 level may presume knowledge normally provided in the requirements for matriculation. Students should consult with their advisors prior to registering for these courses.

GEOL 501. Earth Composition and Earth Processes. 3 lec., 3 lab. hr.; 4 cr. Required field trip(s). Geological materials, internal and external structure and dynamics of the Earth, and origin and evolution of the Earth's present landscapes.

GEOL 502. Earth History and the Fossil Record. 3 lec., 3 lab hr.; 4 cr. Prereq.: GEOL 501 or equivalent. Required field trip(s). The origin and history of the Earth as a planet; the use of evidence in reconstructing its crustal history, geography, and past environments; the evolution of life; regional geology of North America.

GEOL 503. Modern Aspects of Geology. 3 rec., 3 lab. hr.; 4 cr. Prereq.: Two semesters of geology. An introduction to the basic geological processes and structures, followed by discussions of selected topics in geochemistry and geophysics.

GEOL 504. Environmental Problems and Solutions. 4 hr. (2 lec., 2 lab. hr.); 3 cr. Field trips. The scientific analysis of important environmental issues is presented, and various solutions are discussed. Included are case history examples of human impact on the physical environment, such as toxic waste disposal, sludge management, pollution of the potable groundwater supply, sewage effluent, contamination of estuaries and anthropogenic cause of red tides, among others. Proposals are offered on land-use planning and on strategies for energy consumption, agriculture, and manufacturing.

GEOL 507, 508. Special Studies in Geology. Hr. to be arranged; 3 cr. Prereq.: One year of geology and permission of the school. These courses are designed for graduate students interested in geology beyond the elementary level. Course requirements are normally met by successful completion of an advanced undergraduate geology course plus completion of a special project.

GEOL 509. Environmental Geology of the New York Metropolitan Region. 2 lec., 3 lab. hr.; 3 cr. Prereq.: GEOL 501 or equivalent. Geological processes affecting the quality of the environment. Laboratory work involves the study of maps, aerial photographs, and other data in order to analyze geologic problems and write environmental impact statements. Field trips may be included.

GEOL 510. Coastal Geology. 2 lec., 3 lab. hr.; 3 cr. Prereq.: GEOL 501 or equivalent. Geological processes, problems, and management decisions in the coastal zone of the United States. Laboratory work involves analysis of samples, maps, and aerial photographs. Field trips may be required.

GEOL 512. Oceanography of New York and Adjacent Waters. 2 lec., 3 lab. hr.; 3 cr. Prereq.: GEOL 501 or permission of the instructor. An introduction to the processes and problems of the physical, geological, chemical, and biological oceanography of the northwest Atlantic. Lab sessions utilize oceanographic data to study specific areas. Field trips may be included.

GEOL 515. Geology of New York State. 2 lec., 3 lab hr.; 3 cr. Prereq.: GEOL 501 or equivalent. Required field trip(s). The development of the bedrock, surficial geology, and landscapes of New York State over geologic time. Laboratory work involves analysis of samples, geological maps, and sections.

GEOL 516. Geology in the Field. 2 lec., 6 lab. hr. or 1 day in the field per week; 4 cr. Prereq.: GEOL 501 or equivalent. The mode of occurrence and identification of rock types and the development of landscapes are studied in the field. Fieldwork involves obtaining,

recording, and interpreting data from a diverse set of geologic terrains.

GEOL 520. Meteorology. 2 lec. and 2 lab./rec. hr.; 3 cr. Prereq. or coreq.: Matriculation in the program or permission of the School. This course is designed to give middle and high school teachers a nonmathematical background in meteorology, the science of the atmosphere, and its effects on the surface of the Earth and on life in general. Topics include the history, structure, and dynamics of the atmosphere (physical meteorology); fronts and frontal weather, storms (dynamical meteorology), observational methods (observational meteorology); temporal changes in climate (climatology). Observational methods and data are used throughout to support the understanding and concepts important in meteorology.

GEOL 521. Oceanography. 2 lec. and 2 lab./rec. hr.; 3 cr. Prereq. or coreq.: Matriculation in the program or permission of the School. This class provides middle and high school teachers with background information about the Earth's oceans that encompasses: the history of oceanography and sea-floor exploration; the evolution of the oceans and atmosphere; plate tectonics; ocean sedimentation; properties and chemistry of ocean waters; ocean/atmosphere interactions and their effects on climate; coasts; life in the oceans; marine resources and environmental concerns.

GEOL 522. Applied Geologic Reasoning: Geology of New York State. 2 lec., 3 lab. hr., field trips; 3 cr. Prereq. or coreq.: Matriculation in the program or permission of the School, SEES 501 and 502 (or equivalent courses), and at least one 300-level undergraduate geology course. The geologic history of New York, with special emphasis on the New York City region as we currently understand it, is used as a platform for examining, in lecture, lab, and in the field, the evidence and logic that goes into elucidating the geologic history and completion of a geologic map, cross-section, and stratigraphic column.

GEOL 551. Applied Earth Systems Science: GLOBE® Program Certification. 3 hr.; 3 cr. Prereq.: Enrollment in EECE MAT; not open to certified GLOBE® teachers. Application of an Earth systems science integrated view of environmental processes to study long-term global change using GLOBE® Program research protocols. Students are trained in GLOBE® atmosphere, soil, hydrology, seasonal change, and land use/land cover protocols, and learn the scientific principles underlying those research areas. Course includes formal GLOBE® certification, and 2 all-day field exercises.

GEOL 552. GLOBE® Program Environmental Research. 3 hr.; 3 cr. Prereq.: Open to pre-service graduate students and in-service secondary school teachers; not open to students who have completed GEOL 551. Research into selected local environmental issues using GLOBE® Program protocols for atmosphere, soil, hydrology, seasonal change, and land cover. Course includes GLOBE® Program teacher certification, and 3 all-day field exercises.

GEOL 599. Special Topics in Geology. GEOL 599.1, 1 lec. hr.; 1 cr.; GEOL 599.2, 2 lec. hr.; 2 cr.; GEOL 599.3, 3 lec. hr. *or* 2 lec., 2 lab. hr.; 3 cr.; GEOL 599.4, 3 lec., 3 lab. hr.; 4 cr. Prereq.: Permission of the School. This course will cover topics of current interest in a particular aspect of the geological sciences. Topics may vary. The course may be repeated for credit if the topic is different.

GEOL 701. Advanced Principles of Physical Geology. 3 lec., 3 lab. hr.; 4 cr. Required field trip(s). Prereq.: Permission of the instructor. Modern concepts of Earth's composition, processes, physiography, and internal structure.

GEOL 702. Advanced Principles of Historical Geology. 3 lec., 3 lab. hr.; 4 cr. Required field trip(s). Prereq.: Permission of the instructor. Modern concepts of sedimentology, stratigraphy, paleontology, and basin analysis.

GEOL 705. Computer Modeling in Geology: Special Topics. 2 lab. hr.; 1 cr. Prereq.: Permission of the School. This course will be offered as a complement to geology courses in which many of the applications involve the use of computers and modeling. Examples are geotechnics and soil mechanics, hydrology and groundwater geology, environmental geology, etc. Students will be expected to have some knowledge of computers and programming, and to have as a prerequisite or corequisite basic knowledge of the appropriate geological specialty. May be taken as a laboratory component to another course or as independent study.

GEOL 710. Structural Geology. 3 lec., 2 lab. hr.; 4 cr. Physical properties of rocks and rock behavior in different tectonic environments; deformation by fracturing; folding deformation; collapse structures; gravitational gliding; interpretation of linear and planar elements; petrofabric analysis. Fundamental concepts of geotectonics.

GEOL 712. Geotectonics. 2 lec. or 2 semin., 2 lab. hr.; 3 cr. A study of various aspects of the petrology, structural features, and stratigraphy of major tectonic elements, such as orogenic belts, intracratonal basins, rift-zones, island arcs, and mid-oceanic ridges; their significance in the development of the Earth's crust. Detailed analysis of selected world regions.

GEOL 714. Geophysics. 3 lec. or 3 semin. hr.; 3 cr. Principles of seismology: elastic constants; types and 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.

GEOL 715. Introductory Field Geology. 2 cr. Two to three weeks of supervised fieldwork, with the results presented in a geologic map accompanied by a written

report, cross sections, and appropriate diagrams and illustrations. GEOL 715 must be followed by GEOL 716 to meet the geology field course requirement.

GEOL 716. Advanced Field Geology. 2 cr. Prereq.: GEOL 715. Two to three weeks of supervised fieldwork, with the results presented in a geologic map accompanied by a written report, cross sections, and appropriate diagrams and illustrations. The report and map are expected to be prepared at a more advanced level than those of GEOL 715.

GEOL 717. Field Methods. 6 lab. hr.; 2 cr. Methods of collection, analysis, and presentation of field data, navigation, mapping, and plane tabling.

GEOL 718. Field Geology. 4 cr. A comprehensive geologic field investigation at the graduate level involving a minimum of three weeks supervised fieldwork and a detailed field report of acceptable standards with geologic map, diagrams, and illustrations.

GEOL 720. Mineralogy. 2 lec., 2 lab. hr.; 3 cr. Crystal chemistry; mineral genesis and crystal growth; physiochemical principles governing crystal structures; mineral properties related to crystal structures; study of methods of analysis.

GEOL 721. Optical Mineralogy. 2 lec., 4 lab. hr., plus field trip; 2 cr. (for half a semester). Prereq.: Undergraduate course in mineralogy assumed. Use of the petrographic microscope as a rigorous tool in the identification of minerals and the study of rocks.

GEOL 722. X-ray Diffraction Analysis. 2 lec., 2 lab. hr.; 3 cr. Theory and application of X-ray diffraction; methods of qualitative and quantitative mineral analysis; mineral structure analysis.

GEOL 723. Advanced Research Methods in Geology. 1 lec., 3 lab. hr.; 3 cr. Principles and methods of qualitative and quantitative analysis of geological materials. Laboratory problems include using such methods of analysis as differential thermal analysis, infrared spectroscopy, electron microscopy, and electron microprobe.

GEOL 724. Igneous Petrology. 2 lec., 3 lab. hr.; 3 cr. Principles of igneous petrology based on chemical thermodynamics and phase equilibria systems established by geochemical laboratory investigations; problems of rock classification and nomenclature; fundamentals of structural petrology; petrogenesis in space and time; study of hand specimens and thin sections with advanced laboratory techniques.

GEOL 726. Metamorphic Petrology. 2 lec., 2 lab. hr.; 3 cr. Chemical principles and physical conditions of metamorphism, based on thermodynamic and experimental data. Mode of occurrence and classification of metamorphic rocks. Detailed study of metamorphic minerals and mineral assemblages.

GEOL 728. Advanced Volcanology. 3 hr.; 3 cr. Prereq.: Permission of instructor. This seminar-style course addresses various topics in volcanology through readings of peer-reviewed literature and discussions. Topics may include volcano-climate interactions, volcano-tectonic interactions, petrologic reconstructions of magmatic processes, and tephro-stratigraphy.

GEOL 730. Paleontology of the Invertebrates. 2 lec., 1 semin., 2 lab. hr.; 4 cr. An advanced treatment of the functional morphology, systematics, evolutionary history, and paleoecology of invertebrate animals through geologic time. Laboratory techniques in the use of fossils as primary data of organic evolution and indicators of paleoenvironments. (Open to qualified students in biology.)

GEOL 732. Paleoecology. 2 lec., 2 lab. hr.; 3 cr. The reconstruction and analysis of plant and animal communities of the past, their historical development as communities, and their interactions with the environment. The fossil evidence for animal behavior, food chains, predator-prey relationships, symbiosis, parasitism, and environmental control of species distribution. Field and laboratory techniques.

GEOL 734. Micropaleontology. 2 lec., 2 lab. hr.; 3 cr. The study of several groups of animal and plant remains of microscopic dimensions. Collection of samples; recovery of microfossils from samples; sorting and classification; stratigraphic and economic value; ecologic studies.

GEOL 736. Palynology. 2 lec., 2 lab. hr.; 3 cr. The systematic study, laboratory preparation, and geologic significance of the microscopic remains of plants and closely related organisms, such as plant spores and pollen, dinoflagellates, and acritarchs.

GEOL 740. Sedimentology. 2 lec., 3 lab. hr.; 3 cr. Sediments, sedimentary processes, and sedimentary environments. Laboratory and field techniques in the analysis of sediment facies and sequences.

GEOL 742. Stratigraphy. 2 lec., 2 lab. hr.; 3 cr. Principles of stratigraphy; the stratigraphic record and nomenclature; faunal stratigraphy and correlation. Systematic stratigraphy of North America: Pre-Cambrian problems; geosynclinical, cratonal, and non-marine sedimentation of the Paleozoic Era; Mesozoic and Cenozoic stratigraphy; paleontological aspects.

GEOL 743. Sedimentary Petrology. 2 lec., 2 lab. hr.; 3 cr. Origin, texture, composition, and classification of sedimentary rocks, with emphasis on modern analytical techniques; study of thin sections, grain mounts, and hand specimens.

GEOL 745. Hydrology. 3 lec., 1 rec. hr.; 3 cr. Prereq.: One semester of undergraduate calculus and one semester of undergraduate physics, or equivalents, or permission of instructor. Introduction to the hydrologic cycle and processes related to the movement of water in the surficial

environment: precipitation, evaporation and transpiration, infiltration, runoff and stream flow. Numerical calculations and problems will be emphasized. Discussion of case studies that describe hydrologic systems in differing climatic and geologic settings.

GEOL 746. Groundwater Hydrology. 3 lec., 1 rec. hr.; 3 cr. Prereq.: GEOL 745 or permission of the instructor. Physical principles of groundwater flow, Darcy's law, flow equations, flow nets, pumping tests, methods of groundwater investigation, groundwater geology. Numerical calculations and problems will be emphasized. Discussion of case histories that describe different types of groundwater systems.

GEOL 747. Coastal and Estuarine Geology. 3 lec. hr.; 3 cr. Prereq.: GEOL 208 or permission of the instructor. Examination of the geology, oceanography, and geomorphology of polar, subpolar, temperate, and tropical coastal zones. Class work will include the use of web-based data.

GEOL 748. Environmental Geology of the Coastal Zone. 2 lec., 3 lab. hr.; 3 cr. Prereq.: GEOL 747 or permission of the instructor. A laboratory and field examination of the environmental geology of temperate and tropical coastal zones. Field exercises, aerial photo interpretation, and environmental impact statements will be used to analyze specific problem areas.

GEOL 749. Seminar on Urban Coastal Management. 3 lec. hr.; 3 cr. Prereq.: GEOL 748 or permission of the instructor. Case-history analysis of a wide variety of coastal management problems in urban estuaries and along urban shorelines. Student presentations are based on site studies, interviews, and analysis of the relevant literature.

GEOL 750. Environmental Geology. 2 lec., 3 lab. hr.; 3 cr. Geologic processes, structures, and human modifications of geologic systems that affect the quality of the environment. Laboratory and field examination of geologic problems and introduction to site evaluation and environmental impact analysis techniques.

GEOL 752. Map Interpretation. 1 lec., 4 lab. hr.; 3 cr. Interpretation and analysis of topographic, geologic, and other maps. Uses and interpretation of air photographs and radar and satellite imagery.

GEOL 760. Environmental Geochemistry. 3 hr.; 3 cr. Prereq.: Permission of the instructor. This course explores the fundamental geochemical processes regulating the fate and transport of inorganic and organic pollutants in the environment. Both equilibrium and kinetic descriptions of the processes are applied for laboratory and field studies. The effects of these processes on pollutant bioavailability, remediation, and ecotoxicology are discussed.

GEOL 761. Field Methods in Hydrology. 2 lec., 4 fieldwork./dem. hr.; 3 cr. Offered at locations around New York City and Queens College campus. Prereq.: GEOL 745 or 746. Application of the latest techniques for sampling, monitoring, and evaluating groundwater and surface water systems. Emphasis on drainage basin analysis, aquifer testing, surface infiltration techniques, and hydrologic software application.

GEOL 762. Shallow Subsurface Geophysics. 3 lec., 3 rec./dem./hr.; 3 cr. Prereq. or coreq.: Two semesters of undergraduate calculus and two semesters of undergraduate physics, or equivalents, or permission of instructor. Graduate course will train environmental scientists and geologists to apply geophysics to field techniques and procedures, including seismic, gravity, magnetic, resistivity, and electromagnetic methods.

GEOL 763. Geographic Information Systems and Geologic Mapping. 3 hr.; 3 cr. Prereq. or coreq.: Graduate standing in geology, environmental science, or related discipline. Introduction to the uses of Geographic Information Systems in geologic mapping and environmental fieldwork. Hands-on application of GIS techniques and digital information to prepare base maps, plan field programs, record and analyze data, and prepare professional-quality maps and poster presentations.

GEOL 764. Contaminant Hydrology. 3 hr.; 3 cr. Prereq. or coreq.: GEOL 745. This course provides a largely quantitative understanding of the processes controlling physical transport and biogeochemical reactions that determine contaminant concentrations in groundwater resources. The content will include the sources and different types of groundwater contaminant, the mechanisms that control contaminant behavior, and the most up-to-date technologies for groundwater remediation.

GEOL 765. Surface Processes and Products. 2 lec., 3 lab. hr.; 3 cr. Field trips may be required. The origin of terrestrial and near-shore sediments, sediment sequences, soils, and land forms. Emphasis is placed on the laboratory and field techniques used in areal surficial and shallow subsurface surveys.

GEOL 766. Analytical Techniques in Environmental Geosciences. 2 lec., 4 lab. hr.; 4 cr. Prereq.: CHEM 113 or ENSCI 111 or GEOL 100; CHEM 241 or GEOL 270; and permission of the instructor. The objective of this course is to train students in field and laboratory techniques commonly used to characterize the chemical conditions important for contaminant transport in the environment and to characterize the interaction between organisms and their environment. Various sampling, field and laboratory chemical and biological analytical techniques appropriate for surface water, groundwater, and coastal water are practiced, including those used to assay trace contaminants and microorganisms. Instrumental analysis and molecular techniques are introduced when applicable.

GEOL 767. Field Techniques in Environmental Sciences. 9 lab. hr.; 3 cr. Prereq. or coreq.: GEOL 701, plus two advanced Geology or ENSCI graduate courses. Series of exercises designed to train students to collect

reproducible data in the field, to analyze and interpret the data, and to present their findings in maps, written reports, and supporting illustrations.

GEOL 768. Soils, Wetlands, and Bioremediation. 2 lec., 3 lab. hr.; 3 cr. Prereq. or coreq.: Undergraduate major in biology, chemistry, environmental science, or geology. An introduction to wetland science, with an emphasis on the capacities of wetlands and soil systems for biogeochemical remediation of pollutants. The course will begin with an overview of wetland structure, diversity and function, with particular emphasis on biogeochemical mechanisms of nutrient cycling and pollutant uptake and degradation. Engineering, design, and monitoring necessary for wetlands construction and restoration will be covered. Case studies will be examined of uses of wetland for wastewater, heavy metal, and hydrocarbon treatment in a variety of climate regimes. Scientific, management, policy, and regulatory implications of this approach to pollution control and mitigation will also be explored.

GEOL 770. Principles of Geochemistry. 3 lec. hr.; 3 cr. Chemical processes involved in the development of the Earth and distribution of the elements in the Earth's crust, atmosphere, and oceans.

GEOL 771. Geochemistry. 2 lec., 3 lab. hr.; 3 cr.

GEOL 772. High Temperature Geochemistry. 3 lec. hr.; 3 cr. The principles of thermodynamics are reviewed and applied to geological processes at high temperatures and high or low pressures.

GEOL 773. Low-Temperature Geochemistry. 3 lec. hr.; 3 cr. Chemical equilibria in aqueous systems and at low temperature are studied and applied to weathering, sedimentary processes, and ore formation.

GEOL 780. Marine Geology. 3 lec. hr.; 3 cr. The form and origin of the ocean floor, the distribution of sediments, the structure of the oceanic crust and mantle. Chemical and physical aspects in oceanography are also discussed.

GEOL 788. Cooperative Education Placement. Prereq.: Permission of the School. Experiential learning through placement. Opportunities to test and demonstrate academic learning in an organizational setting. Students receive academic credit as well as a stipend from the placement. No more than 6 credits may be taken in Cooperative Education Placement.
GEOL 788.1. 1 hr.; 1 cr.
GEOL 788.2. 2 hr.; 2 cr.
GEOL 788.3. 3 hr.; 3 cr.
GEOL 788.4. 4 hr.; 4 cr.
GEOL 788.5. 5 hr.; 5 cr.
GEOL 788.6. 6 hr.; 6 cr.

GEOL 790. Seminar. Study of selected aspects of geology. Emphasis is placed on areas not directly covered in the regular courses and on the use of original sources. Course may be repeated once.
GEOL 790.1. 1 hr.; 1 cr.
GEOL 790.2. 2 hr.; 2 cr.
GEOL 790.3. 3 hr.; 3 cr.

GEOL 791. Independent Study. Hr. to be arranged; 1 cr. Prereq.: Permission of the instructor. Advanced study of a subject or laboratory technique under the guidance of a faculty member. The course may be taken only once.

GEOL 792. Independent Study. Hr. to be arranged; 2 cr. Prereq.: Permission of the instructor. Advanced study of a subject or laboratory technique under the guidance of a faculty member. The course may be taken only once.

GEOL 793. Independent Study. Hr. to be arranged; 3 cr. Prereq.: Permission of the instructor. Advanced study of a subject or laboratory technique under the guidance of a faculty member. The course may be taken only once and cannot be taken and used to satisfy the requirements of the Master of Arts degree in geology if either GEOL 791 or 792 is credited toward the degree requirements.

GEOL 795. Thesis Research. Preparation of a thesis under the guidance of a faculty mentor. No more than 3 credits may be counted toward the Master of Arts degree in geology.
GEOL 795.1. 1 hr.; 1 cr.
GEOL 795.2. 2 hr.; 2 cr.
GEOL 795.3. 3 hr.; 3 cr.

GEOL 799. Special Topics in Geology. This course will cover topics of current interest in a particular field in the geologic sciences. Topics may vary. The course may be repeated for credit if the topic is changed.
GEOL 799.1. 1 hr.; 1 cr.
GEOL 799.2. 2 hr.; 2 cr.
GEOL 799.3. 3 hr.; 3 cr.

ENSCI 799. Special Topics in Environmental Sciences. Prereq.; Permission of the School. This course will cover topics of current interest in a specific field of environmental sciences. Topics may vary. The course may be repeated for credit if the topic is different.
ENSCI 799.1. 1 hr.; 1 cr.
ENSCI 799.2. 2 hr.; 2 cr.
ENSCI 799.3. 3 hr.; 3 cr.

School of Education

Dean: Dana Fusco
Division Secretary: Lynne Bellantuono
Director of Assessment and Accreditation: Sonia Rodrigues
Assessment Coordinator: Beata Breg
Chalk and Wire Implementation and Training Coordinator: Alan Gonzalez
Director of Office of Teacher Certification: Amy Lui
Clinical Experience: Edwina Branch-Smith, SEYS; Michael Perrone, EECE
Field Placement Coordinators: Victoria Dell'Era and Evelyn Lee
Diversity Access Support Programs: NYC Men Teach, Nathaniel Smith; Teacher Opportunity Corps, Richard Diaz; Urban Teacher Residency Partnership, Mitchel Proux
Budget Manager: Kimberly McCants
Division Office: Powdermaker Hall 100, 718-997-5220

Department of Elementary & Early Childhood Education

Chair: Bobbie Kabuto

Department of Secondary Education & Youth Services

Chair: Eleanor Armour-Thomas

Department of Educational & Community Programs

Chair: Emilia Lopez

PROGRAMS IN EDUCATION

Queens College offers integrated programs of advanced studies leading to various types of master's degree in Education. Through these programs students enrich their knowledge of a specialized area of education or a related area of human service; and they develop the professional disposition, knowledge, and skills needed for successful career practice. In addition to master's degree programs, Queens College offers special advanced certificate programs for prospective school administrators and supervisors and school psychologists. For individuals with advanced degrees (i.e., master's or above) who desire to use their expertise as teachers in the service of K–12 students or in a related field of education, various certificate programs are listed below.

The **Master of Science in Education** is granted in the following areas:

Art Education, Pre-K to Grade 12
Childhood Education, Grades 1–6
Counselor Education, Pre-K to Grade 12
  With Bilingual Extension
Early Childhood Education, Birth to Grade 2
Educational and Instructional Leadership
Educational Leadership
Elementary Education
  in Bilingual Education, Grades 1–6
English Education, Grades 7–12
Family and Consumer Science, Pre-K to Grade 12
  (Please see Family, Nutrition & Exercise Sciences.)
Foreign Languages Education, Grades 7–12
  French
  Italian
  Spanish
Literacy Education, Birth–Grade 6; Grades 5–12
Mathematics Education, Grades 7–12
Mathematics and Bilingual Education, Grades 7–12
Mathematics and Computer Science, Grades 7–12
Music Education, Pre-K to Grade 12
  (Please see the Aaron Copland School of Music.)
Physical Education, Pre-K to Grade 12
  (Please see Family, Nutrition & Exercise Sciences.)
School Psychology, Pre-K to Grade 12
  With Bilingual Extension
Science Education, Grades 7–12
  Biology
  Chemistry
  Earth Science
  Physics
Social Studies Education, Grades 7–12
Students with Disabilities
  Birth to Grade 2
  Birth to Grade 2 with Bilingual Extension
  Grades 1–6
  Generalist, Grades 7–12 with Classroom Teacher Extension in Biology, Chemistry, Earth Science, English, Mathematics, Physics, Social Studies, and Foreign Languages in Chinese, French, Italian, and Spanish
Teaching Mathematics and Computer Science
  Grades 7–12
Teaching English to Speakers of Other Languages (TESOL), Pre-K to Grade 12
  (Please see Linguistics & Communication Disorders.)

The **Master of Arts in Teaching and/or the Post-Bachelor Certification** is granted in the following areas:

Art Education, Pre-K to Grade 12
Childhood Education, Grades 1–6
Childhood Education & Special Education, Grades 1–6
Critical Languages Education, Grades 7–12
  Arabic
  Hindi
  Korean
  Mandarin
  Russian
  Urdu
Early Childhood Education, Birth to Grade 2
English Education, Grades 7–12
Mathematics Education, Grades 7–12
Science Education, Grades 7–12
  Biology
  Chemistry
  Earth Science
  Physics

Social Studies Education, Grades 7–12
Generalist, Grades 7–12 with Classroom Teacher Extension in Biology, Chemistry, Earth Science, English, Mathematics, Physics, Social Studies, and Foreign Languages in Chinese, French, Italian, and Spanish
Teaching English to Speakers of Other Languages (TESOL), Pre-K to Grade 12
(Please see Linguistics & Communication Disorders)

The **Master of Library Science** is granted in the following area:
Library Media Specialist, Pre-K to Grade 12
(Please see Graduate School of Library & Information Studies.)

The **Master of Arts** is granted in the following area:
Speech Language Pathology, Pre-K to Grade 12
(Please see Linguistics & Communication Disorders.)

The **Master of Science** is granted in the following area:
Mental Health Counseling

Advanced Certification, Post-Master's and Professional Certificate Programs

Bilingual Education Extension, Pre-K to Grade 12
Bilingual Pupil Personnel, Pre-K to Grade 12
Educational Leadership, Pre-K to Grade 12
School Building Leader
School District Leader
Sabbatical Program in Literacy for NYC Teachers
School Psychology, Pre-K to Grade 2
Students with Disabilities
Birth to Grade 2
Grades 1–6
Generalist, Grades 7–12 with Classroom Teacher Extension in Biology, Chemistry, Earth Science, English, Mathematics, Physics, Social Studies and Foreign Languages in Chinese, French, Italian and Spanish
Teaching English to Speakers of Other Languages (TESOL), Pre-K to Grade 12
(Please see Linguistics & Communication Disorders)
Teaching English to Speakers of Other Languages (TESOL) and Elementary Education Bilingual

Admissions and Matriculation

Applicants interested in enrolling in a New York State–registered, graduate-level teacher-preparation program, and/or an educational leadership program are required to:
1. Submit the results of the Graduate Record Examination (GRE), unless exempt.*
2. Have a minimum cumulative undergraduate grade point average of 3.0 or its equivalent;
3. Submit three professional letters of recommendation;
4. Write a personal statement (essay).

Graduate students are allowed to transfer up to 12 credits from other institutions with permission of the appropriate chair. All graduate programs in Education must be completed within three years of the date of the first credit earned, with a one-year extension possible.

**Note:* As of December 13, 2017, a GRE score is no longer required of New York State certified teachers, and educational leaders with graduate degrees, who apply to complete additional graduate-level teacher education, and educational leadership programs.

Diversity Access Support Programs

NYC Men Teach
The CUNY NYC Men Teach program provides academic and financial support to program participants, with the goal of helping them through the certification and hiring process so that they can enter the NYC teaching workforce as effective urban educators. Program participants may receive monthly MetroCards, free certification exam practice tests, and other financial incentives as well as access to a dedicated program counselor who will help with advisement and academic supports. NYC Men Teach participants also convene for a semester-long seminar focused on culturally responsive education. Please contact the NYC Men Teach director for information.

Teacher Opportunity Corps (TOC)
The Teacher Opportunity Corps program provides academic and financial support to diverse individuals who are from groups underrepresented in the field of teaching. Eligible participants are enrolled in Queens College and are entering or are on a track of study to complete a teacher-preparation major for a NYS Initial Teaching Certificate as a first-time teacher. Benefits include a stipend per academic year to help cover tuition or state test costs plus a stipend for books and commuting. TOC participants also benefit from access to a dedicated project-support manager who helps with advisement and academic support. Participants engage in a compulsory internship, totaling 200 hours, working in a public school located in Queens. Students receive monthly professional development workshops. Upon successful initial teacher certification, job-placement support is offered by the Queens South Field Support Center. Please contact the Teacher Opportunity Corps program director for information.

Urban Teacher Residency (UTR) Partnership
In partnership with the New Visions for Public Schools and the NYC Department of Education, Queens College offers a Trans-B alternative teacher certification program for select teaching majors. Students take courses at Queens College toward a master's degree in adolescent education and apply what is learned in real time, while working as a part-time teacher in residency, hired by the NYC DOE to work with students throughout a 24-month degree program. Professors and coaches work together to provide personalized, targeted support as students master the curriculum, instruction, and assessment on the job. UTR residents benefit from a personal teaching mentor, deferred tuition, job-placement assistance, and ongoing support after the residency year. Contact the program coordinator for information.

Awards

The Albert Angrilli Award in School Psychology is an annual award of $200 given to a graduating student in the school psychology program who has demonstrated excellence in academic achievement as well as commitment to the field of school psychology. The recipient is an individual who holds promise for becoming an outstanding school psychologist. For information, please contact the school psychology program coordinator.

The Alice Artzt Mathematics Teaching Award. $1,000 is granted to a graduating student in the Master of Science program in mathematics education. The criteria employed by the committee in choosing the individual are: grade-point average of 3.75 education index; 3.50 college index along with grade of *A* in student teaching (if taken at the college). Demonstration of special traits such as dedication, extra effort, need; a philosophy of teaching reflecting the approach recommended by the National Council of Teachers of Mathematics.

The Ted Bernstein Award is given for outstanding professional promise in School Psychology. Sponsored by the New York Association of School Psychologists in memory of Ted Bernstein, an outstanding school psychologist, it is given to one graduating student from each school psychology program in New York State. This student exemplifies the best qualities of a school psychologist and is committed to improving the lives of children and their families.

The Clarence Bunch Art Education Award. $100 is granted to a graduating undergraduate or graduate student in the Art Education Program. This award is administered in honor of Clarence Bunch, who was a faculty member in the program for many years and chair of the Department of Secondary Education & Youth Services. The criteria in choosing the individual are grade-point average and dedication to arts in education.

The Alison Carson Award, was created to honor her legacy in the area of Applied Behavior Analysis. Each year, a student in the Board Certified Behavior Analyst program of Special Education is selected for this award. This individual not only is a strong student academically, but also has demonstrated his or her commitment to supporting individuals with severe disabilities using the principles and procedures of applied behavior analysis.

Esther and Eugene Cohen Memorial Award. Honoring the parents of Professor Marian C. Fish and Richard A. Cohen, this annual award is given to an exceptional School Psychology student in his or her internship year who demonstrates a special interest in and commitment to working with children, adolescents, and their families who come from culturally and/or linguistically diverse backgrounds.

The Robert Edgar Award in Social Studies. $150 is granted to a graduating undergraduate or graduate student in the social studies secondary education program. This award is administered in honor of Robert Edgar, who was a faculty member in the Department of Secondary Education & Youth Services. The criteria in choosing the individual are grade-point average and a dedication to teaching social studies.

The Alan Hamovitch Award for Excellence in Special Education, $1,000, was established by the late Dr. Hamovitch who was Provost here at Queens College for many years. This award is intended to honor his son, Alan, now an adult, who has significant disabilities and lives in upstate New York. This award is given yearly to a graduate student pursuing a master's degree in special education. The recipient must demonstrate a solid commitment to the field and exemplify extraordinary work in research, teaching, and advocacy by going the extra distance to improve the lives of students with disabilities and their families.

The A. Joan Klein Scholarship is given annually to an undergraduate or graduate woman with an interest in becoming a teacher.

The Solomon Levine Memorial Scholarship is awarded to a full-time undergraduate student who has finished his or her freshman year of college or a graduate student who is pursuing a Master's in Secondary Education. The student must demonstrate identifiable interest in teaching as a secondary education teacher (middle school or junior high school level) in the New York City public school system. The student must be in financial need as demonstrated by the college financial aid office. The award will be given to a full-time student with a minimum college or graduate school GPA of 3.0.

The John Lidstone Award in Education. $500 is granted to an undergraduate or graduate student who plans on returning to the field of education. This award is administered in honor of John Lidstone, who was a faculty member and Dean of Education. Criteria in choosing the individual are grade-point average and dedication to the teaching profession.

The Dr. O. Bernard Liebman Award is given annually to an exceptional school psychology student in her or his internship year who demonstrates dedication and service to the field of school psychology.

The Howard Margolis Social Justice Award was created to honor one graduating candidate in the MSEd Program in Special Education each year who has demonstrated his or her commitment to the rights of students with disabilities through action.

The Sally Steinberg Memorial Award honors her memory and dedication. This award recognizes a student whose leadership and active participation in the School Psychology Program exemplifies the values that Sally Steinberg held dear.

The Rachel T. Weddington Education Award is given to a graduating senior who has demonstrated a commitment to the teaching of inner-city students and who is an outstanding student in both his or her education courses and in his or her major or co-major.

The Corinne J. Weithorn Scholarship in School Psychology. The school psychology program is proud to administer a scholarship in honor of Corinne J. Weithorn, who was a faculty member in the program for two decades and chair of the Department of Educational & Community Programs. Professor Weithorn was strongly supportive of all her students. In particular, she was aware of the difficulties experienced by graduate students who were also mothers of young children. The Weithorn family has established a fund for a scholarship of $6,000 to assist a woman school psychology student who is raising a family while pursuing her education. For information, contact Roslyn P. Ross, Chair, School Psychology Scholarship Committee.

Clinical Opportunities and Field Placement

All students in the Education Division must complete a clinical component to graduate and become certified in their discipline. Each program has specific expectations and requirements based on the specifications established by the New York State Department of Education. The clinical component includes time spent in schools, libraries, or mental-health facilities working with children and professionals in a given field of study. To learn more about the specific requirements for your program, contact the program leadership. Requirements for participation in clinical experiences can include fingerprint clearance, prerequisite courses, course GPAs, and/or permission from the program leadership. For students in the teacher-education programs specifically, there is a field placement office in Powdermaker Hall, Room 135, staffed with coordinators who can contact the clinical professors who work in concert with the programs.

New York State Certification

The Office of Teacher Certification serves as the liaison between teacher-education programs at Queens College and the New York State Education Department's Office of Teaching Initiatives. The certification office assists candidates who have completed their New York State–registered education-preparation program(s) at Queens College to obtain their New York State certificate as a Classroom Teacher and/or Administration and Pupil Personnel Services. New York State periodically changes certification guidelines for teachers and other education professionals. Students and alumni are responsible for staying current with the latest certification guidelines, available online from the NYSED Office of Teaching Initiatives. The Queens College Office of Teacher Certification also maintains information on its official website.

Chalk & Wire

The Professional Education Unit at Queens College has adopted an e-portfolio, web-based assessment management system called *Chalk & Wire,* to ensure that candidates have the knowledge and skills they need to become effective practitioners, and to advance assessment for learning.

Elementary & Early Childhood Education

Chair: Bobbie Kabuto

Dept. Office: Powdermaker Hall 054, 718-997-5302

The Department of Elementary & Early Childhood Education (EECE) offers graduate programs leading to New York State certification in Early Childhood Education (birth–grade 2), Childhood Education (grades 1–6), Literacy Education, and Bilingual Education. These programs prepare teachers to support learning and development within the family, culture, and community contexts of students and schools. EECE programs share a commitment to educational practices that honor linguistic and cultural diversity, and integrate technology and instruction to enhance learning.

Programs for individuals who do not hold New York State teacher certifications in Childhood or Early Childhood Education. The department offers a 36-credit program leading to the Master of Arts in Teaching (MAT) degree for individuals who did not receive undergraduate training to become teachers and/or individuals that are not initially certified in the State of New York in Childhood or Early Childhood Education. MAT students specialize in either Childhood (grades 1 through 6) or Early Childhood (birth through grade 2) Education. Successful completion of the MAT program and additional New York State certification requirements will lead to initial and professional New York State certifications in Elementary or Early Childhood Education. Through our additional certification option (described in a later section), students may opt to be dually certified in both Childhood and Early Childhood Education. This option requires that students spend an additional semester in the department and complete the appropriate New York State certification requirements.

In collaboration with the Department of Educational and Community Programs (ECP), EECE also offers a dual-certificate program leading to the MAT with initial and professional certifications in both Childhood Education (grades 1 through 6) and Special Education.

Programs for individuals that hold New York State teacher certifications in Elementary and/or Early Childhood Education. For individuals that already hold an initial certification in Childhood and/or Early Childhood Education in the State of New York, the department offers the following: (a) a 36-credit program leading to the Master of Science in Education (MSEd) degree in Early Childhood Education (birth through grade 2); (b) a 33-credit Literacy Education program leading to a NYS Professional Certificate as a Literacy Specialist, B–6; and (c) a 36-credit program with specialization in either Children's Literature or Language and Literacy.

Program with an option to complete fully online. For individuals that hold an initial or professional New York State base teacher certification, the department offers a 15-credit Bilingual Extension program, which may be completed fully online. Online courses are typically asynchronous.

Courses are generally offered in the late afternoon and evening. Part-time students normally register for 6 credits each semester. A typical full-time graduate program would be 12 credits each semester and 3 credits in the summer, with a potential option to complete an additional course or two during the Winter Session.

Important note: To conform to changing NYS regulations and the requirements of various accreditation agencies, EECE graduate programs may undergo revisions that are not necessarily reflected in this *Bulletin.* Each semester the department holds several informational sessions about NYS certification and program requirements. Students considering graduate study in elementary and early childhood are encouraged to attend. Contact the department (718-997-5302) for the schedule.

Departmental Standards for All Programs

Responsible training for work in the areas of elementary and early childhood education requires that candidates, in addition to meeting their program's academic requirements, also demonstrate appropriate professional behavior in all classroom, field, and professional settings. Such behavior includes, but is not limited to, interpersonal skills, professional judgment, ethical conduct, and academic integrity.

In addition, candidates are expected to demonstrate oral and written communication proficiency, sensitivity to student issues, including those related to diverse backgrounds, practices, and beliefs, as well as the effective management of personal stress or adjustment difficulties. Candidates who fail to meet these personal and professional standards will be subject to review by their program faculty and/or the EECE Student Review Committee, and sanctions, such as dismissal from the program, may result. Students have the right to appeal, and should familiarize themselves with guidelines set forth in this *Graduate Bulletin*.

TABLE 1. Coursework for New York State Professional Certificate, Early Childhood Education, B–2*

Note: The Early Childhood Education, B–2 professional certificate program is designed for students with an initial certificate in childhood education, (1–6) or early childhood (B–2). Students are required to have a field placement in the new certificate area. For students entering the program with NYS provisional certification in Pre-K–6 (this certificate was awarded through February 2, 2004), EECE 730 is not required. Instead, students take an additional course within their specialization.

EECE 703. Classroom Realities in Diverse Settings	3 cr.
EECE 710. Ecological Perspectives on Development: The Early Years	3 cr.
EECE 721. Professional Issues in Early Childhood Education	3 cr.
EECE 722. Language Learning in Cross-Cultural Perspectives	3 cr.
EECE 724. Curriculum and Environmental Design for Early Childhood, Part I	3 cr.
EECE 725. Curriculum and Environmental Design for Early Childhood, Part II	3 cr.
EECE 728. Integrating Expressive Arts into the Early Childhood Curriculum	3 cr.
EECE 737. Infants and Toddlers: Curriculum and Teaching	3 cr.
EECE 780. Introduction to Educational Research	3 cr.
EECE 781. Inquiry into Teaching: Thesis	3 cr.
Elective (3 credits)	
See advisor for recommendations.	3 cr.
EECE 730. Practicum	3 cr.
Total	**36 cr.**

*These curriculum requirements are currently under revision.

TABLE 2. Coursework for New York State Professional Certificate Childhood Education, Grades 1–6

Students select one of the following 3-credit courses:	
EECE 702. Social Foundations of Education	
EECE 704. Major Contemporary Issues in Education	
EECE 705. School and Community Relations	3 cr.
Students select one of the following 3-credit courses:	
EECE 710. Ecological Perspectives on Development: The Early Years	
EECE 711. Ecological Perspectives on Development: The Childhood Years	3 cr.
Students take all of the following 3-credit courses:	
EECE 703. Classroom Realities in Diverse Settings	3 cr.
EECE 780. Introduction to Educational Research	3 cr.
EECE 782. Teacher as Researcher	3 cr.
EECE 796. Exploring Problems in History Through Literature	3 cr.
EECE 797. Queens County as a Learning Lab	3 cr.
EECE 798. Reading and Writing for Learning in Science	3 cr.
EECE 799. Exploring Mathematical Ideas Through Literature	3 cr.
Students are required to complete 12 credits in a specialty area:	
Two required courses	6 cr.
Two electives	6 cr.
Total	**39 cr.**

All students are required to complete a specialization in a high priority area. The specializations are described on pages 86–91.

FACULTY

Kabuto, Bobbie, Chair, *Associate Professor,* PhD 2006, Hofstra University: reading, language, and cognition

Akiba, Daisuke, *Associate Professor,* PhD 2000, Brown University: interdisciplinary studies in experimental psychology and child development

Bushnell Greiner, Mary, *Associate Professor,* PhD 1998, University of Virginia: social foundations of education, cultural anthropology

Cooper, Patricia M., *Associate Professor,* PhD 2000, Emory University: early childhood education

Fraboni, Michelle, *Assistant Professor,* PhD 2019, Teachers College, Columbia University: instructional technology and media

Kesler, Theodore B., *Associate Professor,* EdD 2008, Teachers College, Columbia University: curriculum specialist, language arts, and children's literature

Li, Harriet, *Lecturer,* MSEd 2003, Queens College: language and literacy development

Lipnevich, Anastasiya A., *Professor*, PhD 2007, Rutgers University: educational psychology, testing and assessment

Manning, Karla, *Lecturer,* PhD 2017, University of Wisconsin-Madison: curriculum and instruction

Ossa Parra, Marcela, *Assistant Professor,* PhD, Boston College: curriculum and instruction

Perrone, Michael, *Clinical Professor,* EdD 2010, Teachers College, Columbia University: educational assessment

Saint-Hilaire, Line, *Lecturer,* PhD 2006, City University of New York: biochemistry

Shady, Ashraf, *Associate Professor,* PhD 2008, City University of New York: science education

Shin, Sunghee, *Associate Professor,* EdD 2006, Teachers College, Columbia University: instructional technology and media

Steuerwalt, Karen M., *Lecturer,* MA 1990, Adelphi University: early childhood and elementary education

Swell, Lila, *Associate Professor,* EdD 1964, Teachers College, Columbia University: marriage and family studies

TABLE 3a. 33 Credits of Coursework for MSEd in Literacy Education and NYS Professional Certificate for Literacy Specialist B–6

Foundations, Theory, and Research (18 credits)

EECE 731. Teaching Beginning Reading and Writing	3 cr.
EECE 745. The Reading-Writing Connection	3 cr.
EECE 746. Nonfiction for Children	3 cr.
EECE 773. Families, Stories, and Literacy	3 cr.
EECE 780. Introduction to Educational Research	3 cr.
EECE 782. Teacher as Researcher	3 cr.

Professional Specialization (15 credits)

EECE 764. Learning the Content Areas in Multilingual Settings: Teaching and Assessment	3 cr.
EECE 801. The Role of the Literacy Specialist	3 cr.
EECE 803. Assessment and Instruction I	3 cr.
EECE 804. Assessment and Instruction II	3 cr.
EECE 805. Practicum	3 cr.

TABLE 3b. 39 Credits of Coursework for MSEd in Literacy Education and NYS Professional Certificate for Literacy Specialist B–6

Foundations, Theory, and Research (21 credits)

EECE 722. Language Learning in Cross-Cultural Perspectives	3 cr.
EECE 731. Teaching Beginning Reading and Writing	3 cr.
EECE 746. Nonfiction for Children	3 cr.
EECE 773. Families, Stories, and Literacy	3 cr.
EECE 780. Introduction to Educational Research	3 cr.
EECE 787. Research in Language and Literacy	3 cr.
EECE 782. Teacher as Researcher	3 cr.

Professional Specialization (18 credits)

EECE 764. Learning the Content Areas in Multilingual Settings: Teaching and Assessment	3 cr.
EECE 801. The Role of the Literacy Specialist	3 cr.
EECE 802. Teaching Strategies for the Literacy Specialist	3 cr.
EECE 803. Assessment and Instruction I	3 cr.
EECE 804. Assessment and Instruction II	3 cr.
EECE 805. Practicum	3 cr.

Velasco, Patricia, *Associate Professor,* EdD 1989, Harvard University: bilingual education, indigenous education

Wagner, Christopher, *Assistant Professor,* PhD 2016, Boston College: early childhood education, bilingual literacy

Zarnowski, Myra S., *Professor,* EdD 1983, University of Georgia: language arts, children's literature

Admissions Requirements and Prerequisites for MSEd Programs

Students are required to hold a bachelor's degree with a minimum cumulative GPA of 3.0, and a NYS initial certificate in childhood education, (grades 1 through 6), or early childhood (birth through grade 2) or substantial equivalent. Applicants may be required to provide writing samples on site. Additional application requirements are specified on the application form. As a rule, applicants may enter the program only as matriculating students. The department holds several workshops about program requirements and application procedures; interested students are encouraged to contact the department (718-997-5302) for application deadlines and further information.

Once students are accepted, they will be invited to an orientation meeting.

Master of Science in Education with Specialization in Literacy Education, Birth–Grade 6

EECE offers an MSEd program in Literacy Education leading to a NYS Professional Certificate as a Literacy Specialist, B–6. This competitive professional program requires a GPA of at least a 3.0 and an Initial Certificate as a classroom teacher as a part of the application.

Students beginning the program fall of 2015 and thereafter will take 33 credits of coursework that include foundations, diversity, pedagogy, content areas studies, literature studies, and specifically designed courses in the role of the literacy specialist, assessment and instruction, and a semester-long reading practicum with children.

Required coursework for the 33 credits of coursework is summarized in Table 3a. All other students will complete 39 credits of coursework. Table 3b summarizes the 39 credits of coursework. Because the students in this program are teachers, there is a strong emphasis on research with issues and a project related to literacy learning.

Master of Science in Education with Specialization in Language and Literacy

In this specialty, teachers examine how language develops in young children, the relations between language and cognition, and the sociocultural factors that influence language learning. Unlike the program above, major themes in the courses include the development of literacy as a continuum, language diversity, language assessment, and the teaching strategies that foster the development of reading and writing. Elective courses may be selected from other specializations with the Advisor's approval.

Master of Science in Education (MSEd), Early Childhood Education, Birth–Grade 2

The MSEd in Early Childhood Education, B–2, is designed for students with initial certificates in Childhood Education, Grades 1–6, who are interested in adding a second certificate area. The program presents an integrated approach to curriculum and environmental design. The program acknowledges the unique needs and learning patterns of very young children as the foundation for shaping the content of courses for professionals in early childhood education. Required coursework is summarized in Table 1. Students are required to have a minimum of 50 hours of course-related field experience prior to the practicum.

Master of Science in Education (MSEd), Childhood Education, Grades 1–6

(On moratorium; currently not accepting students)

The MSEd in Childhood Education, Grades 1–6, is designed for students with initial certificates in Childhood

Education, Grades 1–6, or Early Childhood, B–2, who are interested in pursuing advanced pedagogical study within their certificate area. It emphasizes an inquiry-based approach to the study of learning and teaching. In addition to fulfilling core course requirements, students in this program complete a four-course specialization in one of seven areas: Children's Literature, Education for Diverse Learners, Family and Community Studies, Instructional Technologies, Language and Literacy, Mathematics Education, or Science Education (specializations are described below). Students also are required to complete four interdisciplinary courses that have been developed in collaboration with the liberal arts and sciences departments. In some instances, the interdisciplinary courses also fulfill requirements for some of the specializations. Required coursework is summarized in Table 2. Courses that lead to the Bilingual Extension may be taken as part of this program. Students interested in obtaining the Bilingual Extension should contact Dr. Patricia Velasco (718-997-5318).

Master of Arts in Teaching (MAT) Early Childhood Education, Birth–Grade 2

Master of Arts in Teaching (MAT) Childhood Education, Grades 1–6

Master of Arts in Teaching (MAT) Dual Certification in Childhood Education, Grades 1–6, and Special Education

The MAT programs are designed for students with undergraduate degrees in fields other than education who are interested in entering the teaching profession. Applicants must not hold NYS certifications in Childhood (Grades 1–6) or Early Childhood (Birth–Grade 2) education. The programs stress reflective teaching and the proactive role of the teacher in enhancing educational quality. The MAT programs offer students the option of earning NYS initial certification in Early Childhood Education (Birth–2), Childhood Education (Grades 1–6), and Dual Certification in Childhood Education (Grades 1–6) and Special Education. The programs introduce students incrementally to include the study of pedagogy, curriculum and standards, and assessment, with principles of field practice integrated into the coursework at each level. Students are required to take Student Teaching, with two placements as mandated by NYS. With faculty guidance, each student compiles a teaching portfolio that documents the development of reflective practice and self-assessment, and highlights the connections between course and field experiences within the program.

The course requirements for the MAT programs cover educational foundations, development and learning processes, curriculum and pedagogy, and field applications. Students complete a minimum 100 hours of course-related field experiences prior to Student Teaching.

Upon completion of 36 credits of coursework, Student Teaching, and additional requirements, students receive a MAT degree. Once students complete the MAT degree as well as NYS-approved mandated seminars in alcohol and drug abuse, child abuse, school violence, school safety, and the Dignity for All Students Act, and pass NYS exams (EAS, CST, and EdPTA), they are eligible to apply for NYS initial certification in their major area. The course sequences for the Early Childhood Education (Birth–2) and Childhood Education (Grades 1–6) initial certificates are summarized in Tables 4a and 5, respectively. The course sequence for Dual Certification in Childhood Education (Grades 1–6) and Special Education (Grades 1–6) is summarized in Table 6.

Admissions Requirements and Prerequisites for MAT Program

Students are required to hold a bachelor's degree with a cumulative GPA of at least 3.0, and to have taken a concentration of no fewer than 30 credits in one of the liberal arts or sciences subject areas during their undergraduate programs. Vocational-related degrees, such as business administration (including but not limited to advertising, management, accounting, hospitality, and fashion merchandising), broadcasting, fashion design, and nursing do not satisfy this New York State requirement. However, applicants with such degrees may satisfy this requirement by completing 30 semester credits in one liberal arts or science field. Submission of test results for the GRE are required by the State of New York. Applicants may be required to provide writing samples on site and may be called in for an interview if: (a) their application essay is weak but other credentials are competitive, or (b) their application is on the cusp of being accepted into the program. Students also must have completed two semesters of study in a foreign language, as well as courses in the general liberal arts and sciences in their undergraduate program that include the areas summarized in Table 2.

Note: Applicants who provide proof of scoring 85 or higher on a high school foreign language Regents exam will meet the foreign language requirement. Applicants may provide evidence of Advanced Placement credits or equivalent experiences to demonstrate compliance with any of the required New York State Learning Standards.

Additional coursework in the liberal arts may be required to comply with NYS Learning Standards for Elementary School Teachers; students should check with the department at time of application. Students who lack some of these foundation courses but meet other admissions requirements may be admitted to the program. Applicants may enter the program only as matriculating students. Applicants are accepted for fall admission only. Although many program courses are offered late afternoons and evenings, students must plan for one semester of full-time daytime attendance for student teaching.

The department holds several workshops about program requirements and application procedures; interested students are encouraged to contact the department (718-997-5302) for application deadlines and further information. Once students are accepted, they will be invited to an orientation meeting. Students can schedule a meeting with an advisor to review the student's background and interests and assist with course selection and program planning.

In order to continue in the program, students must maintain a *B* average and cannot receive a grade lower than

B– in any course. Students who receive a grade lower than *B*– in any course are required to meet with an advisor or the department's review committee for advisement. Students must also display appropriate professional behavior, not only in their field settings, but also in interacting with the faculty, staff, and peers.

Additional Certification in Early Childhood (Birth through Grade 2) or Childhood (Grades 1 through 6) Education

The EECE Department also offers four-course additional initial certification programs in the spring (full-time) or spring and fall (part-time) semesters after completion of the MAT: one in Early Childhood Education (birth through grade 2) for students holding initial certification in Childhood Education (grades 1 through 6); one in Childhood Education (grades 1 through 6) for students holding initial certification in Early Childhood Education (birth through grade 2). The course sequences for the Early Childhood Additional Certificate are summarized in Table 4b; the course sequence for the Childhood Additional Certificate is summarized in Table 5b.

Admission requirements for the Additional Certification programs include: Initial certification in Early Childhood (B–2), Childhood (Grades 1–6), or Middle Childhood (Grades 5–9); a Master's Degree in Education; Official Transcripts from Graduate Education Program; Minimum 3.0 Graduate GPA; and GRE Score. In order to continue in the program, students must maintain a *B* average and cannot receive a grade lower than *B*– in any course.

Extension in Bilingual Education

The New York State Extension in Bilingual Education program is designed for NYSED certified teachers who speak a language other than English. Prospective bilingual teachers who follow this program will be qualified to work in dual bilingual and transitional bilingual programs upon completion of the 15-credit program.

The courses required in the Bilingual Extension are listed in Table 7.

TABLE 4a. Master of Arts in Teaching

Sequence of Coursework Leading to New York State Initial Certificate, Early Childhood Education, B–2*

Option 1. Full Time*

Fall Semester 1 (12 credits)
EECE 520. Language Development and Emergent Literacy 3 cr.
EECE 702. Social Foundations of Education 3 cr.
EECE 710. Ecological Perspectives on Development: The Early Years 3 cr.
EECE 737. Infants and Toddlers: Curriculum and Teaching 3 cr.

Spring Semester 1 (12 credits)
EECE 525. Language and Literacy Learning in the Elementary Years 3 cr.
EECE 724. Curriculum and Environmental Design for Early Childhood, Part I 3 cr.
EECE 750. Modern Learning Technologies 3 cr.
ECPSE 550. Foundations of Special Education 3 cr.

Summer Semester 1 (3 credits)
EECE 762. Schooling in a Diverse Society 3 cr.

Fall Semester 2 (12 credits)
EECE 725. Curriculum and Environmental Design for Early Childhood, Part II 3 cr.
EECE 800.3. Classroom-based Assessment and Research in Early Childhood: Part II 3 cr.
EECE 565. Student Teaching 3 cr.

Option 2. Part Time*

Fall Semester 1 (6 credits)
EECE 710. Ecological Perspectives on Development: The Early Years 3 cr.
EECE 737. Infants and Toddlers: Curriculum and Teaching 3 cr.

Spring Semester 1 (6 credits)
EECE 724. Curriculum and Environmental Design for Early Childhood, Part I 3 cr.
ECPSE 550. Foundations of Special Education 3 cr.

Fall Semester 2 (6 credits)
EECE 520. Language Development and Emergent Literacy 3 cr.
EECE 702. Social Foundations of Education 3 cr.

Spring Semester 2 (6 credits)
EECE 525. Language and Literacy Learning in the Elementary Years 3 cr.
EECE 750. Modern Learning Technologies 3 cr.

Summer Semester 2 (6 credits)
EECE 762. Schooling in a Diverse Society 3 cr.

Fall Semester 3 (6 credits)
EECE 725. Curriculum and Environmental Design for Early Childhood, Part II 3 cr.
EECE 565. Student Teaching 3 cr.
EECE 800.3. Classroom-based Assessment and Research in Early Childhood: Part II 3 cr.

Total 36 cr.

Upon completion of these 36 credits, students receive the degree of Master of Arts of Teaching. Contingent upon passing NYS qualifying exams (EAS, CST, EdTPA); completing state-approved training seminars on alcohol and drug abuse, child abuse; school violence; school safety, and the Dignity for All Students Act (DASA); and completing the 36-credit B–2 MAT program, students are eligible to apply for the NYS Initial Certificate in Early Childhood Education, B–2.

*Select classes may be offered in Winter or Summer Sessions.

Content Area Literacy Across the Curriculum: A Sabbatical Program

The Elementary and Early Childhood Education Department's Sabbatical Program consists of five three-credit courses with one credit of independent study, for a total of 16 credits Completion of the course of study will result in a Certificate of Advanced Study. This program is an addition to the Queens College Elementary and Early *Childhood Education Department's existing 15-credit Post-master's Certificate Program.

The purpose of this program is to create an integrated course of study in the Queens College Elementary and Early Childhood Education Department that is only available to teachers in the New York City schools, who

TABLE 4b. Additional Certificate

Sequence of Coursework Leading to New York State Additional Certificate, Early Childhood Education, B–2

Option 1. Full Time*

Fall Semester 1 (12 credits)

EECE 520. Language Development and Emergent Literacy	3 cr.
EECE 545. Social Studies in the Elementary School	3 cr.
EECE 702. Social Foundations of Education	3 cr.
EECE 711. Ecological Perspectives on Development: The Childhood Years	3 cr.

Spring Semester 1 (12 credits)

EECE 525. Language and Literacy Learning in the Elementary Years	3 cr.
EECE 550. Mathematics in the Elementary School	3 cr.
EECE 555. Science in the Elementary School	3 cr.
ECPSE 550. Foundations of Special Education	3 cr.

Summer Semester 2 (3 credits)

EECE 762. Schooling in a Diverse Society.	3 cr.

Fall Semester 2 (9 credits)

EECE 555. Science in the Elementary School	3 cr.
EECE 566. Student Teaching	3 cr.
EECE 800.3. Classroom-Based Assessments and Research in Early Childhood	3 cr.

Option 2. Part Time*

Fall Semester 1 (6 credits)

EECE 702. Social Foundations of Education	3 cr.
EECE 711. Ecological Perspectives on Development: The Childhood Years	3 cr.

Spring Semester 1 (6 credits)

EECE 550. Mathematics in the Elementary School	3 cr.
ECPSE 550. Foundations of Special Education	3 cr.

Fall Semester 2 (6 credits)

EECE 520. Language Development and Emergent Literacy	3 cr.
EECE 545. Social Studies in the Elementary School	3 cr.

Spring Semester 2 (6 credits)

EECE 525. Language and Literacy Learning in the Elementary Years	3 cr.
EECE 555. Science in the Elementary School	3 cr.

Summer Semester 2 (3 credits)

EECE 762. Schooling in a Diverse Society.	3 cr.

Fall Semester 3 (9 credits)

EECE 566. Student Teaching	3 cr.
EECE 750. Modern Learning Technologies	3 cr.
EECE 800.3. Classroom-Based Assessments and Research in Early Childhood	3 cr.
Total	**36 cr.**

Upon completion of these 36 credits, students receive the degree of Master of Arts in Teaching. Contingent upon passing NYS qualifying exams (EAS, CST, EdTPA); completing state-approved training seminars on alcohol and drug abuse; child abuse; school violence; school safety; and the Dignity for All Students Act (DASA); and completing the 36-credit 1–6 MAT program, students are eligible to apply for the NYS Initial Certificate in Childhood Education, 1–6.

*Select courses may be offered in the Winter or Summer Sessions.

have been awarded a sabbatical for the academic year. This program addresses challenges faced by elementary school teachers to provide rigorous, standards-based instruction across the content areas of science, math and social studies. Emphasis is placed on aligning content in these subject areas with national standards (Next Generation Learning Standards in ELA and Mathematics, Next Generation Science Standards, The College, Career, and Civic (C3) Framework for Social Studies State Standards) and state and New York City scope. The emphasis is on bringing a disciplinary perspective into the classroom, enabling teachers and students to think like a scientist, mathematician, and historian. Drawing on the Elementary and Early Childhood Education Department's long-term commitment to literacy instruction and children's literature, courses also introduce quality fiction and nonfiction literature as well as strategies for using oral and written language to learn. All courses are designed to provide teachers with up-to-date knowledge in elementary education and practical strategies for applying this knowledge.

Admissions Requirements

To be admitted to the sabbatical program, the student must be a New York City Board of Education appointed teacher in the elementary grades, who is applying for sabbatical leave. The student must have an earned master's degree and teacher certification. Although no specific GPA is required for admission, once in the program students will be expected to maintain a *B* average.

POST-MASTER'S PROGRAMS LEADING TO CERTIFICATE OF ADVANCED STUDY

(*On moratorium; currently not accepting students*)

For students who have completed their master's degree and are looking for additional courses in elementary and early childhood education, the department offers 15-credit specialized programs that lead to a Certificate of Advanced Study in a specific field. The specific fields are: Early Childhood Education (Birth to Second Grade), Language Minority Education, Child Developmental Psychology, Science Education, Social Studies Education, Math Education, and Children's Literature. The department also offers an 18-credit post-master's program in Literacy Education, Birth–Grade 6. To be admitted to any of these post-master's programs, the student must have earned a master's degree and teacher certification. There is no GPA requirement. However, once in the program students are expected to maintain a *B* average. Interested students should contact the department office (718-997-5302).

COURSES IN ELEMENTARY AND EARLY CHILDHOOD EDUCATION

EECE 520. Language Development and Emergent Literacy. 3 hr. plus fieldwork; 3 cr. Required course for B–2 and 1–6 MAT students; open only to MAT students. Students examine how language develops in young children, the relation between language and cognition, and the sociocultural factors that impinge upon language learning. Among the major topics are: language assessment, language diversity, and emergent literacy. Emphasized throughout are teaching strategies and

classroom experiences that foster language development in the young child.

EECE 525. Language and Literacy Learning in the Elementary Years. 3 hr. plus fieldwork; 3 cr. Prereq.: EECE 520. Required course for B–2 and 1–6 MAT students; open only to MAT students. Students build upon earlier studies of emergent literacy to plan effective programs in diverse, inclusive elementary settings. Students develop knowledge of theories of literacy development, design and implement effective strategies for teaching reading and writing in inclusive elementary settings, and examine children's literature to be used across the curriculum. Prospective teachers implement strategies in the field and analyze their teaching with the support of the teacher-research community.

TABLE 5a. Master of Arts in Teaching: Childhood Education, Grades 1–6*

This program is for students who do not possess a teaching license. Sequence of coursework leading to New York State Initial and Professional Certification in Childhood Education, Grades 1–6.

Option 1. Full Time*

Fall Semester 1 (12 credits)

EECE 520. Language Development and Emergent Literacy	3 cr.
EECE 545. Social Studies in the Elementary School	3 cr.
EECE 702. Social Foundations of Education	3 cr.
EECE 711. Ecological Perspectives on Development: The Childhood Years	3 cr.

Spring Semester 1 (12 credits)

EECE 525. Language and Literacy Learning in the Elementary Years	3 cr.
EECE 550. Mathematics in the Elementary School	3 cr.
EECE 555. Science in the Elementary School	3 cr.
ECPSE 550. Foundations of Special Education	3 cr.

Summer Semester 2 (3 credits)

EECE 762. Schooling in a Diverse Society.	3 cr.

Fall Semester 2 (9 credits)

EECE 566. Student Teaching	3 cr.
EECE 707. Classroom-Based Assessments and Research in Childhood Education	3 cr.
EECE 750. Modern Learning Technologies	3 cr.

Option 2. Part Time*

Fall Semester 1 (6 credits)

EECE 702. Social Foundations of Education	3 cr.
EECE 711. Ecological Perspectives on Development: The Childhood Years	3 cr.

Spring Semester 1 (6 credits)

EECE 550. Mathematics in the Elementary School	3 cr.
ECPSE 550. Foundations of Special Education	3 cr.

Fall Semester 2 (6 credits)

EECE 520. Language Development and Emergent Literacy	3 cr.
EECE 545. Social Studies in the Elementary School	3 cr.

Spring Semester 2 (6 credits)

EECE 525. Language and Literacy Learning in the Elementary Years	3 cr.
EECE 555. Science in the Elementary School	3 cr.

Summer Semester 2 (3 credits)

EECE 762. Schooling in a Diverse Society	3 cr.

Fall Semester 3 (9 credits)

EECE 566. Student Teaching	3 cr.
EECE 707. Classroom-Based Assessments and Research in Childhood Education	3 cr.
EECE 750. Modern Learning Technologies	3 cr.
Total	**36 cr.**

Upon completion of these 36 credits, students receive the degree of Master of Arts in Teaching. Contingent upon passing NYS qualifying exams (EAS, CST, EdTPA); completing state-approved training seminars on alcohol and drug abuse; child abuse; school violence; school safety; and the Dignity for All Students Act (DASA); and completing the 36-credit 1–6 MAT program, students are eligible to apply for the NYS Initial Certificate in Childhood Education, 1–6.

*Select courses may be offered in the Winter or Summer sessions.

TABLE 5b. Additional Certificate Sequence of Coursework Leading to New York State Additional Certificate, Childhood Education, 1–6

EECE 545. Social Studies in the Elementary School Years	3 cr.
EECE 550. Mathematics in the Elementary School Years	3 cr.
EECE Elective: Various course selections may include:	
EECE 555. Science in the Elementary School Years	3 cr.
EECE 567. Practicum in Childhood Education	3 cr.

EECE 533. Advanced Methods in Teaching Elementary Art, Pre-K–6. 3 hr.; 3 cr. Prereq.: SEYS 536, 552; coreq.: EECE 711. Advanced methods in teaching art, Pre-K–6, with hands-on experiences in various media.

EECE 545. Social Studies in the Elementary School. 3 hr. plus fieldwork; 3 cr. Required course for MAT, Grades 1–6 students; open only to students in this program. Preservice elementary teachers examine the teaching of social studies in the primary and intermediate grades. Emphasis is on the theoretical basis underlying the teaching of social studies and its application in the elementary classroom. Topics include the social studies disciplines, methodologies, and applications in the classroom.

EECE 550. Mathematics in the Elementary School. 3 hr. plus fieldwork; 3 cr. Required course for MAT, Grades 1–6 students; open only to students in this program. This course examines key concepts, strategies, and skills in the elementary school curriculum. Topics include estimation and mental computation, place value, development of algorithms, algebraic reasoning, fractions and decimals, probability and data analysis, and measurement and geometric concepts. There will be an emphasis on problem-solving, reasoning and proof, communication, and representation of ideas. The course also addresses state and national standards in elementary school mathematics, and discusses uses of technology in the classroom.

EECE 555. Science in the Elementary School. 3 hr. plus fieldwork; 3 cr. Required course for MAT, Grades 1–6 students; open only to students in this program. Students learn about state and national standards in

TABLE 6. Master of Arts in Teaching: Dual Certification Program in Childhood Education (Grades 1–6) and Special Education Sequence of Coursework Leading to New York State Initial Certificate in Childhood Education, Grades 1–6 and Childhood Special Education, Grades 1–6

Phase 1—Pedagogical Foundations (21 credits)	
EECE 702. Social Foundations of Education	3 cr.
ECPSE 700. Foundations of Special Education	3 cr.
EECE 711. Ecological Perspectives on Development: The Childhood Years	3 cr.
ECPSE 701. Introduction to Assessment in Early Childhood Special Education	3 cr.
EECE 520. Language Development and Emergent Literacy	3 cr.
EECE 525. Language and Literacy Learning in the Elementary Years	3 cr.
ECPSE 720. Trends and Issues in the Education of Learners with Severe Disabilities	3 cr.
Phase 2—Pedagogical Core (21 credits)	
EECE 545. Social Studies in the Elementary School	3 cr.
EECE 550. Mathematics in the Elementary School	3 cr.
EECE 555. Science in the Elementary School	3 cr.
ECPSE 710. Curriculum and Instruction for Childhood Special Education	3 cr.
ECPSE 742. Foundations of Assistive and Instructional Technology	3 cr.
ECPSE 708. Collaboration with Families and School-Based Teams	3 cr.
ECPSE 722. Applied Behavior Analysis and Positive Behavior Supports	3 cr.
Phase 3—Student Teaching (12 credits)	
EECE 566. Student Teaching	6 cr.
ECPSE 725. Internship in Severe Disabilities	6 cr.
Phase 4—Research in Evidence-Based Practice (6 credits)	
Select a two-course sequence in research in special education or elementary education	
ECPSE 746. Research in Special Education ECPSE 748. Advanced Research in Special Education OR EECE 780. Introduction to Educational Research EECE 781. Inquiry into Teaching: Thesis	6 cr.
Total	**60 cr.**

elementary school science. They relate current research to the effective teaching of science.

EECE 565. Student Teaching. 3 hr. plus participation; 6 cr. Prereq.: Faculty permission, 100 hours in schools. Eleven weeks of supervised observation and student teaching at two of the three certificate grade levels: Pre-Kindergarten, or Kindergarten and Grades 1–2.

EECE 566. Student Teaching. 3 hr. plus participation; 3 cr. Prereq.: .EECE 520, 525, 545, 550, 555, 750, a course in Ecology of Childhood (EECE 702, 704, or 705), a course

TABLE 7. Courses in Bilingual Extension (15 credits)

EECE 761. Foundations of Bilingual Education and Bilingualism
EECE 763 *or* 791.3. Developing Language and Literacy in the Home Language
EECE 764. Instruction and Assessment Across the Content Areas for Bilingual Learners
EECE 766. Educational Linguistics and Psycholinguistics
EECE 767. Pedagogical Practices in the Multilingual Classroom

TABLE 8. Courses in Sabbatical Program (16 credits)

Fall Courses	Credits
EECE 797 Queens County as a Learning Lab	3
EECE 796 Exploring Problems in History through Literature	3
EECE 750 Modern Learning Technologies	3
Total	**9**
Spring Courses	Credits
EECE 798 Reading & Writing for Learning in Science	3
EECE 799 Exploring Mathematical Ideas through Literature	3
EECE 806 Content Area Literacy across the Curriculum	
Capstone Course	1
Total	**7**

CHART 1 Liberal Arts and Sciences Requirements for Students Entering the MAT Program

Learning Standards/Coursework

English Language Arts
Successful completion* of two courses** selected from the following areas: introductory College English; composition/writing; English literature; critical analysis (e.g., comparative literature); and journalism (limited to written and spoken media).

The Arts
Successful completion* of one course** selected from the following areas: performing arts (e.g., music, drama, dance, etc.; both performance- and theory-based courses are acceptable); creative arts (e.g., drawing, sculpture, and pottery); art history; art theory; or art appreciation.

Social Sciences
Successful completion* of one course** in U.S. history and one additional course selected from the areas typically classified as social/behavioral sciences in U.S. colleges, such as the following: anthropology/archaeology/cultural studies; behavioral sciences; American studies; economics; epidemiology; geography; history; child/human development; philosophy; political science/diplomacy/government studies; sociology; theology; women's/gender studies; and most areas of psychology (except biopsychology, neuroscience, and psychopharmacology, which fall under Science below).

Mathematics, Science, and Technology
Successful completion* of four courses** selected from the areas typically classified as mathematics, natural sciences, or technology in U.S. colleges, as follows: astronomy; biology; biochemistry; chemistry; earth science/geology; ecology (only if hard-science focused); neuroscience; biopsychology; physics; psychopharmacology; zoology; and computer science. Mathematics and applied mathematics offered by a mathematics department.

Note: One of these courses must be a science course with a laboratory component. A limited number of research methods/experimental design/statistical courses in social behavioral sciences are acceptable, but human nutrition is **not** acceptable.

Foreign Languages
Successful completion* of two semesters in college or a passing score on the NYS High School Regents in Foreign Language (must provide high school transcript). American Sign Language is acceptable. Alternatively, an applicant may furnish a letter from an instructor of the language in question at a regionally accredited institution, indicating that the applicant has the fluency equivalent to at least a *C* in the second-semester course in that language.

*A grade of *C* or higher constitutes "successful completion."
**A course must carry at least two semester credits toward the fulfillment of this set of requirements.

in Educating All Students (EECE 703 or 762), a course in Educating Students with Special Needs (ECPSE 550), and a course in Ecological Perspectives on Development (EECE 710, 711, 717); faculty permission, 100 hours in schools. Twelve weeks of supervised observation and student teaching at two grade levels: Grades 1–3 and Grades 4–6.

EECE 567. Practicum in Elementary Education. 3 hr.; 3 cr. Prereq.: EECE 545, EECE 550. This course is required and reserved exclusively for all candidates in the additional initial certification program in childhood education (grades 1–6). This course has 30 hours of mandatory field experience in grades 3 to 6, plus 7 two-hr. seminar sessions that meet every two weeks. Students will have targeted assignments in a grade 3 class for the first six weeks of the semester, then six weeks in a grade 4, 5, or 6 class, including lesson planning, implementation, and reflection.

EECE 700. A History of Ideas in Education. 3 hr.; 3 cr. Offers a historical perspective on central tenets of educational thought. Students examine educational theories and constructs within the context of their historical and cultural roots.

EECE 702. Social Foundations of Education. 3 hr.; 3 cr. Required course in the MAT programs. Provides a forum for the beginning teacher to further investigate cultural, social, philosophical, and historical elements of education. Building on earlier studies in educational foundations, the course explores equity in schooling, school reforms, educational philosophy, and the relationship between schools and society, among other topics. Through readings, course assignments, and field experiences, students study a reflective decision-making model.

EECE 703. Classroom Realities in Diverse Settings. 3 hr.; 3 cr. Prereq.: Required course in the B–2 MSEd program. Sessions are directed at beginning teachers. Students develop strategies to handle the persistent challenges that educators face every day in diverse classrooms, such as increasing numbers of students with limited English ability, cross-cultural misunderstandings, student and parent illiteracy in home languages, lack of parent participation and support, and mainstreamed students with physical and/or emotional difficulties.

EECE 704. Major Contemporary Issues in Education. 3 hr.; 3 cr. In this course students investigate such persistent issues in education as public perceptions of teachers, use of education as a campaign ploy, budgetary limitations and increased demands, de facto segregation, assessment of teachers and students, day care, teachers as surrogate parents, etc. While the course reviews a variety of long-standing issues, it also features contemporary issues particularly relevant at the time the course is offered.

EECE 705. School and Community Relations. 3 hr.; 3 cr. This course is a critical analysis of the relationship between schools and their communities and the confluence of diverse communities within schools. Societal concepts are applied to community concerns related to the schools, to school policies, and to social curriculum. Efforts to adapt the school to social and community needs are examined in light of this analysis. Through readings, course assignments, and field experiences, students study a reflective decision-making model.

EECE 706. Classroom-based Assessment and Research in Early Childhood Education. 3 hr., 3 cr. Prereq. or coreq.: EECE 520, 525, 702, 710, 724, 737, 750; ECPSE 550. Classroom-based Assessment and Research in Early Childhood Education is a required course in the MAT Early Childhood Education (B–2) program designed to provide candidates with a comprehensive foundation in the following: critical issues in assessing young children's learning, developmental screening; authentic versus standardized assessments, formative versus summative assessments, and familiarity with specific tools and assessment instruments regularly used across the curriculum in early childhood education. A research project on classroom-based assessment is required.

EECE 707. Assessment in the Elementary Classroom. 3 hr.; 3 cr. Assessment in the Elementary Classroom is a 3-credit course for students designed to cover a range of assessment issues critical for grades 1–6 classrooms. The goal is to provide 1st- to 6th-grade teachers with an assessment foundation and to give them the tools to construct valid classroom tests that not only reliably measure student achievement and proficiency, but also help to guide instructional decisions. A variety of assessment-focused issues will be explored, including the following: (1) Formative and summative assessment in grades 1–6 classrooms; (2) Key concepts in assessment (including validity, reliability, and practicality); (3) Alternative forms of assessment (portfolios, journals, authentic assessment, performance assessment); and (4) Norm- and criterion-referenced testing.

EECE 710. Ecological Perspectives on Development: The Early Years. 3 hr.; 3 cr. Required course in B–2 MAT and B–2 MSEd programs. This course provides a contextually based study of developmental processes in infants, toddlers, and young children through age 8. Emphasizing the importance of looking at "the whole child," the contributions of family and culture to the child's construction of meaning are examined, with special attention to the broad range of variability within normal development in the early years. Cultural and socioeconomic differences in child-rearing practices and parental expectations are discussed in terms of their significance for children's early linguistic and cognitive functioning. The significance of attachment and autonomy issues for children in early childhood educational and care settings are addressed.

EECE 711. Ecological Perspectives on Development: The Childhood Years. 3 hr.; 3 cr. Required course in 1–6 MAT and 1–6 MSEd programs; must be taken within the first 9 credits in the program. This course provides a contextually based study of development, focusing on children during the elementary school years. Highlighting the ongoing interplay between cognition, language, affect, and social functioning, students examine individual

differences in abilities, learning styles, and academic performance, with attention to ecologically valid assessment strategies for linguistically and culturally diverse populations. Students explore the impact of family dysfunction, stress, poverty, and violence on development and academic performance. Strategies for creating classrooms that support prosocial development and learning are discussed.

EECE 712. Humanistic Psychology: Educational Applications. 3 hr.; 3 cr. Elective course in the EECE Specialty programs in Education for Diverse Populations and Family and Community Studies. This course examines the general principles and practices of motivation and communication, self-concept and its effect on interest, cooperation, and achievement. Values clarification, moral, ethical, and character education are explored. Students develop and implement teaching strategies in affective education.

EECE 713. The Psychology and Education of Exceptional Children and Youth. 3 hr.; 3 cr. Elective course within the Education for Diverse Populations specialty. Students examine legislation, assessments, and terminology related to exceptional children. Classroom strategies and interventions for specific categories of exceptional children are explored.

EECE 714. Behavior Problems of Children and Adolescents. 3 hr.; 3 cr. Elective course within the Education for Diverse Populations specialty. Students examine the range of emotional and behavioral disorders in early childhood through adolescence. The ramifications of behavior problems in classroom settings and techniques for guiding students into constructive activities are explored.

EECE 717. Ecological Perspectives on Development: Early Adolescence. 3 hr.; 3 cr. Prereq.: 1 course within Ecological Perspectives on Development (EECE 710, 711, or 717) must be taken within the first 9 credits in the program. This course provides a contextually based study of development, focusing on early adolescence. The interacting influences of family, ethnic group, and peer group on the young adolescent's emerging identity are examined in relation to school behavior and academic performance. Individual differences in abilities, learning styles, and academic achievement are examined, with attention to ecologically valid assessment strategies for linguistically and culturally diverse populations. The links between school experience and the young adolescent's susceptibility to substance abuse, violence, victimization, school dropout, and premature parenthood are discussed. School strategies for promoting healthy development in the adolescent years are considered.

EECE 721. Professional Issues in Early Childhood. 3 hr.; 3 cr. Required course in the B–2 MSEd programs. Based upon review of research data, students examine current issues in the education of children in the B–2 range and alternative views of these issues to develop an understanding of optimal practice.

EECE 722. Language Development and Multilingualism in Early Childhood. 3 hr.; 3 cr. This course explores the language acquisition and literacy development of multilingual children from birth to age eight. Psycholinguistic and sociolinguistic views of language are used to examine social, cultural, and cognitive aspects of language acquisition and learning. Topics include multilingual language development, multiliteracy, standard and non-standard languages, language instruction in schools, bilingual education, and other topics specific to the language learning of multilingual children. Course topics explore how early childhood educators can support students from various language backgrounds through instructional approaches that meet the needs of multilingual learners.

EECE 724. Curriculum and Environmental Design for Early Childhood, Part I. 3 hr.; 3 cr. Required course in the B–2 MAT and B–2 MSEd programs. This course examines environmental design, instructional strategies, and materials to serve goals of curriculum for B–6-year-old children. Professional study features the role of play, goal-directed teaching within an action-based learning environment, multicultural and technological resources for program development, assessment, working with families in cultural contexts, and meeting individual needs of children.

EECE 725. Curriculum and Environmental Design for Early Childhood, Part II. 3 hr.; 3 cr. Required course in the B–2 MAT and B–2 MSEd programs. Curriculum and Environmental Design II is the second course of a two-course sequence that examines the major ideas and practices that govern the design of educational programs serving grades 1 and 2.

EECE 728. Integrating Expressive Arts into the Early Childhood Curriculum. 3 hr.; 3 cr. Required course within the B–2 MSEd programs. Students explore the range of aesthetic experiences with media, drama, music, and movement that are appropriate for young children. Students examine the ways in which expressive art activities can support children's processing of experiences as they extend understandings about people, communities, economic roles, and events in their world.

EECE 730. Practicum in Early Childhood. 3 hr. plus participation; 3 cr. Required course within the B–2 MSEd program. Six weeks of supervised observation and student teaching in one of the lower certificate grade levels (B–K).

EECE 731. Teaching Beginning Reading and Writing. 3 hr.; 3 cr. Coreq.: Weekly opportunity to work with young children to develop reading and writing experience. Elective course within the Language and Literacy Specialty. Students explore how school programs can facilitate the development of reading and writing in the young child in ways that are consistent with current research and theory on the development of literacy.

EECE 732. Instructional Strategies for Mainstreaming Students. 3 hr.; 3 cr. Elective course within the Education for Diverse Populations Specialty. Course focuses on legal bases for mainstreaming of children with special needs, developing individualized educational

plans, and developing appropriate instructional strategies for individuals in all content areas of the elementary school curriculum.

EECE 734. Using Telecommunication and the WWW in the Classroom. 3 hr.; 3 cr. Elective course within the Instructional Technology Specialty. Students design educational WWW activities for use in the classroom using HTML and various webpage editors. Students also learn how to locate, evaluate, and use educational WWW resources within an elementary classroom curriculum, and use multimedia tools and webpage editors to create educationally sound web-based educational activities. This course assumes ready Internet access outside of the classroom.

EECE 735. Multimedia in the Classroom. 3 hr.; 3 cr. Elective course within the Instructional Technology Specialty. Students learn to use a variety of media and formats to communicate information and ideas effectively to multiple audiences. Students create a Hyperstudio presentation, develop a Power Point presentation; create a Hyperstudio multimedia template and produce an e-portfolio; and create a project using Microworlds.

EECE 736. Mathematics for Young Children. 3 hr.; 3 cr. Elective course within the Mathematics Education Specialty. Focusing on the development of mathematical thinking of children in the primary grades. It examines current research on children's thinking and emphasizes important instructional strategies. It highlights the key role language plays in mathematical learning.

EECE 737. Infants and Toddlers: Curriculum and Teaching. 3 hr.; 3 cr. Required course for B–2 MAT and B–2 MSEd. Approaches to infant/toddler care and education; instructional materials and techniques to foster infant/toddler development; strategies for administering and managing learning environments.

EECE 740. The Improvement of Reading in the Elementary School. 3 hr.; 3 cr. Elective course within the Language and Literacy Specialty. Students examine developmental growth in reading from beginning to advanced stages. Trends in reading instruction and the more common reading difficulties are addressed.

EECE 741. Language Arts in the Elementary School. 3 hr.; 3 cr. Elective course within the Language and Literacy Specialty. Students study ways in which teachers can build upon the resources of children's everyday living to facilitate children's oral and written language development.

EECE 742. Reading Materials for Children. 3 hr.; 3 cr. Required course within the Children's Literature Specialty. Elective course within the Language and Literacy Specialty. Students critically examine a wide range of children's literature, classic and contemporary. Topics include: picture books, easy-to-read material for beginning readers, traditional literature, fantasy, poetry, realistic fiction, biography, historical fiction, nonfiction, books with multicultural and multiethnic emphases, graphic novels, recorded books. Teaching strategies for the use of this literature with diverse student populations are addressed.

EECE 744. The Art and Technique of Storytelling. 3 hr.; 3 cr. Elective course within the Children's Literature Specialty and the Language and Literacy Specialty. Students critically examine stories and storytelling traditions from a variety of cultures as they develop a repertoire of stories to use in culturally and linguistically diverse classrooms. They practice methods and procedures in storytelling, and explore ways to integrate storytelling into the curriculum and to use storytelling in promoting and developing literacy.

EECE 745. The Reading-Writing Connection. 3 hr.; 3 cr. Reviews current research on the development of children's writing and explores how writing can enhance children's learning to read. Students investigate children's writing through actual writing samples and strategies. Students also work on their own writing and examine the childhoods of famous writers.

EECE 746. Nonfiction for Children. 3 hr.; 3 cr. Elective course within the Children's Literature Specialty. Students become acquainted with quality nonfiction books for children, and explore ways to promote children's comprehension of informational books.

EECE 747. Literacy Through Poetry, Verse and Wordplay. 3 hr.; 3 cr. Elective course within the Children's Literature Specialty and the Language and Literacy Specialty. This course introduces students to a wide variety of poetry and verse suitable for children, methods for presenting, studying, and writing poetry with children, and strategies for integrating poetry into programs to develop literacy.

EECE 748. Myths, Legends, and Folktales. 3 hr.; 3 cr. Elective course within the Children's Literature Specialty. Students examine the traditional roots of a story as a model for better understanding and coping with the complexities of human existence. Through extensive reading and library research, students consider the significance of these prototypes for the study of literature and for the elementary school curriculum.

EECE 750. Modern Learning Technologies. 3 hr.; 3 cr. Required course for all MAT students, and for MSEd students in the Instructional Technology Specialty. Students learn to use word-processing software, databases and spreadsheets, digital cameras, educational software, email, and the WWW as tools to enhance learning of the core curriculum subjects. The objective of this course, technology literacy, is acquired through classroom laboratory experiences, extensive readings, and detailed writing requirements. Students learn basic computer operations and vocabulary, explore the many personal and professional uses of technology, and apply modern learning technology tools to the school curriculum.

EECE 751. Teaching Mathematics in the Elementary School. 3 hr.; 3 cr. Required course within the Mathematics Education Specialty. Examining

the content of an elementary school mathematics program, students explore effective teaching strategies that complement the National and New York State Standards for Mathematics. Students are introduced to a wide range of manipulative and technological tools for addressing important concepts, strategies, and skills.

EECE 752. Mathematical Snapshot: Mathematics in Everyday Life. 3 hr.; 3 cr. Elective course within the Mathematics Education Specialty. This course introduces students to geometry content appropriate to the elementary school level. Students explore and develop pedagogical techniques that are applicable to a diverse range of children's abilities.

EECE 753. Teaching Science in the Elementary School. 3 hr.; 3 cr. Required course in the Science Education Specialty. This course emphasizes the selection, organization, and effective use of science materials in the elementary school. Important concepts will be drawn from the various sciences and include: populations and ecosystems, diversity and adaptations of organisms, structure and function in living systems, regulation and behavior, motions and forces, transfer of energy, and properties and changes of properties in matter. State and national standards in elementary school science will also be addressed, including the uses of technology to enhance science instruction.

EECE 756. Geometry, Art, and Mathematical Thinking. 3 hr.; 3 cr. Elective course within the Mathematics Education Specialty. This course addresses key geometric concepts in the context of artistic creations, such as the work of M.C. Escher and the tiling patterns of various cultures. Concepts addressed include congruence, similarity, symmetry, and transformations. Other topics include coordinate geometry, tessellation of shapes, and the relationship between two- and three-dimensional shapes. This course integrates applications to the microcomputer as well.

EECE 757. Physical Science for Elementary School Teachers. 3 hr.; 3 cr. Elective course in the Science Education Specialty. Topics that have applications to the teaching of science concepts in the elementary school are presented from astronomy, chemistry, geology, meteorology, and
physics. To enrich the background of science for elementary school teachers, this course stresses basic principles, applications, experiments, fieldwork, and demonstrations.

EECE 758. Life Science for Elementary School Teachers. 3 hr.; 3 cr. Elective course in the Science Education Specialty. Students make connections in the instruction of elementary science across the disciplines within life science as well as draw on their knowledge of developmental stages to motivate students to learn science, build conceptual understanding, and encourage the application of knowledge, skills, and ideas regarding life science in the lives of elementary students.

EECE 759. Environmental Literature. 3 hr.; 3 cr. Elective course in the Science Education and Children's Literature Specialties. Focusing on the natural world and the interaction between humans and the environment, students examine literature, materials, and teaching practices appropriate for preschool through elementary school children.

EECE 760. Teaching Social Studies in the Elementary School. 3 hr.; 3 cr. Elective course in the Family and Community Studies Specialty. This course is designed for students who have already taken an introductory course in social studies. Students examine the New York and national standards in social studies education and their applications in actual classroom settings. Document-based and inquiry-directed instruction are emphasized.

EECE 761. Foundations of Bilingual Education and Bilingualism. 3 hr.; 3 cr. This course examines the philosophy, rationale, and historical background of bilingual education. By using information provided by research in the field, participants will discuss the programs, models, and trends while exploring the sociological and political aspects of bilingual education. Special emphasis is placed on the analysis of the research as well as the study of strategies to develop the first language and acquire a second language through the content areas.

EECE 762. Schooling in a Diverse Society. 3 hr.; 3 cr. Elective course in the Education for Diverse Populations Specialty. Required course in MAT programs. This course is designed to address the multifaceted dimensions of teaching and learning in a rapidly changing, highly diverse society. Participants review research and theoretical literature in the fields of culture and cognition as they relate to educational practice. Included are traditional elements of culture such as ethnicity, language, and religion as well as less traditional elements of cultural diversity such as age, gender, sexual orientation, social class, and physical disability.

EECE 763. Developing Language and Literacy in the Home Language. 3 hr.; 3 cr. Required course in Bilingual Extension. This course discusses the characteristics of language arts in the home language in the bilingual classroom and the development and evaluation of literacy in the home language and the transfer of skills from one language to another. Participants will learn and practice different methodologies for teaching language arts; develop skills in analyzing and creating instructional materials to teach in the home language; and elaborate techniques to evaluate existing language arts programs in the area.

EECE 764. Instruction and Assessment Across the Content Areas for Bilingual Learners. 3 hr.; 3 cr. Required course in Literacy B–6 MSEd and Bilingual Extension. This course focuses on the study, analysis, application, and creation of appropriate classroom instructional strategies to teach content areas to language minority students. Students practice different methodologies in teaching mathematics, science, social studies, and other content areas in the new and home language, and consider

the evaluation issues related to language and content in the bilingual-multicultural classroom. Participants develop skills to examine, evaluate, and create instructional materials to teach students learning a new language.

EECE 766. Educational Linguistics and Psycholinguistics 3 hr.; 3 cr. Required course in Bilingual Extension. Designed for bilingual teachers, this course concentrates on theoretical approaches to the study of the second language learning process in a bilingual classroom. Students explore aspects of second language acquisition as well as those factors involved in individual variations in achievements of students learning a new language attending bilingual programs.

EECE 767. Pedagogical Practices in the Multilingual Classroom. 3 hr.; 3 cr. Required course in Bilingual Extension. Designed for bilingual educators, this course surveys the alternative teaching methodologies for the learning of English as a new language. Students analyze and apply classroom practices such as audiolingual and communicative methodologies used in the field of second language learning. Special attention is placed on integrating English language teaching in the areas of mathematics, science, and social studies.

EECE 768. Supporting Development in Children with Special Needs. 3 hr.; 3 cr. Required course in the Education for Diverse Populations Specialty. This course highlights the variety of developmental paths that children take to successful functioning. Students examine classroom practices that facilitate the performance of children with special needs, and develop strategies for building collaborations with families and communities to increase the effectiveness of educational interventions.

EECE 770. Supervision of Student Teachers in the Elementary School. 3 hr.; 3 cr. Prereq.: Matriculation in the MSEd program or permission of the department; coreq.: currently teaching full-time in an elementary or early childhood classroom and current involvement with student teacher.

EECE 772. Families and Communities as Educators. 3 hr.; 3 cr. Required course in the Family and Community Studies Specialty. Examines historical and contemporary interrelationships among families, communities, and schools. Students investigate how schools, families, and communities as cultural agencies promote both continuity and change. Particular attention is given to developing strategies for working successfully within families, communities, and cultures in and around New York schools.

EECE 773. Families, Stories, and Literacy. 3 hr.; 3 cr. Required course in Literacy MSEd. Elective course in the Family and Community Studies and Language and Literacy Learning Specialties. This course examines the reciprocal influences of families, stories, and literacy in the lives of children. Students apply constructs from developmental psychology and sociocultural perspectives to consider how families shape the young child's approach to language, stories, and literacy while in turn being shaped by the child's encounters with spoken and written words. This course will also include topics related to cross-cultural perspectives on language acquisition and the development of effective strategies for teaching B-2 students who come to school with diverse language experiences and capabilities.

EECE 774. Social Issues in the Classroom. 3 hr.; 3 cr. Elective course in the Family and Community Studies Specialty. Examines survival skills from a pedagogical perspective of the kind of information children need, a developmental perspective of how children of different ages handle the information offered, and a diagnostic perspective of the risk factors and symptomatic behaviors of children in difficulty. Particular attention paid to questions of home-school domain, cultural differences, and family privacy.

EECE 775. Building Home–School Collaborations. 3 hr.; 3 cr. Elective course in the Family and Community Studies Specialty. Prepares early childhood teachers to establish and maintain positive collaborations with families and communities. Using family systems theory, students examine dynamics, ideas, roles, and relationships within families and communities, and consider different strategies for communicating effectively with parents and involving families in assessment and planning for individual children, including children with special needs.

EECE 776. Culture and Education. 3 hr.; 3 cr. Elective course in the Family and Community Studies Specialty. Deals with the interrelationship between culture and the educational process. Explores how schools are organized as cultural agencies and how culture organizes the activity in schools. Not limited to mainstream U.S. schools. Also looks at cases from other societies in the interest of new perspectives. Gives particular attention to the nature and uses of ethnography for teacher-researchers. Develops strategies to work successfully with the myriad of cultures in New York schools.

EECE 777. Conflict Resolution in Educational Settings. 3 hr.; 3 cr. Elective course in the Family and Community Studies and Education for Diverse Populations Specialties. Explores the origins and causes of conflict and various styles of conflict management. Conflicts between parents and teachers, teachers and administrators, students and their peers are considered. Students apply problem-solving models to multicultural school settings not included in this program.

EECE 779. Research in Children's Literature. 3 hr.; 3 cr. Prereq.: EECE 742 and two electives in Children's Literature. Required course in the Children's Literature Specialty; open only to MSEd students specializing in Children's Literature. This course prepares students for later research courses by (1) focusing on exemplary research in the field of children's literature, (2) familiarizing students with professional journals, and (3) introducing students to noteworthy professional books.

EECE 780. Introduction to Educational Research. 3 hr.; 3 cr. Required course for MSEd students. Students are introduced to basic principles of quantitative and qualitative

research design in educational settings. Emphasis is given to an examination of interdisciplinary perspectives on educational and social issues and to the integration of research evaluation with professional decision-making.

EECE 781. Inquiry into Teaching. 3 hr.; 3 cr. This course synthesizes theory and practice through a student-designed teacher-research project. Ongoing sharing of this classroom-based research provides a forum for discussion of key features of successful teaching. The course also addresses the interviewing process and preparation for entry into the teaching profession.

EECE 782. Teacher as Researcher. 3 hr.; 3 cr. Required course for all MSEd students. Open only to MSEd students. This is the culminating course in the MSEd sequence. It cannot be taken until students have completed all MSEd coursework. Students integrate the work they have done in their Specialty program with principles of educational research. Students prepare a culminating project that proposes and/or implements enhanced practice based on the theory and research that they have studied in the professional certificate program. Culminating projects must be conducted in the student's area of specialization. Public presentations of the culminating projects are included in this course.

EECE 784. Research Materials in Learning Technology. 3 hr.; 3 cr. Prereq.: EECE 750 and two electives in Instructional Technology. Required course for the Instructional Technology Specialty; open only to MSEd students in this specialty. The course examines knowledge of research design, sample selection, instrument choice or design, types of research, data analysis and interpretation, and writing a research report related to technology use in the classroom.

EECE 785. Research in Teaching and Learning Science. 3 hr.; 3 cr. Prereq.: EECE 753 and two electives in Science Education. Required course in the Science Education Specialization; open only to MSEd students in this specialty. This course is based on the newest framework for research in science education informed by the National Science Teachers Association and the Association for the Education of Teachers in Science's principles governing scientific inquiry of teaching and learning in elementary science education. Students will examine current research regarding key learning standards identified by the NYS Department of Education.

EECE 786. Research in Elementary School Mathematics: Trends and Issues. 3 hr.; 3 cr. Prereq.: EECE 751 and two electives in Mathematics Education. Required course in the Mathematics Education Specialty; open only to MSEd students in this specialty. This course focuses on important trends and issues in mathematics research. Students acquire a historical perspective on mathematics education as well as a current overview of significant topics for research.

EECE 787. Research in Language and Literacy. 3 hr.; 3 cr. Prereq.: EECE 722 and two electives in Language and Literacy. Required course in the Language and Literacy Specialty; open only to MSEd students in this specialty. Deals with specific issues in language development, emergent literacy, reading instruction, writing process, language arts, and cross-cultural differences in linguistic and literacy practices and perceptions. Students develop projects for the improvement of practices in homes and schools.

EECE 788. Research in Education for Diverse Populations. 3 hr.; 3 cr. Prereq.: EECE 766 and two electives in Education for Diverse Populations. Required course in the Education for Diverse Populations Specialty; open only to MSEd students in this specialty. This course focuses on current policies and strategies for enhancing the effectiveness of Education for Diverse Populations. Students will examine issues in assessment, prevention, and classroom interventions for children with diverse strengths and needs.

EECE 789. Research in Family and Community Studies. 3 hr.; 3 cr. Prereq.: EECE 772 and two electives in Family and Community Studies. Required course in the Family and Community Studies Specialty; open only to MSEd students in this specialty. Deals with schools as institutions of socialization that complement or conflict with families and communities as institutions of socialization and develops practical solutions to their interrelationships.

EECE 790. Independent Study in Education. Prereq.: Matriculation in MSEd program. Independent study or special project under supervision of a departmental faculty member. Permission of the chair required.
EECE 790.1. 1 hr.; 1 cr.
EECE 790.2. 2 hr.; 2 cr.
EECE 790.3. 3 hr.; 3 cr.

EECE 791. Independent Study in Bilingual Education. Independent study or special project under faculty supervision. Permission of the chair required.
EECE 791.1. 1 hr.; 1 cr.
EECE 791.2. 2 hr.; 2 cr.
EECE 791.3. 3 hr.; 3 cr.

EECE 796. Exploring Problems in History Through Literature. 3 hr.; 3 cr. Required interdisciplinary core course for MSEd 1–6 students. MAT students may take this course as an elective. Takes an interdisciplinary approach to curriculum by combining the content and process of "doing history" with the focused use of language arts (reading, writing, speaking, and listening) as a means of learning in the elementary school. By applying the critical perspective of historians to the study of quality children's literature dealing with the past, this course engages teachers in curricular issues of both content and process.

EECE 797. Queens County as a Learning Lab. 3 hr.; 3 cr. Required interdisciplinary core course for MSEd 1–6 students. MAT students may take this course as an elective. Working with organizations, institutions, and historical sites within the borough of Queens, students investigate and reflect on teaching and learning strategies

for incorporating a study of Queens into their classrooms. Emphasis is on the historical, geographical, political, economic, and social development of the borough.

EECE 798. Reading and Writing for Learning in Science. 3 hr.; 3 cr. Required interdisciplinary core course for MSEd 1–6 students. MAT students may take this course as an elective. This course is designed to promote engaged learners who demonstrate curiosity, search for understanding in self-guided ways, communicate with others to share and test their ideas, contribute to the creation of a community of learners, and bring an enthusiastic quality to the classroom. Students learn to create science-learning environments that promote engaged readers and writers, and develop strategies that promote reading and writing across the disciplines.

EECE 799. Exploring Mathematical Ideas Through Literature. 3 hr.; 3 cr. Required interdisciplinary core course for MSEd 1–6 students. MAT students may take this course as an elective. Explores the role of literature in an elementary school mathematics program. Students discuss criteria for selecting books and address issues of equity in children's literature, such as gender and multicultural perspectives. Students examine a wide range of math-related literature and develop effective instructional strategies for using these books to explore important mathematical concepts.

EECE 800. Workshop in Education. Designed to assist teachers in solving classroom problems. May be repeated for credit if topic is changed.
EECE 800.2. 2 hr.; 2 cr.
EECE 800.3. 3 hr.; 3 cr.
EECE 800.4. 4 hr.; 4 cr.

EECE 801. The Role of the Literacy Specialist. 3 hr.; 3 cr. This course is open only to students in the Literacy B–6 MSEd and the Literacy Post-Master's. This course is designed to provide the reading specialist with the knowledge, skills, and processes necessary to collaborate with other professionals in the school and community.

EECE 802. Teaching Strategies for the Literacy Specialist. 3 hr.; 3 cr. This course is designed to present the various techniques that the literacy specialist will need. It will prepare teachers to use their knowledge of literacy teaching techniques to meet the needs of individuals, small groups, and whole classes.

EECE 803. Assessment and Instruction I. 3 hr.; 3 cr. Prereq.: EECE 722, 731, 773, 780, 801, 764, 802. This course is open only to students in the Literacy B–6 MSEd and the Literacy Post-Master's. This course is the first of two designed to provide the literacy specialist with the knowledge of an assessment and instruction framework. It provides a theoretical and practical basis for informed instruction based on assessment data. The course focuses on the selection and administration of authentic and performance-based assessments and the interpretation of assessment data to inform instruction to support student learning. Teachers practice classroom diagnostic procedures to assess, analyze, and provide instruction to enhance the reading and writing performance of students, and build their knowledge of literacy teaching techniques to meet the needs of individuals, small groups, and whole classes.

EECE 804. Assessment and Instruction II. 3 hr.; 3 cr. Prereq.: EECE 722, 731, 773, 780, 801, 764, 803. This course is open only to students in the Literacy B–6 MSEd and the Literacy Post-Master's. This course is the second of two courses designed to provide the literacy specialist with the knowledge of an assessment and instruction framework. It provides a theoretical and practical basis for informed instruction based on assessment data. The course focuses on the selection and administration of standardized assessments and the interpretation of assessment data to inform instruction to support student learning. The teacher will learn techniques for using and interpreting standardized tests and will practice administering standardized tests to assess, analyze, and provide instruction to enhance the reading and writing performance of students, as well as build their knowledge of literacy teaching techniques to meet the needs of individuals, small groups, and whole classes.

EECE 805. Practicum. 3 hr.; 3 cr. Prereq.: EECE 731, 773, 780, 801, 764, 803, 804. This course is open only to students in the Literacy B–6 MSEd and the Literacy Post-Master's. This course is designed to allow teachers to use the knowledge and skill they have gained from their coursework to work with children who are struggling with literacy. Teachers will administer appropriate tests, analyze these tests, and determine an appropriate instruction for each child.

EECE 806. Content Area Literacy Across the Curriculum Capstone Course. 15 hr.; 1 cr. Prereq.: EECE 750, EECE 796, EECE 797. The course is only available to students in the EECE Sabbatical Program for New York City teachers. It is the final course in the Content Area Literacy Across the Curriculum: A Sabbatical Program for New York City Teachers.

POST-MASTER'S ADVANCED CERTIFICATE IN TESOL AND ELEMENTARY BILINGUAL EDUCATION

The Bilingual Education Extension functions as a branch of the initial or professional certification granted by NYSED. This means that once certified elementary school teachers complete the courses leading to the extension, they can teach elementary-school-age students in bilingual contexts (English and one of the 23 languages in which NYS grants bilingual extensions). The TESOL Initial Certificate allows certified teachers to teach English as a Second Language (ESL) at all grade levels.

Admission Requirements

1. Master's in Education (MAT or MSED)
2. Current NYSED Teacher Certification in elementary education
3. Fluency in a language other than English in which Bilingual Extension is offered
4. Personal interview, including evaluation of oral and written English language proficiency

5. Applicants whose first language is not English and who do not hold a degree from an accredited institution of higher education in a country where English is an official language must submit proof of having passed the Test of English as a Foreign Language (TOEFL) with the following minimum scores: 600 (paper-based test); 250 (computer-based test); 100 (Internet-based test).

Course Work

This is a 24-credit program, consisting of 8 courses: 6 required and 2 disjunctively required between two courses. (6 transfer credits, approved by the program directors, are the maximum allowed.) There are two sets of courses offered by the TESOL and Elementary Education Bilingual Extension programs that share similar content:

EECE 761 and LCD 706 focus on the rationale for bilingual education, and its sociopolitical context in the United States.

EECE 766 and LCD 701 target theoretical and structural approaches to the study of language and its implications for teaching.

The other six courses cover specific topics that are relevant for future TESOL and bilingual teachers.

Required Courses

LCD 701. Introduction to Linguistics. 3 hr.; 3 cr. Structural aspects of language most relevant to the ESL and/or literacy teacher.

or

EECE 766. Educational Linguistics and Psycholinguistics 3 hr.; 3 cr. Required course in Bilingual Extension. Designed for bilingual teachers, this course concentrates on theoretical approaches to the study of the second language learning process in a bilingual classroom. Students explore aspects of second language acquisition as well as those factors involved in individual variations in achievements of students learning a new language attending bilingual programs.

LCD 702. Teaching English Sentence Structure I. 3 hr.; 3 cr. Prereq. or coreq.: LCD 701. Introduction to the grammar of English and applications to teaching ESL, Part I.

LCD 706. Bilingualism. 3 hr.; 3 cr. Prereq. or coreq.: LCD 701. Sociolinguistic and psycholinguistic properties of bilingualism, legal history, and educational foundations of bilingual education. Bilingual education will be compared to other approaches. An emphasis is placed on the implications of bilingualism for ESL and/or literacy teachers.

or

EECE 761. Foundations of Bilingual Education and Bilingualism. 3 hr.; 3 cr. This course examines the philosophy, rationale, and historical background of bilingual education. By using information provided by research in the field, participants will discuss the programs, models, and trends while exploring the sociological and political aspects of bilingual education. Special emphasis is placed on the analysis of the research in as well as the study of strategies to develop the first language and acquire a second language through the content areas.

LCD 740. Second Language Acquisition and Teaching. 3 hr. plus 25 hr. of fieldwork; 3 cr. Prereq. or coreq.: LCD 701. Introduction to the linguistic and pedagogical theories and methods of teaching ESL. There is a field experience requirement at various school settings in conformity with New York State certification requirements. Classes may sometimes be held at these off-campus locations.

EECE 763. Developing Language and Literacy in the Home Language. 3 hr.; 3 cr. Required course in Bilingual Extension. This course discusses the characteristics of language arts in the home language in the bilingual classroom and the development and evaluation of literacy in the home language and the transfer of skills from one language to another. Participants will learn and practice different methodologies for teaching language arts; develop skills in analyzing and creating instructional materials to teach in the home language; and elaborate techniques to evaluate existing language arts programs in the area.

LCD 741. Methods and Materials of TESOL: Listening, Speaking, Reading, Writing. 3 hr. plus 25 hr. of fieldwork tutorial; 3 cr. Prereq.: LCD 702 and 740. This course is a comprehensive review of the methods and materials used in TESOL/ESL classes to teach the four language skills: listening, speaking, reading, and writing. The class covers how to adapt methods and materials to suit learner populations of different ages and at varying levels of English proficiency. The role of instructional technology (e.g., audiovisual, multimedia, computers in ESL instruction) will also be addressed. There is a field experience requirement at various school settings in conformity with New York State certification requirements. Classes may sometimes be held at these off-campus locations. There is a requirement for 10 full school days of supervised student teaching in ESL classes at either the elementary or secondary level.

EECE 764. Instruction and Assessment Across the Content Areas for Bilingual Learners. 3 hr.; 3 cr. Required course in Literacy B–6 MSEd and Bilingual Extension. This course focuses on the study, analysis, application, and creation of appropriate classroom instructional strategies to teach content areas to language minority students. Students practice different methodologies in teaching mathematics, science, social studies, and other content areas in the new and home language, and consider the evaluation issues related to language and content in the bilingual-multicultural classroom. Participants develop skills to examine, evaluate, and create instructional materials to teach students learning a new language.

LCD 742. Methods and Materials of TESOL: The Content Areas. 3 hr.; 3 cr. Prereq.: LCD 741. In this course students learn the principles and practices for TESOL/ESL through academic content areas such as mathematics, science, social studies, and language arts. Readings, model lessons, and authentic materials are used to examine the theoretical issues involved and apply them to teaching practices for ESL learners at the elementary and secondary levels. There is a requirement for 10 full school days of supervised student teaching in ESL classes at either the elementary or secondary level, complementing the level of student teaching in LCD 741.

Secondary Education & Youth Services

Chair: Eleanor Armour-Thomas

Clinical Professor for Fieldwork & Student Teaching Experiences: Edwina Branch-Smith

Field Placement Coordinator: Evelyn Lee

Dept. Office: Powdermaker Hall 150, 718-997-5150

Office Staff: Bonnie Wilichinsky, Kasey Lee

The department prepares teachers for the middle, junior high, and senior high schools through New York State-accredited programs: (1) the Initial Certificate program leading to initial certification in Adolescence Education; and (2) the Master of Science degree in Secondary Education leading to professional certification in Adolescence Education. The Master of Arts in Teaching degree offers both in one program. Each program has a concentration in a specific academic area, as well as education content courses.

Responsible preparation for work in secondary school and community settings requires that in addition to meeting the academic standards established by each program, candidates demonstrate appropriate personal characteristics, which would include professional judgment, ethical conduct, and academic integrity. In addition, candidates are expected to demonstrate sensitivity to secondary student issues and effective management of personal stress or adjustment difficulties. Candidates who fail to meet these personal and professional standards will be subject to review by their program faculty, and sanctions, such as dismissal, may result. Candidates naturally have the right of appeal, and should familiarize themselves with guidelines set forth in program handbooks and this *Bulletin*.

FACULTY

Armour-Thomas, Eleanor, Chair, *Professor,* EdD 1984, Teachers College, Columbia University: educational psychology, cognitive functioning, human growth and development, instructional psychology

Artzt, Alice F., *Professor,* PhD 1983, New York University: mathematics education

Bassey, Magnus O., *Professor,* EdD 1989, Rutgers University: social and philosophical foundations of education

Bembenutty, Hefèr, *Associate Professor*, PhD 2005, City University of New York: educational psychology

Bergey, Bradley W., *Assistant Professor,* PhD 2014, Temple University: educational psychology

Bhattacharya, Alpana, *Associate Professor,* PhD 2001, City University of New York: educational psychology

Branch-Smith, Edwina, *Clinical Professor*, MSEd, Fordham University: educational administration; MPA, New York University: public policy specialization

Caraballo, Limarys, *Associate Professor*, PhD 2012, Teachers College, Columbia University: urban and multicultural education

Costigan, Arthur T., *Associate Professor,* PhD 2000, New York University: English education

Darvin, Jacqueline L., *Professor,* PhD 2004, Hofstra University: literacy studies

Dong, Yu Ren, *Professor,* PhD 1995, University of Georgia: English as a second language (TESOL), teaching composition, reading and writing for diverse learners

Eddy, Jennifer, *Associate Professor,* PhD 1999, Teachers College, Columbia University: Spanish and education; foreign language education

Farenga, Stephen J., *Professor,* 1995, Teachers College, Columbia University: science education

Garofalo, Salvatore, *Lecturer,* MAT 2014, Queens College: biology education

Gerwin, David, *Professor,* PhD 1998, Columbia University: social studies education and oral history

Grey, Leslee, *Associate Professor*, PhD 2009, Georgia State University: social and cultural foundations of education

Gurl, Theresa, *Associate Professor*, PhD 2008, Teachers College, Columbia University, mathematics education

McCullough, Susan, *Distinguished Lecturer,* Art Education

Moncada-Davidson, Lillian, *Associate Professor,* PhD 1990, Columbia University: sociology and education

Shuttleworth, Jay, *Assistant Professor,* Social Studies Education

ADMISSION REQUIREMENTS

All students must have a bachelor's degree from an accredited college or university, or the foreign equivalent. They must have completed: (1) a major in the area in which they wish to become certified; (2) one year of college-level study, or its equivalent, in a language other than English; and (3) an undergraduate education sequence (including student teaching or its equivalent). Students should also have a cumulative and departmental average of at least *B* (3.0). Students must take the Graduate Record Exam (GRE); however, there is currently no minimum score required.

For MSEd programs in mathematics education, teaching mathematics and computer science, and mathematics and bilingual education, the following courses or their equivalents are required prior to admission: MATH 151, 152, 201, 231, and 241.

PROGRAMS OF STUDY

The SEYS Department offers two kinds of graduate degree-track programs. MSEd programs are for those who hold preliminary or initial teaching certification while MAT programs assume no existing certification. The department also offers two self-contained programs leading to Initial Certification.

1. Master of Science in Secondary Education (MSEd) programs
   a. Art Education (K–12)
   b. English Education
   c. Literacy Education 5–12
   d. Mathematics Education, Mathematics and Computer Science, Mathematics and Bilingual Education
   e. Science Education (Biology, Chemistry, Earth Science, Physics)
   f. Social Studies Education
   g. World Languages Education (Spanish, French, Italian)
2. Master of Arts in Teaching (MAT) programs
   a. Art (K–12)
   b. Critical Languages (Arabic, Chinese, Hindi, Korean, Russian, Urdu)
   c. English Education
   d. Mathematics Education
   e. Science Education (Biology, Chemistry, Earth Science, Physics)
3. Post-Master's Certificate Programs
   a. Literacy 5–12
   b. Ethical and Equitable Practice
4. Initial Certification

These programs are described in greater detail below. Note that each has its own admissions requirements. In all cases, it is paramount to speak with an advisor in SEYS to make sure that you are studying in the program that is right for you.

MASTER OF SCIENCE IN SECONDARY EDUCATION PROGRAMS (MSED)

Queens College offers Master of Science in Secondary Education (MSEd) degrees in the regular content areas (Art, English, Literacy, Mathematics, Science, Social Studies, and World Languages). While these all follow a general structure, there are specific requirements for the MSEd programs in Mathematics and Computer Science, Mathematics and Bilingual Education, and Literacy 5–12. Each academic area has its own course requirements. In general, students take about half of their program in the appropriate academic departments and half in education.

Planning a Program in Secondary Education

To obtain the Master of Science in Education degree, students must complete 30 or more graduate credits in an approved course of study, and should consult with an advisor in the appropriate area before choosing courses. In general, students pursuing the MS in Secondary Education take the following sequence of courses:

	credits
Historical, Philosophical, Social Foundations of Education (chosen from SEYS 701–708, 720)	3
Psychological Foundations (chosen from SEYS 709, 710, 717–719, 738)	3
Curriculum Methods in Secondary Education (chosen from the set of courses appropriate to the content area)	3–6
Research (chosen from the sequence of courses appropriate to the content area)	6
	Total 15–18
Certification Content Area (see department listings in this *Bulletin* or consult an appropriate advisor)	**Total 15–18**

Although the above sample program represents the general pattern of courses within the MS in Secondary Education sequence, there may be differences for academic areas. Again, in choosing academic courses, students should—as early as possible—read the section of the *Bulletin* appropriate to their certification area and consult with an advisor in the appropriate department.

MSED IN MATHEMATICS AND COMPUTER SCIENCE

The MSEd in Mathematics and Computer Science is designed to meet the growing demand for education in computer science in the schools and the broader educational community. Teachers find themselves increasingly asked to assume multiple roles in schools, and having expertise in computer science, an area of mathematics, is extremely advantageous. This program is designed for students who have initial certification in Mathematics (grades 7–12) who wish to gain professional certification as mathematics teachers while extending their proficiency in computer science.

	credits
Pedagogical Courses	
Historical, Philosophical, and Social Foundations of Education: select one course from among SEYS 701–708, 720	3
Psychology Foundations: select one course from among SEYS 709, 710, 717, 718, 719, 738	3
Curriculum Methods in Secondary Math Education: SEYS 751	3
Research: SEYS 775, 776	6
Computer Science Courses	
CSCI 611 (Advanced Programming in C++)	3
CSCI 612 (Advanced Programming in Java)	3
CSCI 613 (Data Structures)	3

CSCI 620 (Discrete Structures) 3
CSCI 640 (Computer Organization and Assembly Language) 3
CSCI 655 (Internet and Web Technologies) 3

MSED IN MATHEMATICS AND BILINGUAL EDUCATION

The MSEd in Mathematics and Bilingual Education is designed for students who have attained initial certification in mathematics (grades 7–12) who are themselves proficient in a Language Other Than English (LOTE) and wish to gain professional certification as mathematics teachers as well as a bilingual extension. Students completing this program will be eligible for both certification in Mathematics (7–12) and a New York State Bilingual Extension (7–12).

credits

Pedagogical Courses

Historical, Philosophical, and Social Foundations of Education:
select one course from among
SEYS 701–705, 707, 708, 720 3
Psychology Foundations:
select one course from among
SEYS 709, 710, 717, 718, 719, 738 3
Curriculum Methods in Secondary Math Education:
SEYS 751 3
Research:
SEYS 775, 776 6

Bilingual Education Courses

SEYS 706 (Globalization and Bilingual Education) 3
SEYS 720 (The Education of Immigrant Students) 3
SEYS 744 (Methods and Materials in Teaching English to Speakers of Other Languages in the Content Areas) 3
SEYS 745 (Reading and Writing for Diverse Learners in Content Areas) 3
SEYS 767.3 (Workshop in Secondary Education: Language Acquisition and Learning for Bilingual English Language Learners) 3

MSED IN SECONDARY LITERACY 5–12

The Literacy Program reflects the teacher certification regulations for literacy specialist grades 5–12 and the diversity of literacy learners. The 30-credit program provides courses in all areas of literacy and prepares individuals for leadership in literacy program development as well as compensatory programs. Program courses focus on diverse literacy learners, particularly English-language learners and children with language learning disabilities.

Requirements for Admission

Admission is limited, competitive and open to individuals who hold a provisional or initial New York State Teaching Certification in any secondary or elementary content area, including English, Social Studies, Mathematics, Science, Music, Art, Physical Education, TESOL, Special Education, and Elementary Education. Applicants must complete the graduate application and may be required to be interviewed. The applicant's entire record is considered, including undergraduate and graduate GPA, teaching and other experiences with children and adolescents, and demonstration of leadership and scholarship.

An overall GPA of 3.0 and the Graduate Record Exam (GRE) are required; however, there is currently no minimum score required on the GRE. Individuals who have already successfully completed master's degree programs leading to teacher certification may choose to apply for the 21-credit Post-Master's Program in Secondary Literacy 5–12 and, upon passing the New York State exams, will be eligible for New York State Secondary Literacy 5–12 Teaching Certification.

Graduation requirements include completion of 30 credits of required coursework in the areas of diversity, literature, literacy pedagogy, and content area literacy, a GPA of 3.0, and successful completion of a professional portfolio and research project. For more information, contact the coordinator.

The electronic Literacy Portfolio (e-portfolio) is a longitudinal project designed to demonstrate each student's growth as a literacy educator and reflective practitioner. The satisfactory completion of the e-portfolio is a requirement of this program; it is introduced in the first literacy course (SEYSL 700 or 701) and compiled by students as they progress through the program. Faculty guide students through this process. The e-portfolio is completed and submitted as part of SEYSL 790. SEYSL 790 must be taken in the student's last semester of the program. For more information, contact the coordinator.

credits

MSEd in Literacy 5–12 Requirements

SEYSL 700. Research Investigation for Literacy Instruction, Part I 3
SEYSL 701. Foundations of Literacy Development & Instruction 3
SEYSL 702. Literacy in the Content Areas 3
SEYSL 703. Literacy Instruction for Diverse Learners 3
SEYSL 704. Young Adult Literature Across the Curriculum 3
SEYSL 750. Literacy Assessment & Instruction 3
SEYSL 752. Consultation, Collaboration & Literacy Program Renewal 3
SEYSL 760. Supervised Practicum I (Middle School) 3
SEYSL 762, Supervised Practicum II (High School) 3
SEYSL 790. Research Investigation for Literacy Instruction, Part II 3
Total **30**

Summary of Admission Requirements

- Teaching certification in any secondary or elementary content recognized by New York State (including English, Social Studies, Mathematics, Science, Music, Art, Physical Education, TESOL, Special Education,

and Elementary Education) is required for matriculation in this program of study.

- Applicants must already have master's degrees in education (including at least one undergraduate or graduate course in reading, diverse learners, and educational research). If students are missing one or more of these courses, they may take them while pursuing the first 9 credits of this program.
- A 3.0 GPA and the Graduate Record Exam (GRE) are required. However, there is currently no minimum score required on the GRE.

MASTER OF ARTS IN TEACHING IN SECONDARY EDUCATION (MAT)

The following MAT degree programs are offered at Queens College:

1. Master of Arts in Teaching in Adolescent Mathematics Education, Grades 7–12;
2. Master of Arts in Teaching in Adolescent English Education, Grades 7–12;
3. Master of Arts in Teaching in Art (K–12);
4. Master of Arts in Teaching in Science Education (Biology, Chemistry, Earth Science, Physics); and,
5. Master of Arts in Teaching in Critical Languages Education (Arabic, Chinese, Hindi, Korean, Russian, Urdu).

The goals of the MAT degree program are to:

- fulfill Initial Certification requirements in a content area;
- fulfill MAT degree requirements; and,
- fulfill Professional Certification requirements in a content or related area.

The MAT degree in Secondary Education consists of existing courses in state-certified Post-Baccalaureate and MSEd programs in Secondary Education. An MAT includes these existing 24 credits, 6 additional credits in advanced pedagogy, and 9–12 credits in content courses. Upon completion of the 24 credits in the Post-Baccalaureate program, students are eligible for Initial Certification in the content area. Upon completion of the remaining 15–21 credits for the MAT degree, students are eligible for Professional Certification in the content or related area.

CORE COURSES

(all MAT candidates take the following courses)

SEYS 536 Educational Foundations

SEYS 552 Educational Psychology

SEYS 560–564 Methods of Teaching in Middle and High School, SEYS 565 and EECE 533 Methods I, II (Art)

SEYS 570.2–574.2 Initial Clinical Experience in *** for Secondary School

SEYS 570.4–574.4 Student Teaching in *** for Secondary School, SEYS 575, 576 Student Teaching I, II (Art)

SEYS 580–584 Standards-Based Curriculum and Assessment in Teaching ***

SEYS 700 Language, Literacy, and Culture in Education

ECPSE 550 Foundations of Special Education

After completing these Core Courses and all New York State and Queens College certification requirements, candidates are eligible to apply for New York State Initial Certification.

CONTENT COURSES

Mathematics (15 credits)

Pedagogical Content Courses

SEYS 751 Mathematics in the Secondary School

SEYS 775 Research in Mathematics Education I

Content Courses

MATH 505 Problem Solving

MATH 509 Set Theory and Logic

MATH 524 History of Mathematics

English (18 credits)

Pedagogical Content Courses

One Reading Elective from the following:
SEYS 740, 741, 746

One Writing Elective:
SEYS 763

One Contemporary Issues/Research Course from the following: SEYS 764, 781, 767.3†

Content Courses

9 credits in English

Art (18 credits)

Pedagogical Content Courses

6 credits from the following: SEYS 712, SEYS 724, SEYS 725, SEYS 727, SEYS 732

SEYS 773 Research Seminar

Content Courses

ARTS 600 / ARTH 500 (Total of 9 credits from 500- and 600-level Art and Art History courses).

Science (18 credits)

Pedagogical Content Courses

SEYS 753 or 754 or 756

SEYS 777

SEYS 778

Content Courses

9 credits in Science area of certification.

Critical Languages (15 credits)

Pedagogical Content Courses

SEYS 743

SEYS 785

SEYS 786

*** Indicates each specific content area (English, Science, Mathematics, Critical Languages, Art).

†*Note that SEYS 767.3 is a generic workshop course used for special topics in specific content areas. Eligibility of topics to be determined by the program advisor.

Two electives (6 credits) from the following:

SEYSW 710. Foreign Language and Cultural Learning through Classroom Interaction

SEYS 714 World Language Program Design

or

Selected Topics: SEYS 767.3*
Interdisciplinary Curriculum for Critical Language Assessment in Secondary School
Teaching Languages to Young Children
Integrating Language, Culture, and Content in Critical Language Education

POST-MASTER'S CERTIFICATE PROGRAM IN LITERACY (5–12)

Many teachers who already hold master's degrees in Education desire certification in Secondary Literacy (5–12). Teachers get incremental raises for a master's plus additional credits. Further, teachers on sabbatical leave often want to take courses leading to a certification rather than random courses. This program was designed to meet all of these needs. The Post-Master's Certificate Program in Secondary Literacy (5–12) is designed to offer an integrated, theoretically grounded view of literacy and literacy learning that addresses the needs of students and teachers in diverse communities. The literacy faculty focus on preparing graduate candidates for their careers as classroom teachers, interventional literacy teachers, clinicians, supervisors, and directors or coordinators of literacy in school districts. Graduates will be able to develop, implement, and evaluate literacy programs at schools and in agencies, and work with individual students and their families. Program faculty promote rigorous scholarship and research, contextualized learning and service in school and community settings. We encourage critical reflection on the role of literacy in society and about our responsibilities as educators. The QC secondary literacy program's knowledge base and practices are consistent with International Literacy Association Standards (ILA/CAEP) and New York State regulations. Completion of the course work will lead to New York State certification as Literacy Specialist (formerly titled "Reading Teacher"). It is expected that all candidates completing the program of study will be recommended for and attain New York State certification as Literacy Specialists. The New York State Teacher Certification exams are required for certification in literacy, even for those who have passed other state examinations for prior certification.

Certificate Courses

	credits
SEYSL 701. Foundations of Literacy Development and Instruction	3
SEYSL 702. Literacy in Content Areas	3
SEYSL 704. Literature across the Curriculum	3
SEYSL 750. Literacy Assessment and Instruction	3
SEYSL 752. Consultation, Collaboration, and Literacy Program Renewal	3
SEYSL 760. Supervised Practicum with Middle/Junior High School Students	3
SEYSL 761. Supervised Practicum with High School Students	3
Total	**21**

INITIAL CERTIFICATE PROGRAM

For students who decide late in their undergraduate careers or after they graduate to pursue certification as teachers, the department offers a sequence of courses, consisting of 24 credits, that leads to an Initial Certification. This sequence provides an integrated program that includes the coursework and field experience necessary to meet state requirements for initial certification in adolescent education in a specific academic subject area.

Upon completing the Initial Certificate program, students will be recommended for initial certification provided they have also completed the required 36 credits in their major and met all other state requirements for initial certification. The program enables students to begin teaching and gain the experience necessary for professional certification while they complete the coursework required for the master's degree.

Program Requirements

Students must hold a bachelor's degree with a major (or equivalent) in the subject area in which they wish to be certified. Students who were not subject area majors but have a minimum of 21 appropriate credits in the content area may be accepted but are required to complete at least 9–15 additional content area credits before they are recommended for initial certification. These 9–15 credits will be selected with the approval of the major advisor. Students who have more than 21 subject-area credits but fewer than 30–36 will be required to make up the corresponding number of missing credits. In all cases, the advisor will ensure that the distribution of the 36 subject-area credits is appropriate to the requirements of certification in the student's major area.

Students are also required to have one year of college study, or its equivalent, in a language other than English. They must also meet the general admissions requirements for graduate study at Queens College, including a cumulative and departmental average of at least *B* (3.0) to remain in the program.

Following fulfillment of the Initial Certificate program (24 credits), students may complete the remaining graduate courses required for the Master of Science in Education degree in Secondary Education (15–18 credits in education and 15–18 credits in the content area), which will lead to professional certification. The total number of credits will be 51–54 including the initial certificate program.

Coursework in Initial Certificate Program

The Initial Certificate program comprises the following:

1. An education sequence of 24 credits:
2. Completion of 30–36 credits in the student's area of certification.
3. Students are required to fulfill all requirements, including exams and seminars at the time of certification.

4. A 3-credit course that meets NYS standards for promoting the participation and progress of students with disabilities in the general education curriculum (please see advisor).

Upon completion of the Initial Certificate program (outlined above in 1, 2, 3, and 4), students will have satisfied the academic requirements for initial certification as teachers of secondary academic subjects in New York State. Passing of the following New York State Teacher Certification Examinations will complete their qualifications for initial certification: the Educating All Students Test (EAS), the edTPA, and the Content Specialty Test (CST). The CST may be taken prior to the beginning of the Initial Certificate program or at any time thereafter. When students complete these requirements, they can apply through the Office of Teacher Certification for New York State initial certification.

ADVANCED CERTIFICATE IN ETHICAL AND EQUITABLE PRACTICE

The SEYS Post-Master's Program in Ethical and Equitable Practice is designed to offer integrated, theoretically grounded views of teaching and learning that address the needs of students and teachers in diverse communities. Program faculty promote rigorous scholarship and research, contextualized learning, and service in school and community settings. They encourage critical reflection on the roles of teachers in society and about their responsibilities as educators. Five cutting-edge, fully online courses are aimed at expanding teachers' knowledge of teaching literacy in their content areas, teaching diverse learners successfully, engaging more effectively in data-driven assessment and instruction, and employing current and innovative pedagogies in their classrooms.

Requirements for Matriculation

Admission is limited, competitive, and open to individuals who hold initial or professional New York State Teaching Certification and a master's degree in any secondary or elementary content area, including literacy, English, social studies, mathematics, science, music, art, physical education, TESOL, world languages, special education, and elementary education. Applicants must complete the online graduate application and admissions essay. The applicant's entire record is considered, including undergraduate and graduate grade-point average (GPA), teaching and other experiences with children and adolescents, and demonstration of leadership and scholarship. An overall GPA of 3.0 is required. The Graduate Record Examination (GRE) and letters of recommendation are not required for admission.

Course Requirements

	credits
a. SEYSL 702, Literacy in the Content Areas	3
b. SEYS 703, Philosophies of Education: Critical Approaches and Ethical Practices	3
c. SEYS 719, Understanding Group Behavior and Cultural Differences in Schools	3
d. SEYS 764, The Secondary School Curriculum: Current Theories and Controversies	3
e. SEYS 768, Measurement and Evaluation in Education	3
Total	15

COURSES IN SECONDARY EDUCATION (SEYS)

SEYS 500.1, 500.2, 500.3. Non-degree Workshop in Secondary Education. 15 hr., 1 cr.; 30 hr., 2 cr.; 45 hr., 3 cr. Prereq. or coreq.: Permission of the instructor. A special-topics SEYS course offering at the graduate level that does not count toward the MS degree and is pass/fail.

SEYS 533. Methods of Teaching the Visual Arts, Pre-K–12th grade. 3 hr.; 3 cr. Prereq.: SEYS 536 and 552. This course is designed to introduce students to methods of teaching visual art. The course will give students an understanding of lesson planning, developing goals and objectives, and assessment strategies for all grades. Students will make art as part of this course.

SEYS 536. Educational Foundations. 3 hr. plus 30 hr. field experience; 3 cr. Prereq.: Permission of the department. Overview of theory and research on key sociological, philosophical, historical, and political foundations of education. Consideration will be given to how these foundational issues are evident in classroom situations and practice. This course will deal with contemporary socioeconomic and political issues that continue to influence and shape education decision-making. Theoretical analysis of major educational ideas and practices in the United States will be examined. Attention will also be given to how growth in technology has influenced the educational environment.

SEYS 552. Educational Psychology. 3 hr. plus 30 hr. field experience; 3 cr. Prereq.: Permission of the department. Overview of developmental and instructional issues in teaching middle childhood and adolescents. The role of technology in cognition and instruction for diverse learners, including those within the full range of disabilities and exceptionalities, will be examined. Second-language development and issues related to language acquisition and English-language proficiency will also be explored.

SEYS 560–564. Methods of Teaching _____ in Middle and High School. 3 hr. plus 30 hr. field experience; 3 cr. Prereq.: SEYS 536, 700, ECPSE 550; prereq. or coreq.: SEYS 552. Students' pedagogical content knowledge in their specific subject areas is developed in this course. Research-based learning, instructional and assessment strategies, as well as the secondary school curriculum will be examined. The course also examines issues

of language, literacy, and culture and how they impact the learning and teaching of the specific content. Emphasis is placed on the use of technology in instruction.

560. Methods of Teaching English in Middle and High School.

561. Methods of Teaching Mathematics in Middle and High School. 3 hr. field experience; 3 cr. Prereq.: MATH 385W and permission of the department; coreq.: SEYS 571.2. Students' pedagogical content knowledge in their specific subject areas is developed in this course. Research-based learning, instructional and assessment strategies, as well as the secondary school curriculum will be examined. The course also examines issues of language, literacy, and culture and how they impact the learning and teaching of the specific content. Emphasis is placed on the use of technology in instruction.

562. Methods of Teaching Science in Middle and High School.

563. Methods of Teaching Social Studies in Middle and High School.

564. Methods of Teaching Foreign Language in Middle and High School. 3 hr. field experience; 3 cr. Prereq.: A score of at least advanced low on both the Oral Proficiency Interview (OPI) and the Writing Proficiency Test (WPT) in Spanish, French, Italian, Arabic, Chinese, Japanese, Hindi, Korean, Urdu, or Russian.

SEYS 565. Methods of Standards-based Curriculum and Assessment in Teaching the Visual Arts. 3 hr.: 3 cr. Prereq.: SEYS 533 and EECE 711. This course will introduce students to curriculum planning and further develop students' skills in lesson planning and assessment.

SEYS 570.2–574.2. Initial Clinical Experience in _____for Secondary School. 100–150 hr. at a secondary school; 3 cr. Prereq.: SEYS 536, 700, ECPSE 550; prereq. or coreq.: SEYS 552; submission of CST official score report, with overall score and subscores (candidates who do not pass develop a remediation plan signed by advisor prior to student teaching). Open only to students who are matriculated.

SEYS 570.2. Initial Clinical Experience in English for Secondary School.

SEYS 571.2. Initial Clinical Experience in Mathematics for Secondary School.

SEYS 572.2. Student Teaching I in Science for Secondary School (7–12). 3 hr. plus 280 hours of fieldwork; 3 cr. Coreq.: SEYS 552, 536, 362, submission of CST official score report, with overall score and subscores (candidates who do not pass must develop a remediation plan signed by advisor prior to student teaching). Student Teaching I is the first student-teaching experience that is designed to provide undergraduates and graduates in the secondary education program with school-based classroom experiences that prepare them to effectively student teach at the secondary-school level. Students are placed in a secondary-school setting under the guidance of a school-based teacher and college-based supervisor. Aspiring teachers will learn how to plan and implement lessons based on knowledge of subject matter; how students learn and develop; and how to create learning environments that encourage positive social interactions and active participation. In addition, aspiring teachers will learn how to adapt instructional and assessment strategies to the diverse needs, interests, and abilities of learners.

SEYS 573.2. Initial Clinical Experience in Social Studies for Secondary School.

SEYS 574.2. Initial Clinical Experience in Foreign Language for Secondary School.

SEYS 570.4–574.4. Student Teaching in _____ for Secondary School. 190–240 hr. of daily participation or its equivalent for 15 weeks at a secondary school; 3 cr. Prereq.: A minimum grade of *B* in SEYS 560–564 and SEYS 570.2–574.2 and a 3.0 GPA in SEYS courses; prereq. or coreq.: 580–584. School-based teaching experiences are provided that prepare student teachers to effectively teach students at the secondary school levels. Under the guidance of a cooperating teacher and a college-based supervisor, students are expected to teach a minimum of one class. Students must earn a minimum grade of *B* to be recommended for NYS initial certification.

SEYS 570.4. Student Teaching in English for Secondary School.

SEYS 571.4. Student Teaching in Mathematics for Secondary School.

SEYS 572.4. Student Teaching II in Science for Secondary School (7-12). 3 hr. plus 360 hours of fieldwork; 3 cr. Prereq.: A minimum grade of *B* in SEYS 582 and 572.2, and a 3.0 GPA in SEYS courses; candidates must have a prepared edTPA portfolio submitted on *Chalk & Wire.* Student Teaching II is a full-time, clinically rich student-teaching experience that is designed to provide graduates in the secondary education program with school-based classroom experiences that prepare them to effectively student teach at the secondary-school level. Students are usually placed at a secondary school setting under the guidance of a school-based teacher and college-based supervisor. Aspiring teachers will demonstrate an understanding of planning and implementing lessons based on knowledge of subject matter, how students learn and develop, and how to create learning environments that encourage positive social interactions and active participation. In addition, aspiring teachers will demonstrate how to adapt instructional and assessment strategies to the diverse needs, interests, and abilities of learners. It should be noted that Student Teaching II is considered a level III assessment where candidates are required to demonstrate their ability to plan, instruct and assess at a proficient to exemplary level of performance.

SEYS 573.4. Student Teaching in Social Studies for Secondary School.

SEYS 574.4. Student Teaching in Foreign Languages for Secondary School.

SEYS 575. Supervised Student Teaching I in Visual Arts I. 3 cr. Prereq.: Grade of *B* or higher in SEYS 533. 190–240 hr. 3–4 periods of daily participation or its equivalent for 15 weeks in elementary or secondary school setting. Students will satisfy both elementary and secondary student-teaching placements in SEYS 575 (this course) and SEYS 576. The seminar course is for MAT and Post-Baccalaureate teacher candidates in the Art Education program during their school-based teaching experience that prepares them to teach Visual Arts in public schools. Students are expected to prepare daily lesson plans and will develop and maintain student teaching portfolios.

SEYS 576. Supervised Student Teaching II in Visual Arts II. 3 cr. Prereq.: Grade of *B* or higher in SEYS 565 and SEYS 575. 190–240 hr. 3–4 periods of daily participation or its equivalent for 15 weeks in elementary or secondary school setting. Students will satisfy both elementary and secondary student-teaching placements during SEYS 576 (this course) and SEYS 575 (Student Teaching I). The seminar course is for MAT and Post-Baccalaureate teacher candidates in the Art Education program during their school-based teaching experience that prepares them to teach Visual Arts in public schools. This course will focus on preparing students with edTPA and the Content Specialty Test (CST) for Visual Arts.

SEYS 577. Clinical Residency I. 3 hr. plus 300 hours of fieldwork; 3 cr. Coreq.: SEYS 552—Educational Psychology, SEYS 536—Educational Foundations, and a discipline-specific SEYS methods course. This is the first of three intensive clinical residencies. In this first clinical residency, candidates will have multiple, scaffolded opportunities to apply what they are learning in their college coursework in real secondary (i. e., grades 7–12) classrooms as they endeavor to create safe and culturally sustaining learning environments that inspire critical engagement. Candidates will reflect on and revise their teaching practice in authentic, diverse, urban teaching situations within their respective content area specializations. Candidates will be provided with significant support from both faculty and mentor teachers so that by the end of the semester, candidates are well on their way to developing and demonstrating knowledge, skills, and professional dispositions in fundamental aspects of pedagogy that are consistent with research-validated, discipline-specific, best practices for promoting student learning and well-being.

SEYS 578. Clinical Residency II. 3 hr. plus 300 hours of fieldwork; 3 cr. This is the second of three intensive clinical residencies. During this second semester of clinical residency, candidates continue with their full-time clinical residency placements within New York City Public Schools and continue to have multiple opportunities to apply what they are learning in their college coursework in real secondary classrooms. Many of the scaffolded supports provided during SEYS 577 are systematically removed, and candidates are expected to move toward the independent demonstration of instructional effectiveness. Candidates must successfully and independently be able to demonstrate knowledge, skills, and professional dispositions in 1) designing and implementing coherent, culturally sustaining instruction consistent with research-validated, discipline-specific, best practices, and 2) assessing the impact of their instruction in formative and summative ways in terms of promoting the learning and well-being of all students.

SEYS 579. Clinical Residency III. 3 hr. plus 300 hours of fieldwork; 3 cr. This is the final of three intensive clinical residencies and provides multiple structured opportunities for candidates to apply and reflect on strategies, theories, and practices learned in college coursework through daily work with a mentor teacher in a host school within the mentor teacher's classroom. This course provides induction support to candidates during their final semester in the secondary level Transitional B MAT clinical residency programs as NYCDOE first-year teachers of record within their own classrooms. Specifically, this induction portion of the clinical residency sequence supports candidates' growth during the first semester of full-time teaching, helping candidates as novice teachers continue to develop knowledge, skills, and professional dispositions related to designing, facilitating, and implementing coherent instruction consistent with research-validated, discipline-specific, best practices; and assessing the impact of their instruction in formative and summative ways in terms of promoting the learning, well-being, and critical engagement of all students.

SEYS 580–584. Standards-Based Curriculum and Assessment in Teaching. 3 hr.; 3 cr. Coreq.: SEYS 570.2–574.2. An examination of current standards-based curriculum and assessment strategies and how they can be transformed into effective classroom practice. This class is corequisite with SEYS 570.2–574.2 so as to enrich the student teacher's understanding of curriculum and assessment issues within an actual classroom. Special topics include strategies for preparing students for Standardized Examinations, ways of integrating innovative curricula and technology in instruction, and assessment strategies for diverse student populations, including those with special needs.

SEYS 580. Standards-Based Curriculum and Assessment in Teaching English.

SEYS 581. Standards-Based Curriculum and Assessment in Teaching Mathematics.

SEYS 582. Standards-Based Curriculum and Assessment in Teaching Science.

SEYS 583. Standards-Based Curriculum and Assessment in Teaching Social Studies.

SEYS 584. Standards-Based Curriculum and Assessment in Teaching Foreign Language. Arabic, Chinese, Japanese, Hindi, Korean, Urdu.

SEYS 700. Language, Literacy, and Culture in Education. 3 hr. plus 30 field hr. experience; 3 cr. Intended to deepen and broaden students' understanding of language development in adolescence, and multilingual, multicultural, and biliteracy issues in education. Particular emphasis will be given to the role of language and culture in a pluralistic and democratic society. Students will learn about the nature of language acquisition, English-language proficiency for academic purposes, cross-cultural understanding, second language development, and strategies for teaching subject matter knowledge to English Language Learners (ELL). Course content will focus on the characteristics and needs of ELL populations. Students will examine the instructional strategies of the teachers in relation to the unique needs of these populations. The literacy demands of content curricula in secondary schools will also be critically examined.

SEYS 701. History of Ideas in Education. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in educational foundations (historical, philosophical, or social).

SEYS 702. The History of Education in the United States. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in educational foundations (historical, philosophical, or social).

SEYS 703. Philosophies of Education: Critical Approaches and Ethical Practices. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in educational foundations (historical, philosophical, or social). This course is designed to explore philosophical dimensions of educational policy and practice. Teachers will study major philosophical orientations of education, knowledge and ethics, focusing on the concepts of justice, equity, and other ideas that guide decision making in public education. They will critically engage with key philosophical texts, both classic and contemporary, and use case studies from a variety of educational contexts to grapple with "real-life" ethical dimensions of education and schooling. Participants will look to theory and evidence in evaluating educational decisions and practices, with attention to the effects that school/educator choices and actions have on others (including learners, families, other professionals, and various communities). As a culminating project, learners will work collaboratively to create and analyze their own original "real-world" case studies.

SEYS 704. Philosophies of Teaching and Learning and Digital Pedagogy. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in educational foundations (historical, philosophical, or social). This course is aligned with NYC and NYS learning outcomes for digital citizenship as well as recommendations of the International Society for Technology in Education (ISTE). The course develops foundational knowledge of the history, purposes, and current state of digital citizenship education in K–12 settings. In this course, learners will be asked to analyze what it means to be a citizen of digital spaces and to consider the implications of educational technology for K–12 teaching and learning as well as broader societal implications of technology use. This course aims to equip educators with knowledge, skills, and dispositions to bring digital citizenship into their classrooms in equitable, ethical, and meaningful ways. Learners will understand the historical context and present state of educational technologies through the lens of digital citizenship: legal obligation, various sets of learning standards, traditional frameworks of citizenship education, and research on youth and technology. Participants will learn how to integrate these topics into various content areas and make informed decisions regarding teaching and learning with technologies. Throughout this course, learners will engage in discussions and assignments that encourage thinking critically about how to use online technologies in safe, ethical, equitable, and effective ways.

SEYS 705. School and Society. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in educational foundations to be certified by the department. This course will focus on the study of the institution of education, and on the structure, processes, and interaction patterns within it. It includes the subtle ways in which internal as well as wider social structural forces impinge upon or influence the pedagogy and the social processes in the classroom and in the school. Special attention is given to cultural diversity and alienation, poverty, and inequality issues.

SEYS 706. Globalization and Comparative Education. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in educational foundations to be certified by the department. In this course we will discuss responses of different governments around the world to common educational problems such as governance, financing, and provisions of mass education. We will also consider the equality of educational opportunity and outcome for differently situated social groups, especially those traditionally marginalized: women, ethnic minorities, rural populations, and working class.

SEYS 707. Major Issues in Education. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in educational foundations (historical, philosophical, or social).

SEYS 708. Seminar in Theoretical Study of Education. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in educational foundations (historical, philosophical, or social).

SEYS 709. Humanistic Psychology: Educational Applications. 3 hr.; 3 cr. Prereq.: Undergraduate work in educational psychology.

SEYS 710. Psychology of Adolescence. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in educational psychology.

SEYSW 710W. Foreign Language and Cultural Learning through Classroom Interaction. 3 hr.; 3 cr. Prereq.: SEYS 700, 564, 584, or permission of the instructor. An advanced study of foreign language teaching and diversity focusing on the social, cultural, psychological, and literacy aspects of learning a foreign language. Major threads in the course include how language learning occurs through classroom interaction, how teachers can design classroom interaction to build communities that use the target language for instruction, and how potential mismatches in cultural differences and communication practices occur during classroom interaction.

SEYS 711. Workshop in Art Education in the Elementary School. 3 hr.; 2 cr. Prereq.: One course in art education or permission of the chair. May be repeated for credit if topic is changed.

SEYS 712. Workshop in Visual Thinking. 3 hr.; 3 cr. An advanced course in art education with emphasis on the understanding and development of visual thinking and perceptual awareness. This course attempts to increase the student's ability to observe, remember, visualize, analyze, and discuss visual phenomena and art. Various media and techniques will be utilized.

SEYS 714. World Language Program Design. 3 hr.; 3 cr. Prereq. or coreq.: SEYS 743. This course examines administrative program needs, requirements, key stakeholders, and best practices in assessment systems for designing a vertically articulated K-12 program across levels, buildings, and schools. Participants will develop program curricula for differentiated levels of proficiency targets, including performance-based assessment and student self-assessment statements for content and intercultural competence.

SEYS 715. Language Acquisition and Learning for Bilingual Students. 3 hr.; 3 cr. The course examines the theories, principles, and processes of L1 and L2 acquisition and learning for secondary bilingual students. It explores bilingual language acquisition and learning through linguistic, sociolinguistic, cognitive, cultural, and psycholinguistic lenses. It discusses various research methods used to study and assess bilingual language acquisition and learning with their implications for teaching. 10–15 hours of fieldwork is required.

SEYS 717. Learning Theory in Education. 3 hr.; 3 cr. Prereq.: Course in psychology of the elementary school child, or psychology of the adolescent student, or permission of the department.

SEYS 718. Classroom Management. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in educational psychology. Principles and practices of classroom management in secondary schools with a focus on dealing with behavior and discipline problems.

SEYS 719. Understanding Group Behavior and Cultural Differences in Schools. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in educational psychology. A fundamental goal of education is to promote the intellectual, social, and personal development of all students, including but not limited to each one's fullest potential. A key assumption of this course is that educational planning and intervention adaptive to the diverse needs of learners are primary mechanisms for enabling this goal attainment. Themes such as equity, pluralism, acculturation, and identity will be used to promote teachers' understanding of discipline-based teaching and learning for students from diverse linguistic, racial, gender, and religious backgrounds and students with diverse sexual orientations. Particular attention will be focused on how teachers' understanding of diversity influences on behavior impact their decision making and judgment with respect to four major areas of the teacher's work: instructional planning, assessment, instruction, and curriculum.

SEYS 720. The Education of Immigrants' Children in the United States. 3 hr.; 3 cr. This course will deal with international migration to the United States from a historical perspective, including the development of United States immigration policies and their impact on the sociocultural adaptation of immigrants to the host society, especially in relation to the education of young people. The course will address issues of discrimination, differential socialization, and multicultural problems. Students are expected to acquire first-hand experience by interacting with a recent immigrant family and following the educational experience of recent immigrant students presently attending a school in the United States.

SEYS 722. Oral History in the Secondary Classroom. 3 hr.; 3 cr. Prereq.: Completion of 30 credits in the social sciences (undergraduate and/or graduate) and basic undergraduate or graduate course in curriculum and methods of teaching social studies in secondary schools. An introduction to the field of oral history, including techniques and philosophies behind using oral history and using historical recordings in the classroom. Students will collect life histories (and transcribe and present them), design assignments involving historical recordings, review and prepare an oral history project proposal that will include a plan for the management and presentation of the collected histories. Also suitable for history graduate students (see History Department graduate advisor).

SEYS 724, 725, 727. Workshops in Middle and High School Art Education. Required of all candidates for the MS in Education (art education) degree. Selection and numbers of workshops taken by candidates to be determined in consultation with art education advisor. Open as elective to other matriculated students with departmental permission. Teaching methods utilizing classroom materials and techniques applied to specific areas of art education instruction. Ways of working with a variety of age groups and students of varying abilities in a range of instructional settings.

SEYS 724. Teaching as Social Practice in the Arts. 3 hr.; 3 cr. This course will consider the connection between art making and the teaching of art.

It focuses on the idea of art as social action, community-based research and art practice, and socially engaged art and its relationship to pedagogy.

SEYS 725. Community and Culture in Art Education. 3 hr.; 3 cr. This course will explore the role of culture and community in multiple arts settings, with an emphasis on community building and culturally relevant pedagogy.

SEYS 727. Topics in Art Education. 3 hr.; 3 cr. This course will examine current research in art education and how it applies to teaching in the art room.

SEYS 732. Seminar in Art Education. 3 hr.; 3 cr. Prereq.: Completion of the undergraduate sequence in art education or experience in teaching secondary school art.

SEYS 738. The Teaching Process. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in educational psychology. Examination of current literature relating to the analysis of teaching. Study of recent research and other materials on the nature of teaching.

SEYS 740. The Teaching of Reading in the Secondary School. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in curriculum and methods of teaching English in the secondary schools; coreq.: Classroom teaching in a secondary school.

SEYS 741. Literature for Adolescents. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in curriculum and methods of teaching English in the secondary schools; coreq.: Classroom teaching in a secondary school.

SEYS 743. Curriculum and Instruction in Foreign Language Education. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in curriculum and methods of teaching foreign languages in the secondary schools. The course examines advanced elements and/or issues of foreign language pedagogy.

SEYS 744. Methods and Materials in Teaching English to Speakers of Other Languages in the Content Areas. 3 hr.; 3 cr. Prereq.: Permission of the department. This course will provide training in the teaching of speaking, reading, writing, and comprehension in English to speakers of other languages at all grade levels. The course will include materials and techniques for teaching English to speakers of other languages through mathematics, science, and social studies.

SEYS 745. Reading and Writing for Diverse Students in Content Areas. 3 hr.; 3 cr. Designed for implementing effective instructional strategies for teaching linguistically and culturally diverse students. The course focuses on these students' difficulties with reading and writing in English in content areas and how to structure an integrated content and language and literacy instruction which addresses these students' needs and prepares them for challenging academic work across disciplines.

SEYS 746. Multicultural Literature. 3 hr.; 3 cr. A survey of literature works from/about African, Asian, Caribbean, Hispanic cultures, etc. for use in middle and high school English-language arts classes. The course focuses on a critical examination of curricular and pedagogical issues salient to teaching multicultural literature and developing ways of promoting cross-cultural understanding and approaches for including multicultural literature in the school curriculum.

SEYS 750. Mathematics in the Junior High or Middle School. 3 hr.; 3 cr. Prereq.: Undergraduate course in methods of teaching mathematics, secondary school teaching experience, and permission of the program advisor. The focus of the course is on the improvement of instruction through the examination of the most current issues concerning mathematics instruction in the middle school and the latest curriculum, instructional strategies, manipulatives, and technologies that can be used to enhance the learning of mathematics for all junior high and middle school students.

SEYS 751. Mathematics in the Secondary School. 3 hr.; 3 cr. Prereq.: Undergraduate course in methods of teaching mathematics, secondary school teaching experience, and permission of the program advisor. The focus of the course is on the improvement of instruction through the examination of the most current issues concerning mathematics and computer science instruction in the secondary school and the latest curriculum, instructional strategies, manipulatives, and technologies that can be used to enhance the learning of mathematics and computer science for all secondary school students.

SEYS 752. Problems in Teaching General Science in the Junior High School. 2 hr. plus conf.; 3 cr. Prereq.: Appropriate basic courses in science and methods of teaching science in the secondary school, or secondary school science teaching experience.

SEYS 753. Digital Applications in Science and Technology Education. 3 hr.; 3 cr. Prereq.: Matriculation into the MAT or MS in secondary science education, initial certification, and/or permission of the instructor. Science teacher candidates enrolled in this course will examine the fundamental issues, concepts, and best practices surrounding the use of multimedia in science education. They will learn how to use multimedia digital systems, hardware, software, and Internet resources to support science instruction at the secondary level. Some of the teaching and learning activities will take place online.

SEYS 754. Curriculum Innovations in Science Education. 3 hr.; 3 cr. Prereq.: Matriculation into the MS in secondary science education program, 36 credits in an approved science discipline, an introductory course in curriculum development or methods of teaching science at the secondary level and/or permission of the instructor. Students enrolled in this course will learn how to design innovative science curriculum products that are project-based, student-centered and address the needs of diverse learners at the secondary level. Candidates will be assigned a series of curriculum development tasks, which will require indi-

vidual and collaborative effort. All tasks will be compiled into a comprehensive curriculum product and presented at the end of the course for peer review.

SEYS 755. Practical Applications in Educational Technology. 3 hr.; 3 cr. Prereq: None. This course will teach educators how to appropriately assess technology for integration in their classrooms. It will also support organization and creation of a Learning Management System (LMS). Topics include digital applications, content creation, assessment, and technological pedagogical content knowledge (TPCK). This new course will be added to the elective pool for both the Science MSEd and MAT along with the current offerings, SEYS 753 and 754. This fourth elective option will give the faculty the option of rotating these four elective classes for different populations of students, will increase the fully online offerings in both graduate science programs, and will enhance both graduate programs with regard to courses addressing student use of technology.

SEYS 757. Student Use of Technology. 3 hr.; 3 cr. Technology in the hands of students provides previously inconceivable opportunities, especially in creativity, collaboration, and content knowledge. This course will present pedagogical techniques to enhance student use of technology in a cognitively stimulating and meaningful way. A focus on essential twenty-first-century skills will develop teachers' technological pedagogical content knowledge.

SEYS 758. Cognition in Learning Science and Mathematics. 3 hr.; 3 cr. This course examines current trends in science and mathematics teaching influenced by cognitive learning theory, the rise of the constructivist and neuro-constructivist approaches to learning, the use of social-interactive learning as an important instructional practice, and the use of inquiry teaching—all of which involve students in metacognition and real-life problem solving.

SEYS 760. Curriculum Innovations in the Social Studies. 3 hr.; 3 cr. Prereq.: 30 credits in the social sciences (undergraduate and/or graduate) and basic undergraduate or graduate course in curriculum and methods of teaching social studies in secondary schools.

SEYS 761. Law and the Social Studies. 3 hr.; 3 cr. Prereq.: Completion of an undergraduate sequence in social studies education.

SEYS 762. Teaching History as Mystery. 3 hr.; 3 cr. 30 credits in the social sciences (undergraduate and/or graduate) and basic undergraduate or graduate course in curriculum and methods of teaching social studies in secondary schools.

SEYS 763. Mass Media in School and Society. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate course in curriculum and methods of teaching English in secondary schools. An examination of the media of mass communication from the point of view of the teacher. The focus of the course is on the improvement of instruction through a critical-evaluative study of the bases, processes, techniques, and probable effects of mass media on school and society.

SEYS 764. The Secondary School Curriculum: Current Theories and Controversies. 3 hr. ; 3 cr. Prereq.: Basic undergraduate courses in secondary school curriculum and methods and student teaching or teaching experience. This course will explore the complexities of teaching and learning from multiple perspectives. Assignments and class discussion will encourage teachers to view current educational theories and controversies through various overlapping, dynamic lenses, so that they will be better prepared to facilitate learning in their secondary classrooms. The relationships between current theories and controversies, as well as issues of class, race, power, and social justice in secondary school curriculum design and instruction, are the major topics that will be addressed. It is the objective of this course that teachers will come away with their own personal, highly developed philosophies and practices concerning current theories and controversies and be well versed in the current research and discourse surrounding their secondary school curricula.

SEYS 765. Differentiated Teaching for Diverse Learners in Secondary Schools. 3 hr.; 3 cr. Prereq.: Basic undergraduate or graduate courses in secondary school curriculum and methods, or secondary school teaching experience.

SEYS 766. Workshop in Junior High School Education. Prereq.: Basic undergraduate or graduate courses in curriculum and methods of teaching a specific subject in secondary schools; coreq.: Secondary school teaching. May be repeated for credit if topic is changed.
SEYS 766.2. 2 hr.; 2 cr.
SEYS 766.3. 3 hr.; 3 cr.
SEYS 766.4. 4 hr.; 4 cr.

SEYS 767. Workshop in Secondary Education. Prereq.: Basic undergraduate or graduate courses in curriculum and methods of teaching a specific subject in secondary school; coreq.: Secondary school teaching. May be repeated for credit if topic is changed.
SEYS 767.1. 1 hr.; 1 cr.
SEYS 767.2. 2 hr.; 2 cr.
SEYS 767.3. 3 hr.; 3 cr.
SEYS 767.4. 4 hr.; 4 cr.

SEYS 768. Measurement and Evaluation in Education. 3 hr.; 3 cr. This course requires teachers to examine quantitative and qualitative data from measurement and evaluation tests to inform discipline-specific teaching and learning for students from diverse backgrounds. Teachers will also examine the purposes and functions of standardized and formative assessment process and tools that contribute to a more informed understanding of the learning potentialities of students from diverse backgrounds and their nurturance through the application of principles of differentiation in curriculum and instruction.

SEYS 790. Independent Study in Secondary Education. Prereq.: Matriculation in the Master of Science in Secondary Education program. Permission of the chair is required. Independent study or special project under the supervision of a departmental faculty member. This course may be repeated for credit if the topic is changed for a maximum of 6 credits.
SEYS 790.1. 1 hr.; 1 cr.
SEYS 790.2. 2 hr.; 2 cr.
SEYS 790.3. 3 hr.; 3 cr.
SEYS 790.4. 4 hr.; 4 cr.
SEYS 790.5. 5 hr.; 5 cr.
SEYS 790.6. 6 hr.; 6 cr.

SEYS 769, 770. Scientific Approach to Educational Problems. 3 hr.; 3 cr. each course. Prereq.: For SEYS 769, matriculation in the MS in Education program, completion of one graduate curriculum course, and completion of 20 graduate credits; for SEYS 770, SEYS 769 during the preceding semester.

SEYS 771, 772. Seminar in Research in Educational Foundations. 3 hr.; 3 cr. each course. Prereq.: For SEYS 771, matriculation in MS in Education program, and completion of two appropriate graduate courses in philosophical, historical, or comparative education; for SEYS 772, SEYS 771 during the preceding semester. Examination and evaluation of research in educational foundations: philosophy, history, comparative education. Topics to be announced each year.

SEYS 773, 774. Seminar in Research in Art Education. 3 hr.; 3 cr. each course. Prereq.: Matriculation in the MS in Education (art education) program, completion of 20 graduate credits. SEYS 773 prepares students for research projects. It is a prerequisite to SEYS 774 and does not satisfy the research requirement. In SEYS 774, students complete the required research project.

SEYS 775, 776. Seminar in Research in Mathematics Education. 3 hr.; 3 cr. each course. Prereq.: For SEYS 775, matriculation in MS in Education (mathematics) program, or MSED in Teaching Math and Computer Science program, or MAT (in mathematics) program, 20 credits in graduate program, 30 credits in mathematics (undergraduate and graduate), and SEYS 750 and 751(for MSED students); for SEYS 776, SEYS 775 during the preceding semester.

SEYS 777. Seminar in Research in Science Education I. 3 hr.; 3 cr. (each course). Prereq.: Matriculation in MAT or MS in Education (science) program, initial certification, completion of 20 graduate credits, and 30 credits (undergraduate and graduate) in general science. The course focuses on educational research methodology to prepare students to use appropriate models, research designs, and evaluation techniques and to study educational problems in the areas of science and technology. Students will develop a proposal for a science education field-based research project that will be conducted in SEYS 778.

SEYS 778. Seminar in Research in Science Education II. 3 hr.; 3 cr. (each course). Prereq.: Matriculation in MAT or MS in Education (science) program, initial certification, an approved research proposal from SEYS 777. This course is the second of two consecutive courses in research techniques and research study findings in science education. The objective is to introduce graduates to tools used in research and study how data are used to look more carefully at cause and effect in teaching and learning. In the process, graduates will complete an original research study in an area of interest. The study is expected to be well designed and follow the appropriate APA format for a publishable paper. Quantitative studies that rely on numerical data analysis and qualitative studies that rely more heavily on observational, descriptive measures will be reviewed. Further, common statistical procedures used in various studies will be discussed.

SEYS 779, 780. Seminar in Research in Psychological Foundations. 3 hr.; 3 cr. each course. Prereq.: For SEYS 779, matriculation in MS in Education program and two courses in Psychological Foundations area; for SEYS 780, SEYS 779 during the preceding semester.

SEYS 781, 782. Seminar in Research in Language Arts. 3 hr.; 3 cr. each course. Prereq.: For SEYS 781, matriculation in MS in Education (English) program, completion of 20 graduate credits, and 30 credits in English (undergraduate and graduate); for SEYS 782, SEYS 781 during the preceding semester.

SEYS 783, 784. Seminar in Research in the Teaching of Social Studies. 3 hr.; 3 cr. each course. Prereq.: For SEYS 783, matriculation in the MS in Education (social studies) program, completion of 20 graduate credits, and 30 credits (undergraduate and graduate) in social studies; for SEYS 784, SEYS 783 during the preceding semester.

SEYS 785. Seminar in Research in Foreign Language Education. 3 hr.; 3 cr. Prereq.: Matriculation in MS in Education and completion of 20 graduate credits. Completion of SEYS 743 or its equivalent is a degree requirement and prerequisite or corequisite for this course. SEYS 785 is a prerequisite for SEYS 786.

SEYS 786. Advanced Seminar in Research in Foreign Language Education. 3 hr.; 3 cr. Prereq.: Matriculation in foreign language education, SEYS 743, and 785. Students will conduct a research project in a foreign language that will expand on the literature review begun in SEYS 785. Students will write a detailed plan for the research project including research design, data sources, and participants. They will act on that plan by data collection and analysis, and write a teacher research report.

SEYS 787. Seminar in Action Research in Secondary Education and Technology. 3 hr.; 3 cr. Prereq. or coreq.: None. This course is for secondary (7–12)

teachers who already hold professional certification, aimed at enhancing their understanding of educational technology and improving their practice through action research that they conduct in their own classrooms. The basic tenets of action research will be explored, and teachers will be asked to critically evaluate research in technology and education and then design their own inquiries around instructional technology in education across all secondary content areas.

COURSES IN SECONDARY EDUCATION LITERACY (SEYSL)

SEYSL 700. Research Investigation for Literacy Instruction I. 3 hr.; 3 cr. The first of two courses in the study, understanding, and evaluation of basic research designs and methodology used in literacy education, birth through grade 12, and the interpretation of literacy research. Teacher candidates study the scope of research in the area of literacy, the nature of being a teacher-researcher, and research processes and designs. Teacher candidates demonstrate ability to read and evaluate primary research reports, interpret research syntheses, locate information about literacy research, and determine appropriateness of literacy research findings for instruction by conducting an in-depth investigation of a specific topic in the area of literacy development and instruction.

SEYSL 701. Foundations of Literacy Development and Instruction. 3 hr.; 3 cr. An introductory course in literacy development and instruction of students in grades 5–12. The major area of inquiry is the psychological, sociological, cognitive, and linguistic bases of literacy. Specific topics include the role of literacy in society, history of literacy instruction, current schoolwide early childhood, childhood, middle education, and adolescent literacy instructional programs, differentiation of instruction for students with diverse needs, family literacy partnerships, children and adolescent literature, classroom organization, classroom and schoolwide assessment programs, literacy in a technological age, and processes of developing literacy proficiency. Special emphasis is placed on factors underlying development of print awareness and usage at all levels, including word identification and spelling strategies, vocabulary skills, comprehension strategies, composing skills, and the supporting roles of speaking and listening to the development of reading and writing strategies.

SEYSL 702. Literacy in Content Areas. 3 hr.; 3 cr. This course is designed to help all teachers facilitate middle and secondary classrooms where reading, writing, listening, and speaking are effective tools for learning, where collaboration and communication are valued and enhanced in the learning process, and where young people are encouraged to develop critical perspectives and strong voices. Attainment of literacy is central to knowledge construction in all middle and secondary school curricula. Students will examine issues of literacy in different subject areas and the varied demands on readers and writers as the range of literate activities changes according to context. This course is designed to enable inservice teachers and literacy specialists to improve the literacy of all students in the middle and secondary schools.

SEYSL 703. Literacy Instruction for Diverse Learners. 3 hr.; 3 cr. The primary emphasis of this course is to familiarize teacher candidates about the historical, sociological, and psychological issues related to the education of all learners including English-language learners and students with disabilities in secondary education. English-language learners and disability issues highlighted within this course include laws and legal mandates; types of disabilities; characteristics of English-language learners and students with specific disabilities; assessment, diagnosis, and intervention; individualized education and transition planning; curriculum adaptation; assistive technologies; and research-based instructional methods and strategies for English-language learners and students with disabilities. Teacher candidates develop an understanding of the linguistic and cognitive capabilities of English-language learners and students with various disabilities and acquire the expertise to adapt instruction for advancing literacy as well as content learning of English-language learners and students with disabilities. Twenty-five hours of fieldwork focused on English-language learners and students with disabilities are required.

SEYSL 704. Literature across the Curriculum. 3 hr.; 3 cr. This course is designed to help all teachers facilitate middle and secondary classrooms where reading and writing are effective tools for learning, where collaboration and communication are valued and enhanced in the learning process, and where young people are encouraged to develop critical perspectives and strong voices. Attainment of literacy is central to knowledge construction in all middle and secondary school curricula. Students will examine issues of literacy in different subject areas and the varied demands on readers and writers as the range of literate activities changes according to context. This course is designed to enable inservice teachers and literacy specialists to improve the literacy of all students in middle and secondary schools.

SEYSL 750. Literacy Assessment and Instruction. 3 hr.; 3 cr. Prereq.: SEYS 700, 701, 702, 703, 704, 705, and satisfactory electronic portfolio review. This course requires teacher candidates to examine causes of reading difficulty, elements of skilled reading, and systematic models for analyzing and remediating literacy problems for students in middle and adolescent education. Topics include the function of standardized assessment devices in instructional decision-making, development and administration of informal assessment devices and inventories of reading and writing performance, evaluation and modification of environmental and instructional variables contributing to literacy achievement in content areas, student motivation, and strategies for determining the appropriate procedures to assess students with diverse abilities and cultural and linguistic backgrounds. Candidates demonstrate ability to systematically identify critical variables

that contribute to literacy success and failure and to develop and apply various procedures for assessing literacy difficulties of students with diverse backgrounds.

SEYSL 752. Consultation, Collaboration, and Literacy Program Renewal. 3 hr.; 3 cr. Prereq.: 700, 701, 702, 703, 704, 705, 750, 751. This course assists literacy personnel in using their knowledge of literacy to help classroom teachers, special education teachers, parents, school-based support teams, administrators, and other relevant personnel to develop and enhance literacy programs for students and to improve literacy across the curriculum. It focuses on definitions of consultation, effective models of consultation, consultation strategies, staff development, literacy program evaluation and reform, working with para-professionals, federal and state laws and initiatives, and instructional practice.

SEYS 756. Mobile Science: Data-Based Decision Making. 3 hr.; 3 cr. Prereq.: None. This course is designed to tap student motivation by using personal technologies such as mobile phones and tablets as tools for conducting authentic science investigations. The workshop provides tools to find and use real-time data and the analytical pedagogical foundation of how to use large data sets to engage students in detecting patterns in the natural environment. Data analytics is especially important in the twenty-first century because of two advances: computational power and a veritable explosion in the quantity of collected data.

SEYSL 760. Supervised Practicum with Middle/Junior High School Students. 3 hr.; 3 cr. Prereq.: SEYSL 700, 701, 702, 703, 704, 705, 750, 751. This course provides 25 hours of supervised practicum and seminar to develop teacher candidates' competence in planning and implementing instruction in middle/junior high school education, grades 5–8, for diverse students experiencing moderate and severe difficulties in literacy development. Content deals with the skills and strategies needed to assess students' literacy strategies, plan and implement appropriate instructional procedures, and report progress to students, parents, and school officials. Supervised practicum is required for New York State Certification as literacy teacher, grades 5–12.

SEYSL 761. Supervised Practicum with High School Students. 3 hr.; 3 cr. Prereq.: SEYS 700, 701, 702, 703, 704, 705, 750. This course provides 25 hours of supervised practicum and seminar to develop teacher candidates' competence in planning and implementing instruction in high school education, grades 9–12, for diverse students experiencing moderate and severe difficulties in literacy development. Content deals with the skills and strategies needed to assess students' literacy strategies, plan and implement appropriate instructional procedures, and report progress to students, parents, and school officials. Supervised practicum is required for New York State Certification as literacy teacher, grades 5–12.

SEYSL 790. Research Investigation for Literacy Instruction II. 3 hr.; 3 cr. Prereq.: SEYSL 700, 701, 702, 703, 704, 705, 750, 751, 752, 760, 761. SEYSL 790 must be taken in the student's last semester of the program. The second of two research courses about the study, understanding, and evaluation of basic research designs and methodology in literacy education and the interpretation of literacy research, grades 5–12. Major emphasis is on the design, implementation, and reporting of a qualitative or quantitative research project on a topic of concern in middle or adolescent education. The e-portfolio begun in the first literacy course, (SEYSL 700 or SEYSL 701) and compiled by students as they progress through the program is completed and submitted as part of SEYSL 790.

Educational & Community Programs

Chair: Emilia C. Lopez

Graduate Program Coordinators: Counselor Education, Lourdes M. Rivera; Educational Leadership, Nathalis Wamba; Special Education, Lenwood Gibson; School Psychology, Marian C. Fish

Dept. Office: Powdermaker Hall 033, 718-997-5240, 5250

Office Staff: Jaclyn Arroyo, Shaneeza Gulmahamad, Diane Mantellino, Dolly Mathura

The Department of Educational & Community Programs prepares candidates for leadership, instructional, and support positions in counseling, school leadership, special education, and school psychology. The four distinct graduate programs in the department lead to New York State-approved certifications, licenses, and specializations. Many of our programs also lead to either a Master of Science in Education or a Master of Arts in Teaching. The programs in Counselor Education, Educational Leadership, Special Education, and School Psychology prepare graduates to take positions in schools, community agencies, industry, and other institutions that provide educational and human services.

All candidates must meet appropriate standards in scholarship, communication skills, character, ethics, interpersonal relations, and social judgment to continue in their chosen programs. Candidates are obliged to meet the college standards, as well as the academic standards established by their particular programs. Once admitted, all candidates are expected to demonstrate professional behaviors and dispositions that are consistent with (a) the Core Values of the Education Unit at Queens College of promoting Equity, Excellence, and Ethics in urban schools and communities, and (b) the code of ethics for their professions. Responsible preparation for work in school and community settings requires that in addition to meeting the academic standards established by each

program, candidates demonstrate appropriate personal characteristics, which include professional judgment, ethical conduct, and integrity at all levels. In addition, candidates are expected to demonstrate compassion and sensitivity to client issues and effective management of personal stress or adjustment difficulties. Expectations for appropriate professional conduct must be met at the college, division, department, and program levels when interacting with peers, faculty and college staff, field supervisors, fieldwork setting staff, and all clients (i.e., children, adolescents, families, adults). Candidates are also expected to abide by the CUNY Policy on Academic Integrity.

All candidates are subject to review by their program faculty, and sanctions, up to and including dismissal, may result from academic and/or professional deficiencies. Candidates have the right of appeal and should familiarize themselves with guidelines set forth in program handbooks and this *Bulletin*.

Candidates are required to purchase and maintain a *Chalk and Wire* ePortfolio subscription in order to submit their assignments as directed by their respective programs.

In the event that students experience discontinuities in their preparation, college policies in regard to timelines for program completion must be followed. Candidates' leave or a break in the continuity of study involving program reentry requires review by the faculty before candidates return to the program and study may be resumed. Such reviews could result in requiring candidates to retake courses or other requirements to ensure competencies are maintained. Reentry into a program must be approved by the program coordinator and the respective program faculty. All applications for reentry must be approved by the respective program faculty. Please refer to policies in this *Bulletin* regarding reentry procedures.

Registration

Registration or pre-registration procedures vary among programs. Candidates should check with their program faculty to learn about the procedures. They should also check the Queens College website for registration and pre-registration dates and course schedules. Program schedules are posted in the departmental office. Candidates must consult with advisors and check program sequences before they are registered. All registration is done by the respective program.

Department-wide Courses

ECP 747. Independent Study in Education. 3 hr.; 3 cr. Prereq.: Matriculation in an MS in Ed program or in an ECP Advanced Certificate program in Education independent study or special project under supervision of a departmental faculty member; permission of the appropriate program coordinator and departmental chair required. No more than 3 credits of independent study may be taken. Students participate in independent studies or complete special projects under the supervision of a departmental faculty member. The supervising faculty member establishes subject matter and criteria for completion. Each participating student will receive a letter grade for this class.

ECP 749. Independent Study in Education. Prereq.: Matriculation in MS in Ed program or in an ECP Advanced Certificate program in Education independent study or special project under supervision of a department faculty member. Permission of the appropriate program coordinator and departmental chair required. No more than 3 credits of independent study may be taken. This course may be given Pass/Fail for students in the Advanced Certificate program in Education.
ECP 749.1. 1 cr.
ECP 749.2. 2 cr.
ECP 749.3. 3 cr.

ECP 789. Workshop in Current Issues in Education and Human Services. 3 hr.; 3 cr. Prereq.: Permission of the department chair. Course content will vary from semester to semester and will cover a range of issues. This course may be repeated for credit if the course content is changed. Students taking this course will receive a pass/fail grade.

ECP 790. Workshop in Current Issues in Education and Human Services. Prereq.: Permission of the department. Course content will vary from year to year and will cover a range of issues. May be repeated for credit if topic is changed.
ECP 790.2. 2 hr.; 2 cr.
ECP 790.3. 3 hr.; 3 cr.
ECP 790.4. 4 hr.; 4 cr.

BILINGUAL EXTENSION FOR PUPIL PERSONNEL

The Department of Educational and Community Programs provides a sequence of courses for practicing school counselors, school psychologists, and school social workers currently holding provisional or permanent certification in their respective disciplines. The 15-credit sequence of courses is approved by the New York State Education Department and includes a field component. The purpose of the sequence is to prepare school counselors, school psychologists, and school social workers to provide bilingual educational, psychological, and mental health services to linguistically diverse students and families in school settings. Individuals who complete the 15-credit sequence will be eligible for the New York State Education Department's bilingual extension in their respective fields.

Sequence Objectives

The bilingual extension sequence of courses is specifically designed for pupil personnel in the fields of school counseling, school psychology, and school social work. Candidates in those various fields take courses together in order to receive an interdisciplinary training experience. Candidates obtain the following competencies:

- Awareness of cross-cultural differences;
- Knowledge of the second-language acquisition process;
- Knowledge and skills in using a variety of culturally sensitive assessment tools;

- Skills in developing and implementing culturally responsive school-based interventions;
- Skills in providing culturally responsive consultation services to other school personnel;
- Knowledge and skills to work with linguistically and culturally diverse families;
- Skills in multicultural counseling, and
- Knowledge of educational programs appropriate for bilingual students and English language learners.

Requirements for Admission

To be admitted to the bilingual extension sequence, a professional must present:

(a) a graduate degree in school counseling, school psychology, or social work;

(b) a valid New York State license or certificate in one of these discipline areas;

(c) proof of employment in the respective disciplines while studying for the extension and providing bilingual services; and

(d) scores obtained on the New York State Department of Education Bilingual Extension Assessment; and,

(e) interest in a bilingual extension in one of these disciplines.

All candidates will be interviewed by sequence advisors. At the time of the interview candidates must submit the following documentation:

- a copy of a graduate transcript from the institution that granted the degree in the candidate's discipline;
- a copy of a valid New York State license or certificate in the candidate's discipline; and
- a letter from the candidate's employer stating that he/she is currently employed as a bilingual clinician and that his/her job responsibilities include providing educational, psychological, and mental health services to bilingual students and families in the candidate's specific language competencies.
- a copy of the New York State Bilingual Education Assessment examination scores

Course Sequence for the Part-Time Mental Health Counseling Program

Fall – first year		*credits*
ECPCE 700	Foundations of Counseling	3
ECPCE 704	Counseling Theories	3
ECPCE 701	Lab in Self-Awareness	3
Spring – first year		
ECPCE 703	Lab in Counseling Techniques	3
ECPCE 702	Theories of Human Development	3
ECPCE 812	Psychopathology and Diagnosis in Mental Health Counseling	3
Fall – second year		
ECPCE 708	Ethics, Clinical Issues, and Crisis Intervention	3
ECPCE 721.4	Practicum in Mental Health Counseling	4
ECPCE 811	Mental Health Counseling	3
Spring – second year		
ECPCE 804	Assessment Methods in Counseling	3
ECPCE 706	Theories of Group Counseling	3
ECPCE 821	Internship in Mental Health Counseling	2–3
Fall – third year		
ECPCE 707	Lab in Group Counseling Techniques	3
ECPCE 800	Career Development and Assessment	3
ECPCE 821	Internship in Mental Health Counseling	2–3
Spring – third year		
ECPCE 803	Multicultural Issues in Counseling	3
ECPCE 807	Research Methods in Counseling	3
ECPCE 829	Internship in School Counseling	2–3
Fall – fourth year		
ECPCE 813	Family Dynamics	3
ECPCE 829	Internship in School Counseling	2–3
Spring – fourth year		
ECPCE 814	Seminar in Advanced Applications of Psychological Theories	3
	Total	**60**

Note: Candidates may complete the program in 3 years with summer courses.

Course Sequence for the Part-Time School Counseling Program

Fall – first year		*credits*
ECPCE 700	Foundations of Counseling	3
ECPCE 701	Lab in Self-Awareness	3
ECPCE 708	Ethics, Clinical Issues, and Crisis Intervention	3
Spring – first year		
ECPCE 704	Counseling Theories	3
ECPCE 703	Lab in Counseling Techniques	3
ECPCE 702	Theories of Human Development	3
Fall – second year		
ECPCE 729.4	Practicum in School Counseling	4
ECPCE 802	Special Issues in School Counseling	3
ECPCE 804	Assessment Methods in Counseling	3
Spring – second year		
ECPCE 706	Theories of Group Counseling	3
ECPCE 803	Multicultural Issues in Counseling	3
ECPCE 829	Internship in School Counseling	1
Fall – third year		
ECPCE 707	Lab in Group Counseling Techniques	3
ECPCE 800	Career Development and Assessment	3
ECPCE 829	Internship in School Counseling	1–4
Spring – third year		
ECPCE 806	Administration and Organization of School Counseling Programs	3
ECPCE 807	Research Methods in Counseling	3
ECPCE 829	Internship in School Counseling	1–4
Fall – fourth year		
ECPCE 809	Learning and Motivation in School Counseling	3
ECPCE 829	Internship in School Counseling	1–4
Spring – fourth year		
ECPCE 808	Child and Adolescent Counseling	3
	Total	**60**

Notes:

1. Bilingual Specialization requires one additional course (ECPSP 866 or equivalent, per advisor) for a total of 63 credits.
2. Candidates may complete the part-time program in 3 years by taking ECPCE 808 and ECPCE 809 during the summer and completing 3 credits of internship in each semester of year three.
3. The full-time school counseling program is completed in 2 years (4 semesters) by taking 13–16 credits each semester. This program plan requires attendance at afternoon classes (12 noon or 1 pm).

Candidates applying for the bilingual extension sequence of courses must complete and submit an application form to the Office of Graduate Admissions. Once the application is complete, candidates will be invited for an interview with the program directors. All documentation must be submitted in order for your application to be considered complete and ready for review. Candidates who are currently working in a school setting providing bilingual services in their discipline may be eligible for tuition support via the Intensive Teacher Institute, a New York State-funded program. For additional information, please contact 631-218-5172.

REQUIRED SEQUENCE OF COURSES

The courses that students must complete for the bilingual extension sequence are as follows:

ECPSP 779. Multicultural Issues in Schools. 3 hr.; 3 cr. The course provides an introduction to language, cultural, and social influences that impact on individuals' behaviors, attitudes, and cognitive styles. Language, ethnicity, socioeconomic class, sexual orientation, and gender issues are explored. The course also provides students with knowledge of cultural characteristics of children and families from diverse cultural groups (e.g., African Americans, Hispanic Americans, Asian Americans). In addition, problems in and approaches to bilingual and multicultural assessment, cross-cultural consultation, and interventions with culturally and linguistically diverse children and youth are discussed.

ECPSP 861. Assessment of Linguistically and Culturally Diverse Students. 3 hr.; 3 cr. Students will develop competencies in assessing linguistically and culturally diverse students. A major emphasis is placed on learning appropriate procedures in assessing language proficiency, intellectual, academic, and personality-behavioral functioning of these students. Nontraditional alternative assessment approaches and nonbiased assessment are also covered.

ECPSP 866. Multicultural Interventions. 3 hr.; 3 cr. This course provides an overview of culturally responsive interventions for culturally and linguistically diverse students. Interventions focusing on instruction, classroom management, consultation (i.e., teacher and parents), and counseling are explored. Organizational and school culture issues are also examined within the context of creating school environments that help linguistically and culturally diverse students succeed in schools.

ECPCE 803. Multicultural Issues in Counseling. 3 hr.; 3 cr. This course explores issues of diversity in the counseling process; reviews emerging theories, literature and research in multicultural counseling practice; examines the social and cultural foundations of race, ethnicity, gender, and sexual orientation as these relate to counseling practice and human development. Issues of language and language diversity are also addressed.

ECPCE 814. Advanced Seminar in Counseling Applications. 3 hr.; 3 cr. This course entails an in-depth study of specific counseling approaches and their use with various client populations, including culturally and linguistically diverse clients. Case studies will provide a focus for analysis. Students may be required to conduct literature reviews and to make presentations.

As part of the Bilingual extension sequence of courses and as required by New York State, candidates are required to complete a minimum of 50 hours of field-based related bilingual experiences. Candidates will be required to complete multiple assignments that are field based as part of several of the courses in the bilingual extension sequence. As such, candidates must be working in school settings while providing bilingual services to children and families.

Other Requirements

Candidates must demonstrate bilingual proficiency by passing the language proficiency exam required by the New York State Education Department prior to starting the bilingual extension sequence of courses.

They must maintain a *B* average (3.0 grade-point average) and demonstrate professional dispositions and attitudes. Candidates who achieve a course grade of less than a *B*– or who fail to demonstrate professional dispositions or behaviors must meet with the program advisors. Candidates' performance will be reviewed by the program advisors every semester.

All candidates must meet appropriate academic and scholarship standards to remain in the program and to complete the program. They must also demonstrate appropriate personal, professional, and ethical conduct as established by the program and their prospective professions (e.g., ethical and professional standards in school counseling, school psychology, and social work). Candidates are expected to abide by the CUNY Policy on Academic Integrity. All candidates are subject to review, and sanctions, up to and including dismissal, as a result of academic and/or professional deficiencies.

Candidate leaves or a break in the continuity of study require a review by the faculty before candidates return to the program and study is resumed. Such reviews could result in requiring candidates to retake courses or other requirements to ensure competencies are maintained.

For information about how to apply for the bilingual extension sequence of courses, please contact one of the following advisors:

Dr. Emilia C. Lopez
718-997-5234 • emilia.lopez@qc.cuny.edu

Dr. Lourdes M. Rivera
718-997-5313 • lourdes.rivera@qc.cuny.edu

School psychologists should contact Dr. Lopez; school counselors should contact Dr. Rivera; social workers may contact either Dr. Lopez or Dr. Rivera.

Counselor Education

Coordinator: Lourdes M. Rivera

The Master of Science in Education (MSEd) for school counselors and the Master of Science (MS) in Mental Health Counseling degrees are 60-credit programs that prepare students to serve as professional counselors in schools, hospitals, and community agencies. The MSEd program in School Counseling leads to New York State certification in counseling. The 63-credit multicultural specialization program leads to the bilingual extension of the school counseling certification. The MS program in Mental Health Counseling leads to New York State licensure. Candidates seeking specialization in college counseling enroll in the mental health program.

The Counseling Program offers a sequence of courses for practicing school counselors who already hold certification and are seeking a bilingual extension. For additional information, please refer to this *Bulletin* under Bilingual Extension for Pupil Personnel.

Either MS program in Counseling (School or Mental Health) can be completed in 2 years full-time (which requires attendance in daytime classes) or 3 to 4 years part-time with evening classes. All candidates for either master's degree must take the 36-credit sequence of basic and advanced core courses, 12 credits of specialization courses, and 12 credits in fieldwork (for a total of 700 hours).

Core and advanced courses must be taken in sequence. Lecture courses and the related experiential lab courses are offered in modules and must be taken concurrently. This allows for the development of knowledge and skills in a logical progression from basic competencies to more complex applications. It is necessary for candidates to both learn psychological concepts and demonstrate the ability to apply theoretical knowledge in various contexts. Specifically, candidates must be able to demonstrate individual and group counseling skills, including interviewing, assessment, research, and evaluation. They are expected to develop critical thinking and insight, to take multiple perspectives, and to synthesize knowledge from various learning experiences in the program. Both personal maturity and academic sophistication are required.

Responsible training for work in school and mental health settings requires that candidates display professionalism in appearance, demeanor, and personal characteristics. Such characteristics include, but are not limited to, communication skills, interpersonal skills, professional judgment, insight, compassion and ethical conduct. In addition, candidates are expected to demonstrate sensitivity to client issues and effective management of personal stress or adjustment difficulties. If there are questions regarding academic performance or personal/ interpersonal capacities, candidates are reviewed by the program faculty to determine intervention supports or their continuation in the program. *In order to maintain matriculation, students must receive a favorable review with regards to:*

1. Grades (a minimum GPA of 3.0).
2. Attendance, punctuality, and participation in classes.
3. Personal and interpersonal abilities relevant to professional counseling, including ethical and professional conduct.
4. Dispositional assessments at various points throughout the program.

All candidates must meet appropriate academic and scholarship standards to remain in and complete the program. They must also demonstrate appropriate personal, professional, and ethical conduct as established by the program and counseling profession (e.g., ethical and professional standards in school counseling and mental health counseling). Candidates are expected to abide by all CUNY policies, including but not limited to the Policy on Academic Integrity. All candidates are subject to review and sanctions, including dismissal, as a result of academic and/or professional deficiencies.

Counseling candidates are expected to engage in ethical and professional behavior in their relationships with their student peers, faculty, supervisors, clients and fieldwork staff, and in all settings, including but not limited to on campus, in classrooms, and fieldwork settings. All candidates are subject to review throughout the program on professional dispositions. Candidates who do not receive satisfactory ratings are subject to review and sanctions, including dismissal, as a result of professional deficiencies.

Chalk & Wire: Candidates are required to purchase and maintain a *Chalk & Wire* ePortfolio subscription from the Queens College bookstore in order to submit their assignments as directed.

FACULTY

Rivera, Lourdes M., Coordinator, *Associate Professor,* PhD 2002, Fordham University: counseling psychology, career counseling and development, multicultural issues

Day, Matthew S., *Assistant Professor,* PhD 2005, University of New Orleans: group counseling, supervision, family and adolescent counseling

Kyle, Jennifer, *Assistant Professor,* PhD 2004 CUNY: clinical psychology, suicide prevention, multicultural issues, gender

Matta, Marissa, *Lecturer,* PhD 2019, University of Buffalo, SUNY: counselor education, rehabilitation counseling

Pellitteri, John, *Associate Professor,* PhD 1999, New York University: counseling psychology, emotional intelligence, school counseling, music therapy

Rivera, David P., *Associate Professor,* PhD 2012, Teachers College, Columbia University: counseling psychology, development of cultural competency, microaggressions, identity development

PROGRAM FOR THE DEGREES OF MASTER OF SCIENCE IN EDUCATION (MSED) AND MASTER OF SCIENCE (MS) IN COUNSELING

Requirements for Admission

1. Completion of a bachelor's degree with an overall GPA of 3.0.
2. Satisfactory completion of the following five prerequisite course areas:
   - Introduction to psychology
   - Developmental psychology (child, adolescent, or life-span)
   - Abnormal psychology (or psychopathology)

- Statistics
- Social basis of behavior (sociology, anthropology, or social psychology).

3. Three positive letters of reference from professors, supervisors, or professional references.
4. A 500-word essay outlining reasons for choosing a career in counseling (describing the applicant's motivations for entering the counseling profession and expectations of graduate-level study).
5. Satisfactory rating on admissions tests, essay, interviews, and references.

In the 500-word essay on the admissions application, please describe your motivations for entering the counseling profession and your expectations of graduate-level study

Requirements for Completion of the Master's Degree

1. Satisfactory completion of the 60-credit sequence.
2. Demonstration of the professional knowledge and competencies associated with professional counseling.
3. Satisfactory completion of at least 700 hours of supervised fieldwork in approved settings.
4. Satisfactory completion of a final research project.
5. Satisfactory scores on a comprehensive examination administered by the Program.

Candidate leave or a break in the continuity of study requires review by the faculty before candidates return to the program and study may be resumed. Such reviews could result in requiring candidates to retake courses or other requirements to ensure competencies are maintained. Students must contact their faculty advisor to discuss reentry before submitting a reentry application through Graduate Admissions.

PROGRAMS & SPECIALIZATIONS

School Counseling Program

The graduate program is approved by the New York State Education Department and leads to *permanent* certification as a school counselor upon completion of the 60-credit MSEd degree and 2 years of post-master's employment in a school setting. Students may obtain a *provisional* state certification after the completion of 30 credits. The provisional certification application must be handled by the student directly with the state. Dr. John Pellitteri is the school counseling advisor, and Dr. Lourdes Rivera is the multicultural specialization advisor.

The following are specific requirements for all candidates in school counseling:

(a) School counseling specialty courses:
ECPCE 700. Foundations of Counseling
ECPCE 802. Special Issues in School Counseling
ECPCE 806. Administration and Organization of School Counseling Programs
ECPCE 808. Child and Adolescent Counseling
ECPCE 809. Learning & Motivation in School Counseling
ECPCE 810. College and Career Readiness

(b) Fieldwork in K–12 school settings as part of ECPCE 729.4. Practicum in School Counseling (4 credits) and ECPCE 829. Internship in School Counseling (8 credits).

(c) Completion of a final research project (as part of ECPCE 807 Research Methods) in an area related to school counseling.

(d) Completion of three workshops: Child Abuse Identification, School Violence Prevention and Intervention (SAVE), and DASA (Dignity for All Students Act). The workshop sessions usually last 2–3 hours and are offered periodically throughout the year by the college. Contact the Office of Continuing Education for information about these workshops.

Additional Requirements for the Bilingual Extension Specialization

(a) ECPCE 803. Multicultural Issues in Counseling (required for all candidates).

(b) An additional course in bilingual issues (ECPSP 866. Multicultural Interventions or equivalent, as per advisor) for a total of 63 credits.

(c) At least 6 of the 8 internship credits (450 internship hours) must be with a bilingual population.

(d) The final research project (ECPCE 807) on a topic in multicultural/bilingual issues.

Mental Health Counseling Program

The Mental Health Counseling program is registered with the New York State Education Department and leads to licensing as a Mental Health Counselor. Post-degree clinical hours and exams are required beyond the master's degree for licensing.
The following are the specific requirements for all candidates in mental health counseling:ec

(a) Mental Health Counseling specialty courses:
ECPCE 807. Research Methods in Counseling
ECPCE 811. Mental Health Counseling
ECPCE 812. Psychopathology and Diagnosis in Mental Health Counseling
ECPCE 813. Family Dynamics
ECPCE 814. Advanced Applications in Counseling

(b) Fieldwork in Mental Health settings as part of ECPCE 721.4, Practicum in Mental Health Counseling (4 credits), and
ECPCE 821, Internship in Mental Health Counseling (8 credits).

(c) Completion of a final research project (as part of ECPCE 807 Research Methods) in an area related to mental health counseling.

Additional Requirements for the Counseling in a College Setting Specialization

Students who plan to work as counselors in college settings must complete the Mental Health Counseling program. Dr. Lourdes M. Rivera is the advisor for the College Counseling specialization and should be notified

if you wish to concentrate in this area. In addition to the Mental Health Counseling requirements above, students must complete the following:

(a) Practicum and internship hours in a college setting that is also acceptable as a mental health site for the New York State License in Mental Health Counseling;
(b) The final research project in ECPCE 807 on a topic relevant to counseling in a college setting.

CORE COURSES

ECPCE 700. Foundations of School Counseling. 3 hr.; 3 cr. This course is an introduction to the field of school counseling that will provide an overview of the knowledge necessary for preparation as professional school counselors. Some of the topics addressed in this course include professional and ethical responsibilities, consultation, multicultural and diversity issues, college and career readiness, and the perspectives and practices necessary for school counseling in the 21st century. Candidates will also be introduced to the components required for the development and management of a school counseling program, and the use of data to inform decision making. In addition, candidates will learn the various roles of a school counselor as leaders, advocates, consultants, coordinators, and collaborators. This course will utilize both theory and the exposure to practitioners in the field to better understand the function of a professional school counselor. As this course facilitates the development of the skills necessary for counselor training at the graduate level, topics such as research in counseling and scholarly writing will also be addressed.

ECPCE 701. Lab in Self-Awareness. 3 hr.; 3 cr. Taken concurrently with ECPCE 700, this experiential course develops listening, feedback, and communication skills through guided exercises and readings. The small group experience is used to explore and enhance self-awareness of intrapersonal and interpersonal dynamics through a variety of psychological, social, and profession-al perspectives. It is the basis for the personal and professional development expected of the counselor-in-training. Graded on a Pass/Fail basis only.

ECPCE 702. Theories of Human Development. 3 hr.; 3 cr. This course is a survey of the major theories of personality, cognitive, and social-emotional development through the lifespan. It includes study of family, social and ecological factors as they interact with individual factors to facilitate development. The course emphasizes the application of developmental principles to counseling interventions.

ECPCE 703. Lab in Counseling Techniques. 3 hr.; 3 cr. Taken concurrently with ECPCE 704, this course focuses on developing basic counseling skills with individuals. Emphasis is on creating the core conditions for facilitating the counseling relationship and process, practicing appropriate application of counseling microskills, and coordinating intervention techniques with counselor intentions for therapeutic change. Role plays, video feedback and group discussions as well as other activities will be used. Graded on a Pass/Fail basis only.

ECPCE 704. Counseling Theories. 3 hr.; 3 cr. This course surveys the major theories of counseling and psychotherapy. Issues of theoretical assumptions, assessment, treatment, and outcome will be addressed as well as their application to counseling settings and specific clinical populations. Comparison of the various empirically based models of counseling will aim to derive common principles of therapeutic change.

ECPCE 705. Seminar Practicum in Psychological Counseling with Individuals: Applications. 3 hr.; 3 cr. Graded on a Pass/Fail basis only.

ECPCE 706. Theories of Group Counseling. 3 hr.; 3 cr. This course will provide an overview of the major theories of group counseling with a focus on task groups, psychoeducational groups, and therapy groups. Topics will include techniques of group counseling, group dynamics, developmental stage theories, group process components, types of groups, ethical and legal considerations, leadership styles, as well as research and literature in group counseling and social systems. Experiential exercises will be used to reinforce concepts.

ECPCE 707. Lab in Group Counseling Techniques. 3 hr.; 3 cr. Prereq.: ECPCE 706. This is an experiential course where students practice techniques of group interventions that are taught in the theory part of the course sequence. Students gain experience in developing their own leadership styles and responding to group dynamics. Topics will include techniques of co-facilitation, giving and receiving corrective feedback, and development of group session plans.

ECPCE 708. Ethics, Clinical Issues, and Crisis Intervention. 3 hr.; 3 cr. This course will cover various clinical topics such as suicide assessment, crisis intervention, critical incident counseling, and grief/trauma issues as well as mental health and substance abuse assessment. Ethical codes for professional counselors will be reviewed and ethical issues will be addressed. Taken as a prerequisite or corequisite with counseling practicum ECPCE 729 or 721.

ECPCE 721. Practicum in Mental Health Counseling. 100 hr. per semester (placement in a mental health clinic, hospital, or community agency setting); 4 cr. Prereq.: Completion of 12 cr. in the program including ECPCE 703. Prereq. or coreq.: ECPCE 708. The focus will be on advanced skills development (through video feedback), integration of counseling theory, and applications to fieldwork sites. Supervision will involve the use of video or audio tapes. Professional counseling issues encountered in field placement will be addressed. A comprehensive case study is required as part of this course.

ECPCE 729. Practicum in School Counseling. 100 hr. per semester (placement in a school setting, grades K–12); 4 cr. Prereq.: Permission of the advisor,

completion of 12 cr. in the program including ECPCE 703. Practicum is a field-based course during which candidates will be placed for 100 hours in a K–12 school setting. During practicum, candidates will engage in activities related to the development, implementation, and evaluation of the elements of the school counseling program (60% of hours) and provide direct student services (40% of hours) with a focus on integrating theoretical concepts with advanced techniques to develop a cohesive approach to counseling. A comprehensive case study is required as part of this course. While on practicum candidates are under the supervision of a school counselor and a Queens College faculty member, and must attend a course on campus.

Substance Abuse Specialization

The courses for the Substance Abuse Specialization are currently not being offered and are on reserve. Speak to the graduate advisor for more information.

ADVANCED COURSES

ECPCE 800. Career Development and Assessment. 3 hr.; 3 cr. This course will introduce students to the theories and practice of career counseling throughout the lifespan, the administration and interpretation of selected inventories, available career resources, and the ethical and practice standards in the field. As part of this course, issues related to working with diverse populations (gender, race, culture, and sexual orientation) will be explored. Field-based hours outside the classroom are required to administer career assessment instruments.

ECPCE 802. Clinical and Contextual Issues in School Counseling. 3 hr.; 3 cr. This course involves the study of clinical and contextual issues in school counseling, including depression, substance abuse, suicide, violence in school and communities, psychological trauma, crisis intervention, and ethics as they relate to educational settings. Particular emphasis is given to issues related to linguistically diverse learners, immigrants, and special needs students. The course will also explore effective counseling strategies and resources in the community. Candidates seeking the Bilingual Extension in School Counseling will complete required assignments with a focus on linguistically diverse learners/bilingual education.

ECPCE 803. Multicultural Issues in Counseling. 3 hr.; 3 cr. This course will introduce students to issues of diversity within the counseling process and society as a whole. As part of this course, students will examine issues related to race, culture, ethnicity, gender, sexual orientation, religion, socioeconomic class, and power. Students will be introduced to ethical and practice standards in the field as they relate to working with the culturally diverse client. A significant aspect of this course is to assist the emerging counselor in developing a deeper self-awareness as an individual and a professional, particularly as it relates to issues of diversity, and the impact of these issues on professional roles.

ECPCE 804. Assessment Methods in Counseling. 3 hr.; 3 cr. This course covers the concepts, principles, and theoretical foundations of psychological and educational measurement. It surveys individual cognitive, personality, and educational measures as well as couples, family, and group assessment instruments. Consideration is given to ethical practice and to factors of culture, gender, language, ethnicity, age, disability, and examiner bias in the administration and interpretation of tests.

ECPCE 805. Assessment Methods in School Counseling. 3 hr.; 3 cr. Prerequisites or corequisites: None. This course covers the principles of assessment methods used in school counseling. There will be a review of basic statistical concepts and educational measurement. The course will survey cognitive, personality, career, and educational tests. Assessment and evaluation methods specific to education and to school counseling will be covered. Ecological assessment and program evaluation will be addressed. Critical issues will include factors of culture, gender, linguistic diversity, ethnicity, age, disability, and examiner bias. Candidates seeking the Bilingual Extension in School Counseling will complete required assignments with a focus on linguistically diverse learners.

ECPCE 806. Administration and Organization of School Counseling Programs. 3 hr.; 3 cr. This course covers the role and function of the counselor in school settings; the study of school structure, policies, and procedures; the development, implementation, and evaluation of counseling and guidance services; and issues in consultation, administration, and systemic interventions. The first part of the course describes the regulations and laws that govern student support services. The second portion of the course deals with the New York State Comprehensive Counseling Program and the best practices for providing and evaluating complete multitiered programs with diverse student populations to include special education and linguistically diverse students. Dispersed throughout the course, candidates will see how the use of technology and its application assist the counselor with routine clerical work, recordkeeping, and data-driven decisions. Candidates seeking the Bilingual Extension in School Counseling will complete required assignments with a focus on linguistically diverse learners/bilingual education.

ECPCE 807. Research Methods in Counseling. 3 hr.; 3 cr. This course surveys methods of research design used in psychological, educational, and counseling research and program evaluation. The goals of the course are for the candidates to develop a foundation in empirical research to become critical consumers of studies in the counseling literature. Candidates work with the instructor to develop a research project in the candidate's area of specialization or are involved in direct research activities. Candidates seeking the Bilingual Extension in School Counseling will complete required assignments with a focus on linguistically diverse learners/bilingual education. Ethical considerations, application of research skills to counseling activities,

and use of data for program development will also be discussed.

ECPCE 808. Child and Adolescent Counseling. 3 hr.; 3 cr. Prereq.: ECPCE 702, Theories of Human Development or equivalent. This course will focus on the methods, techniques, and issues of counseling children and adolescents. General considerations of developmental stages, family dynamics, school environment and the therapeutic relationship will be discussed. The etiology and assessment of common childhood disorders and empirically supported treatment will be reviewed. Cognitive-behavioral, pharmacological, educational, and ecological interventions will be addressed as well as issues of prevention and community resources.

ECPCE 809. Learning and Motivation in School Counseling. 3 hr.; 3 cr. This course will cover major theories of learning and motivation as they apply to school counseling settings. Principles of attribution, self-efficacy, goal setting, conditioning, and information processing will be applied to student achievement and academic development as well as to the counseling experience as a type of learning process. Emphasis will be placed on the role of the counselor as a consultant to teachers, in support services for students with learning and motivation difficulties, and in psychoeducational and ecological interventions. The course is designed for graduate students to experience their own learning and motivational processes.

ECPCE 810. College and Career Readiness in K-12 Schools. 3 hr.; 3 cr. This course is an introduction and overview to college and career readiness from a holistic and developmental perspective for students in the K-12 setting. Working within a developmental and social justice framework participants will: learn about developmentally appropriate academic and personal needs of students as they transition from elementary through high school; learn about strategies and interventions to facilitate students' college career readiness at the elementary, middle and secondary school level; learn about and utilize informational resources needed to assist students with secondary transition planning (included but not limited to identifying postsecondary options, the college application and admissions process, sources of financial assistance); and learn about strategies for working collaboratively with teachers, administrators, parents and other key stakeholders in facilitating student college and career readiness and postsecondary transition. This course will include information and strategies for working with special populations (e.g., undocumented students, ELLs, LGBT, and students with disabilities) on the postsecondary transition planning process.

ECPCE 811. Mental Health Counseling. 3 hr.; 3 cr. This foundation course surveys the role of mental health counselors on the state and national levels. Topics will include requirements for licensing, history of the discipline, supervision, consultation, community issues, prevention, and legal/ethical issues. This course is required for students in the Mental Health program.

ECPCE 812. Psychopathology and Diagnosis in Mental Health Counseling. 3 hr.; 3 cr. This course covers the DSM classification system of mental disorders and focuses on the etiology, developmental pathways, assessment and treatment of various psychopathologies. Psychopharmacology and other treatment approaches will be addressed as well as the role of the mental health counselor. This course is required for the Mental Health program.

ECPCE 813. Family Dynamics. 3 hr.; 3 cr. In this course the main stages of the family life cycle are studied as a means of understanding the family as a system of human relationships. Developmental stages, family rituals, family crises, and other variables affecting family development are examined. The purpose of this course is to enable students to assess family systems, to develop knowledge of current family life demographics, and to gain an understanding of marriage and family styles, symptomatology, and counseling techniques.

ECPCE 814. Seminar in Advanced Applications of Psychological Theories. 3 hr.; 3 cr. Prereq.: ECPCE 700, 703, and 704. This course entails an in-depth study of specific counseling approaches and their use with various client populations. Case studies will provide a focus for analysis. Students are required to conduct literature reviews and to make presentations.

ECPCE 815. Career Development and Assessment in School Settings. 3 hr.; 3 cr. This course will introduce candidates to the theory and practice of career counseling, the administration and interpretation of selected inventories, the career counseling process, available career resources, and the ethical and practice standards related to career counseling in school settings. Particular focus will be placed on the career development process of students in grades K–12 and the school counselor's role in providing developmentally appropriate career development services. As part of this course, issues related to working with diverse populations (gender, race, culture, ability, and sexual orientation) will be explored.

ECPCE 818. Special Topics in Counseling. 2 hr. plus conf.; 3 cr. A course with changing content relating to topics of current relevance to the field of counseling.

ECPCE 821. Internship in Mental Health Counseling. 2 hr. plus fieldwork; 1–4 cr. May be repeated for credit. Prereq.: Permission of the advisor and completion of the Counseling Mental Health Practicum course, ECPCE 721.4. Students will be placed for 75 to 300 hours per semester in a hospital, clinic, or agency under supervision of a field clinician and Queens College faculty. Graded on a Pass/Fail basis only.
ECPCE 821.1. 1 cr. (75 hr.)
ECPCE 821.2. 2 cr. (150 hr.)
ECPCE 821.3. 3 cr. (225 hr.)
ECPCE 821.4. 4 cr. (300 hr.)

ECPCE 829. Internship in School Counseling. 2 hr. plus fieldwork. Prereq.: Permission of the advisor and completion of ECPCE 729.4. Internship is a field-based course during which candidates will be placed for 75 to 300 hours per semester in a K–8 or 9–12 school setting. During the program, candidates are required to complete at least 300 hours in a K–8 school setting and at least 300 hours in a 9–12 school setting. While on internship, candidates will engage in activities related to the development, implementation, and evaluation of the elements of the school counseling program (60% of hours) and provide direct student services (40% of hours). A case study is required as part of this course. During internship, candidates are under supervision of a school counselor and Queens College faculty and must attend a course on campus.

ECPCE 829.1. 1 cr. (75 hr.)
ECPCE 829.2. 2 cr. (150 hr.)
ECPCE 829.3. 3 cr. (225 hr.)
ECPCE 829.4. 4 cr. (300 hr.)

ECPCE 834. Advanced Course in Family Education: Parenting Models. 2 hr. plus conf.; 3 cr. Exploration of models of effective parenting in single, multiple, and blended families.

Educational Leadership

Coordinator: Nathalis Wamba

The Master's in Education Leadership (MSEd) is a 36-credit, post-master's-level program that offers courses designed to prepare qualified candidates for school building and school district leadership positions in New York State elementary and secondary schools. Candidates take six credits per semester and complete 400–600 hours of internship. Upon completion, the candidates receive a Master's in Education Leadership and are eligible to take the New York State Licensure exam for School Building leader (SBL) and School District Leader (SDL) certifications. The program emphasizes the preparation of effective school leaders in urban and suburban communities that surround the New York metropolitan area, with a focus on high-needs schools.

The Master's in Instructional Leadership (MSEd) (not leading to certification) is a 36-credit, post-master's-level program whose purpose is to prepare teachers who want to assume more active roles in school reform and renewal as teacher leaders without permanently moving to administration. Their role is to work individually and collectively with the principals, assistant principals, students, and the school community to improve teaching and learning practices and the emotional well-being of students. Teacher leaders assume new roles such as mentoring, coaching new teachers, running induction programs for new teachers, convening professional development for teachers, leading inquiry teams, developing curricula, advising on technology, assisting in evaluating teachers, assuming content chair positions, and so on.

The program uses a cohort model that encourages candidates to build relationships and a sense of community among classmates, providing a foundation for lasting professional networks. Coursework focuses on understanding education administration, and management and leadership in urban settings that includes the acquisition of managerial skills applicable to a range of educational institutions. The program integrates theoretical and applied knowledge in all coursework, including course seminars, simulated experiences, planned fieldwork experiences, and universal design for learning (UDL) to promote and prepare candidates to be effective leaders and agents of change in high-needs schools, school systems, and educational organizations.

Candidates' leaves or breaks in the continuity of study require review by the faculty before candidates return to the program and study is resumed. Such reviews could result in requiring candidates to retake courses or other requirements to ensure competencies are maintained. Requests for extensions of time must be submitted and approved by the (*a*) program coordinator, (*b*) chair of the Department of Educational and Community programs, and (*c*) dean of the Division of Education.

FACULTY

Wamba, Nathalis, Coordinator, *Professor,* PhD 1991, New York University: action research, educational policy, critical theory, postmodernity and postcolonialism/decoloniality

Genao, Soribel, *Associate Professor,* PhD, 2010, Rutgers University: administration in urban settings, multinational education and multicultural issues in educational leadership

Gray-Nicolas, Nakia, *Assistant Professor,* EdD 2017, New York University: college access and readiness, transition from high school to college, first year experience, underrepresented students in college settings

REQUIREMENTS FOR MATRICULATION

The program is open only to individuals who have been selected as appropriate and qualified candidates with the following qualifications:

1. Both baccalaureate and master's degrees, with a minimum grade-point average (GPA) of 3.0, from approved postsecondary institutions. Queens College may specify certain additional gradute courses to be completed before the candidate is admitted to the

program. Evidence of achievement at the undergraduate and graduate levels will be given primary emphasis in the admissions process.

2. A minimum of three years of successful full-time teaching or related experience in a public, private or parochial school, or at the college or university level—at least one year of which has been in the past five years.

3. A minimum of three professional recommendations from supervisors that attest to the applicant's supervisory/leadership experiences and potential.

4. A written statement of approximately 1,000 words detailing reasons for the applicant's interest in the educational leadership program, including relevant experiences and responsibilities that give evidence of leadership potential.

5. A formal interview (TB) with at least two members of the full-time faculty.

6. All candidates must represent the program's high standards of integrity, honesty, emotional stability, and commitment to foster these qualities in future administrators through course work, internships, and school building and district rapport and relationships.

MAINTENANCE REQUIREMENTS

Candidates must maintain a *B* average (3.0 grade-point average) and demonstrate professional dispositions and attitudes. Candidates who achieve a course grade of less than a *B*– or who fail to demonstrate professional dispositions or behaviors must meet with the program advisors. Candidates' performance will be reviewed by the program advisors every semester.

All candidates must meet appropriate academic and scholarship standards to remain in the program and to complete the program. Candidates must also demonstrate appropriate personal professional, and ethical conduct as established by the program and their respective professions (i.e., ethical and professional standards in educational leadership). Candidates are expected to abide by the CUNY Policy on Academic Integrity. All candidates are subject to review, and sanctions, including dismissal, as a result of academic and/or professional deficiencies.

Chalk & Wire: Candidates are required to purchase and maintain a *Chalk & Wire* ePortfolio subscription in order to submit their assignments as directed.

PROGRAM OF STUDY FOR THE MSED IN EDUCATIONAL LEADERSHIP

The program requires the completion of 12 courses (36 credits) as outlined below. Candidates who complete these 36 credits and maintain an average of *B* (3.0) or better are eligible to receive New York State Building Leader certification, pending satisfactory completion of the New York State Educational Leadership Assessment Examination.

The 12 required courses for completion of the program include:

		credits
ECPEL 880	Leadership Theory and Practice	3
ECPEL 881	Curriculum and Supervision	3
ECPEL 882	School Finance	3
ECPEL 883	Human Relations for the Educational Leader	3
ECPEL 884	Data for School Planning	3
ECPEL 885	Legal Problems in Public Education: Political and Economic Implications	3
ECPEL 886	Management of Teaching and Learning for Administrators	3
ECPEL 887	Technology for School Leaders	3
ECPEL 888	Critical Issues and Guidelines	3
ECPEL 890	Guided Field Experience in Administration and Supervision	3
ECPEL 894	Supervisory Practicum	3
ECPEL 892	Action Research for School Building Leaders	3
ECPEL 893	School District Organization	3
	Total	**36**

*ECPEL 884, Data for School Planning, is an elective.

Of the 30 credits required to complete the School Building Leader program, up to 6 credits may be taken at other institutions and transferred into this program, if approved by the coordinator.

Candidates must follow the course sequence listed below:

First Year		*credits*
880	Leadership Theory and Practice	3
881	Curriculum and Supervision	3
882	School Finance	3
883	Human Relations for the Educational Leader	3
884	Data for School Planning	3
Summer		
885	Legal Problems in Public Education: Political and Economic Implications	3
886	Management of Teaching and Learning for Administrators	3
887	Technology for School Leaders	3
Second Year		
888	Critical Issues and Guidelines	3
890	Guided Field Experience in Administration and Supervision	3
891	Leadership for Diverse Populations	3
894	Supervisory Practicum	3

COURSES IN THE MSED IN EDUCATIONAL LEADERSHIP PROGRAM

ECPEL 880. Leadership Theory and Practice. 3 hr.; 3 cr. Administrative theory and research. Theoretical approaches to the study of organization behavior; the nature of organizations; systems analyses; research concerned with change in systems and groups.

ECPEL 881. Curriculum and Supervision. 3 hr.; 3 cr. An examination of the trends and issues in the

school curriculum with emphasis on the development of theoretical bases for the making of curriculum decisions. A critical examination of the literature on supervision in education and related fields. Current practices will be appraised in relation to the teaching/learning process.

ECPEL 882. School Finance. 3 hr.; 3 cr. An examination of school finance and budgeting practices in public elementary and secondary schools in New York State. Current practices of data-driven decision-making by school leaders will be discussed.

ECPEL 883. Human Relations for the Educational Leader. 3 hr.; 3 cr. Study of the variety of supervisory and administrative relationships. Fields of psychology, social psychology, sociology, and education will be drawn upon to develop an understanding of human behavior and methods of working with others.

ECPEL 884. Data for School Planning. 3 hr.; 3 cr. This course prepares prospective school administrators to use data as a tool to examine school issues and develop improvement plans. The course teaches the processes of data analysis, collection and management, and then requires participants to develop a School Improvement Plan for a real school striving to reverse a pattern of declining school achievement. The focus is on helping participants work collaboratively to evaluate a wide range of data sources so they can initiate thoughtful plans and recommendations based on data review.

ECPEL 885. Legal Problems in Public Education: Political and Economic Implications. 3 hr.; 3 cr. Current and historic law in public education. Will inform candidates of basic legal principles as they affect public schools in general; in particular, candidates will study such areas as freedom of speech, student rights, search and seizure, torts, teacher rights, religion in the public schools, and constitutional due process.

ECPEL 886. Management of Teaching and Learning for Administrators. 3 hr.; 3 cr. This course will include an analysis of teaching strategies and of the learning patterns of individual students. A review of the research will be followed by practical applications in the classroom. Assessment instruments, observation forms, and counseling techniques designed for the improvement of instruction and staff development will be studied and evaluated. Teaching and learning style models will be emphasized. Applications for future administrators will be covered. Instructional environments, teaching strategies, learning materials, homework patterns, and classroom management techniques will be described and implemented.

ECPEL 887. Technology for School Leaders. 3 hr.; 3 cr. An introduction to basic programming plus applications of computers to instruction and in school management.

ECPEL 888. Critical Issues and Guidelines. 3 hr.; 3 cr. Examination of specific and universal problems of school administration. Application of case studies, role playing, and group analysis focused on recurring themes of educational governance at the building level.

ECPEL 890. Guided Field Experience in Administration and Supervision. 3 hr.; 3 cr. Seminar and fieldwork requirement. Both fieldwork placement and hours must be approved by the coordinator.

ECPEL 891. Leadership for Diverse Populations. 3 hr., plus 15 hr. of fieldwork; 3 cr. Prereq. or coreq.: ECPEL 880 (Leadership Theory and Practice) and ECPEL 888 (Critical Issues and Guidelines). This course provides candidates seeking New York State School Building Leader/School District Leader certification with the knowledge, skills, and dispositions necessary to enhance their understanding of the unique organizational, administrative, supervisory, and policy planning details inherent in a school program that serves diverse student populations including (1) children with special needs; (2) English Language Learners (ELL), and (3) children who are gifted and talented. Candidates are exposed to research-validated programs and applied theory that result in the creation of effective learning environments for these populations, and are provided with multiple opportunities to reflect on their leadership goals regarding best practices in curriculum design, instructional practices, and school-wide support services to meet the needs of diverse students.

ECPEL 894. Supervisory Practicum. 3 hr.; 3 cr. Advanced courses in supervision for candidates preparing for school leadership roles. Candidates will observe, facilitate, consult, and supervise first-year candidates under close supervision of faculty. Theoretical concepts are used to analyze small group interactions and supervisory conferences. These experiences provide the framework for individual instruction in the leadership of small groups.

ECPEL 892. Action Research for School District Leaders. 3 hr.; 3 cr. Prereq.: Satisfactory completion of the 30-credit School Building Leader program. This course introduces the methods and concepts of action research and its various approaches, with an emphasis on approaches that encourage the participation of as many stakeholders as possible. This course is designed to give educational leadership candidates interested in improving classroom instruction and school administration greater insight into the nature of action research in the field of education. The course emphasizes the view that action research is an inquiry process that is school- and classroom-based and tied to professional development. Practitioner-researchers are most capable of generating new knowledge about teaching practice through this inquiry process. Approval to register for this course must be given by the instructor.

ECPEL 893. School District Organization, Supervision and Administration. 3 hr.; 3 cr. Prereq.: Completion of the 30-credit School Building Leader program. This course prepares School District Leaders—

COURSES IN THE MASTER OF SCIENCE IN EDUCATION

Early Childhood Special Education

ECPSE 700	Foundations of Special Ed.	3 cr.
ECPSE 701	Introduction to Assessment in Early Childhood Special Ed.	3 cr.
ECPSE 722	Applied Behavior Analysis & Positive Behavior Support	3 cr.
ECPSE 712	Language & Literacy: Principles & Practices in Early Childhood Special Education	3 cr.
ECPSE 708	Collaboration with Families & School-Based Teams	3 cr.
ECPSE 720	Trends & Issues in the Education of Students with Severe Disabilities	3 cr.
ECPSE 725	Internship in Severe Disabilities	6 cr.
ECPSE 730	Curriculum and Instruction for Early Childhood Special Ed.	3 cr.
ECPSE 746	Research in Special Ed.	3 cr.
ECPSE 731	Advanced Seminar in Early Childhood Special Ed.	3 cr.
ECPSE 748	Advanced Research in Special Education	3 cr.
Total		**36 cr.**

Childhood Special Education

ECPSE 700	Foundations of Special Education	3 cr.
ECPSE 702	Introduction to Assessment in Childhood Special Ed.	3 cr.
ECPSE 722	Applied Behavior Analysis & Positive Behavior Support	3 cr.
ECPSE 713	Language & Literacy: Principles & Practices in Childhood Special Education	3 cr.
ECPSE 708	Collaboration with Families & School-Based Teams	3 cr.
ECPSE 720	Trends & Issues in the Education of Students with Severe Disabilities	3 cr.
ECPSE 725	Internship in Severe Disabilities	6 cr.
ECPSE 710	Curriculum and Instruction for Childhood Special Ed.	3 cr.
ECPSE 746	Research in Special Ed.	3 cr.
ECPSE 711	Advanced Seminar in Childhood Special Education	3 cr.
ECPSE 748	Advanced Research in Special Education	3 cr.
Total		**36 cr.**

Adolescent Generalist Special Education

ECPSE 700	Foundations of Special Ed.	3 cr.
ECPSE 703	Introduction to Assessment in Adolescent Special Ed.	3 cr.
ECPSE 722	Applied Behavior Analysis & Positive Behavior Support	3 cr.
ECPSE 714	Language & Literacy: Principles & Practices in Adolescent Special Education	3 cr.
ECPSE 708	Collaboration with Families & School-Based Teams	3 cr.
ECPSE 720	Trends & Issues in the Education of Students with Severe Disabilities	3 cr.
ECPSE 725	Internship in Severe Disabilities	6 cr.
ECPSE 740	Curriculum and Instruction for Adolescent Special Ed.	3 cr.
ECPSE 746	Research in Special Ed.	3 cr.
ECPSE 741	Advanced Seminar in Adolescent Special Education	3 cr.
ECPSE 748	Advanced Research in Special Education	3 cr.
Total		**36 cr.**

including Superintendent of Schools, Assistant Superintendent, District Coordinator, Supervisor, Director, and other positions at the district/central office level in the complex functions of those offices—to serve schools in diverse urban and suburban settings. This course is designed to meet the Interstate School Leaders Licensure Consortium (ISLLC) standards 1, 2, 3, 4, and 6 and the appropriate National Council for Accreditation of Teacher Education (NCATE) standards.

MASTER OF SCIENCE IN EDUCATION AND INSTRUCTIONAL LEADERSHIP

Admission to the Master's of Science in Instructional Leadership (MSEd) requires:

- A four-year undergraduate degree or master's in liberal arts or science from an accredited postsecondary institution, with a minimum 3.0 grade-point average;
- A minimum of a year of full-time teaching experience in a public or private school and NYSED Initial Certification in a teaching area;
- Three letters of recommendation that attest to the applicant's supervisory leadership experience or potential;
- A well-written statement of approximately 1,000 words detailing reasons for the applicant's interest in the Instructional Leadership program, including relevant experiences and responsibilities.

Those applicants who meet the above requirements will be invited to interview with two full-time faculty members. Acceptance to the program will be based on faculty assessment of an applicant's potential for success in the program (knowledge, skills, and dispositions) and, later, as a professional education leader.

PROGRAM OF STUDY

The program requires the completion of 12 courses, as outlined below. Candidates who complete these 36 credits and maintain an average of *B* or above are eligible for the MSEd in Instructional Leadership.

The 12 courses required for program completion are:

ECPEL 880	Leadership Theory
ECPEL 881	Curriculum and Supervision
ECPEL 882	School Finance
ECPEL 883	Human Relations
ECPEL 885	Legal Problems in Education
ECPEL 886.	Management of Teaching and Learning
ECPEL 887	Technology for School Leaders
ECPEL 888	Critical Issues in Education
ECPEL 890	Field Experience: Internship
ECPEL 891	Diverse Populations for School Leaders
ECPEL 892	Action Research
ECPEL 893	School District Organization

COURSE SEQUENCE

		credits
Fall Semester 1		
ECPEL 888	Critical Issues & Guidelines	3
ECPEL 882	Curriculum & Supervision	3
ECPSE 700	Foundations of Special Education	3
Subtotal		*9*
Spring Semester 1		
ECPIL 702	Professional Development Praxis	3
ECPEL 892	Action Research	3
ECOIL 701	Organizational Leadership and Change	3
Subtotal		*9*
Fall Semester 2		
ECPIL 704	Critical Race Theory	3
ECPIL 707	Public Education: Challenges and Possibilities	3
ECPIL 703	Imagination, Creativity and Innovation	3
Subtotal		*9*
Spring Semester 2		
ECPIL 705	Globalization and Education	3
ECPEL 892	(B) School-based Action Research Project (thesis)	6
Subtotal		*9*
Total		**36**

ECPIL 708. School Leadership and Inclusive Education. 3 hr.; 3 cr. Prereq. or coreq.: None. This course addresses critical issues in leadership relating to the inclusion of students with learning differences/disabilities. It considers how the improvement of educational systems can promote such students' achievement, increasing their skills in core academic subjects as well as in functional competencies needed for full participation in home, school, and community. Candidates learn models of systems change that include (*a*) assessment of one's own leadership dispositions and skills, (*b*) strategies for engaging individuals to support inclusive education, and (*c*) models of schoolwide change that are research based.

COURSES IN THE MSED EARLY CHILDHOOD/CHILDHOOD/ADOLESCENT SPECIAL EDUCATION BCBA TRACK PROGRAMS

ECPSE 700	Foundations of Special Ed.	3 cr.
ECPSE 701/ 702/703	Introduction to Assessment in Early Childhood/Childhood/ Adolescent Special Ed.	3 cr.
ECPSE 712/ 713/714	Language and Literacy: Principles and Practices in Early Childhood/ Childhood/Adolescent Spec. Ed.	3 cr.
ECPSE 708	Collaboration with Families and School-based Teams	3 cr.
ECPSE 723	ECPSE 723 Applied Behavior Analysis I: Basic Concepts and Principles of Reinforcement (BCBA Cohort)	3 cr.
ECPSE 730/ 710/ 740	Curriculum and Instruction for Early Childhood/Childhood/ Adolescent Spec. Ed.	3 cr.
ECPSE 731/ 711/741	Advanced Seminar in Early Childhood/Childhood/ Adolescent Spec. Ed.	3 cr.
ECPSE 728	Applied Behavioral Analysis II: Advanced Concepts and Treatment Strategies (BCBA Cohort)	3 cr.
ECPSE 720	Trends and Issues in Education of Students with Severe Disabilities	3 cr.
ECPSE 729	Ethics and Professionalism in Applied Behav. Analysis (BCBA Cohort)	3 cr.
ECPSE 725	Internship in Severe Disabilities (BCBA Cohort)	6 cr.
ECPSE 746	Research in Special Education (BCBA Cohort)	3 cr.
ECPSE 748	Advanced Research in Special Education (BCBA Cohort)	3 cr.
Total		**42 cr.**

COURSES IN THE MAT DUAL CERTIFICATION PROGRAM IN CHILDHOOD EDUCATION AND SPECIAL EDUCATION

EECE 702	Social Foundations of Ed.	3 cr.
EECE 711	Ecological Perspectives on Development—Childhood Years	3 cr.
EECE 520	Language Development and Emergent Literacy	3 cr.
ECPSE 700	Foundations of Special Ed.	3 cr.
EECE 545	Social Studies in the Elementary School	3 cr.
EECE 550	Mathematics in the Elem. School	3 cr.
EECE 525	Language and Literacy Learning in the Elementary Years	3 cr.
EECE 555	Science in the Elem. School	3 cr.
EECE 566	Student Teaching in Elementary Education	6 cr.
ECPSE 722	Applied Behavior Analysis and Positive Behavioral Supports	3 cr.
ECPSE 702	Introduction to Assessment in Childhood Special Education	3 cr.
ECPSE 708	Collaboration with Families and School-Based Teams	3 cr.
ECPSE 720	Trends and Issues in Education of Students with Severe Disabilities	3 cr.
ECPSE 742	Foundations of Assistive and Instructional Technology	3 cr.
ECPSE 710	Curriculum and Instruction for Childhood Special Education	3 cr.
ECPSE 746 or EECE 780	Research in Special Education Introduction to Educational Research	3 cr.
ECPSE 725	Internship in Severe Disabilities	6 cr.
ECPSE 748 or EECE 781	Advanced Research in Special Ed. Inquiry into Teaching	3 cr.
Total		**60 cr.**

COURSES IN THE POST-MASTER'S ADVANCED CERTIFICATION PROGRAMS IN SPECIAL EDUCATION

Early Childhood Special Education

ECPSE 700	Foundations of Special Education	3 cr.
ECPSE 730	Curriculum and Instruction for Early Childhood Special Education	3 cr.
ECPSE 701	Introduction to Assessment in Early Childhood Special Education	3 cr.
ECPSE 722	Applied Behavior Analysis & Positive Behavior Support	3 cr.
ECPSE 725	Internship in Severe Disabilities	6 cr.
Total		**18 cr.**

Childhood Special Education

ECPSE 700	Foundations of Special Education	3 cr.
ECPSE 710	Curriculum and Instruction for Childhood Special Education	3 cr.
ECPSE 702	Introduction to Assessment in Childhood Special Education	3 cr.
ECPSE 722	Applied Behavior Analysis & Positive Behavior Support	3 cr.
ECPSE 725	Internship in Severe Disabilities	6 cr.
Total		**18 cr.**

Adolescent Generalist Special Education

ECPSE 700	Foundations of Special Education	3 cr.
ECPSE 740	Curriculum and Instruction for Adolescent Special Education	3 cr.
ECPSE 703	Introduction to Assessment in Adolescent Special Education	3 cr.
ECPSE 722	Applied Behavior Analysis & Positive Behavior Support	3 cr.
ECPSE 725	Internship in Severe Disabilities	6 cr.
Total		**18 cr.**

Special Education

Coordinator: Lenwood Gibson

MASTER OF SCIENCE IN EDUCATION (MSED) PROGRAMS IN SPECIAL EDUCATION

(1) Early Childhood, Birth–Grade 2;
(2) Childhood, Grades 1–6; and
(3) Adolescent, Grades 7 through age 21. (Please note that NYSED initial certification is Grades 7–12).

Each program prepares candidates to work with children or youth whose disabilities range from mild to severe. Upon completion of one of these programs, our graduates are eligible for initial/professional or permanent New York State Certification in Special Education within one of the above listed age/grade levels.

These three (3) MSED programs are considered part-time programs for the purposes of financial aid. It generally takes 2 to 3 years to complete them. Each program is 36 credits.

Post-Master's in Special Education

In addition to our MSED programs, we offer three 18-credit Post-Master's Advanced Certification programs for each of the three age ranges mentioned above. These programs are open to candidates who already have NY State teacher certification and master's degrees in an area other than special education and allow candidates, upon completion, to qualify for additional teacher certification in special education.

In addition to the three MSED programs, there are several other programs that are offered.

Master's of Art in Teaching Childhood and Special Education (Dual Certification Program)

The Master of Arts in Teaching (MAT) in Childhood and Special Education (Grades 1–6) is a 60-credit program, which is a collaboration between the Elementary and Early Childhood (EECE) and Educational and Community Programs (ECP) departments. This program is intended for students who do not have undergraduate preparation in education and do not have initial certification. It leads to initial certification in both general and special education at the childhood level (Grades 1–6).

MSEd with BCBA Track

The Behavior Analyst Certification Board, Inc. has approved a sequence of courses in the Special Education MSED program (i.e., Early Childhood, Childhood, and Adolescent) and the MAT dual certification in Childhood Education and Special Education program as meeting the coursework requirements for eligibility to take the Board Certified Behavior Analyst (BCBA) Examination.

Applicants for the BCBA track program have to meet additional requirements as follows: (a) submit an internal application for the BCBA course sequence within their first semester of matriculation; (b) follow the three-year sequence of their respective MSED/MAT program; (c) complete additional two 3-credit courses (ECPSE 728 and 729); and (d) complete their internship in severe disabilities (ECPSE 725) at a site where they can be supervised by a licensed BCBA.

MASTER OF ARTS IN TEACHING (MAT) FOR TEACHING STUDENTS WITH DISABILITIES (GENERALIST 7–12)

This 45-credit alternative certification (Transitional B) program offers a Master of Arts in Teaching (MAT) for Teaching Students with Disabilities: Generalist 7–12. It is designed for candidates with an undergraduate degree in liberal arts (or the equivalent) who wish to enter an Urban Teaching Residency (UTR) program to become certified special education teachers and gain their Master of Arts in Teaching. This UTR parallels the format of Queens College's existing clinical residency programs in the Division of Education. Once accepted, candidates will engage in an intensive and scaffolded summer experience starting in the beginning of June through preparation for the start of the school year at the beginning of September. The goal of the summer experience is to ensure that residents acquire the foundational skills and knowledge to meet the requirements for Transitional B Certification and to start the school year successfully in September. While taking courses during the first Fall and Spring semesters, candidates serve as a .4 employee of the New York City Department of Education (NYCDOE) under the guidance of a mentor teacher. Upon completion of the second semester of clinical residency in the first spring, candidates make the transition to full-time teacher of record in a high-needs NYCDOE school and receive induction support for the next full academic year. Upon successful completion of the MAT program, the edTPA, and a year of supervised, full-time teaching under the guidance of a mentor teacher (i.e., after the second Spring semester), candidates are cleared for graduation and recommended to NYSED for initial and professional teaching certification.

Integrated Bilingual Early Childhood Special Education: MSED Birth – Grade 2

This 43-credit Master of Science in Education (MSED) program prepares bilingual candidates to become early childhood special education teachers to work with young children who are English-language learners (ELLs) with special needs and their families. The program integrates both special education and bilingual education content, pedagogy, and practices. Upon completion, candidates will be eligible for two certifications in New York State: Early Childhood Special Education (Birth to 2nd grade) and a Bilingual Education extension.

The faculty is committed to preparing teachers who have the knowledge, skills, and dispositions to help children and youth with disabilities become independent, productive, and fully included members of their schools and communities. The purpose of the Graduate Programs in Special Education (GPSE) is to help candidates develop the competencies needed to teach children and youth with disabilities, regardless of the severity of their disabilities, in a variety of settings, including age-appropriate general education environments. To this end, the New York State Pedagogical Core requirements for teachers of students

with disabilities and related competencies have been embedded throughout the curriculum and programs.

All candidates must meet appropriate academic and scholarship standards to remain in and complete the program. Candidates must also demonstrate appropriate personal, professional, and ethical conduct as established by the program and the special education and teaching professions (e.g., ethical and professional standards). They are expected to abide by the CUNY Policy on Academic Integrity. All candidates are subject to review and sanctions, including dismissal, as a result of academic and/or professional deficiencies.

FACULTY

Gibson, Lenwood, Coordinator, *Associate Professor*, PhD 2006, The Ohio State University: special education and applied behavior analysis; Board-Certified Behavior Analyst–Doctoral level

Dilts, Anne, *Lecturer,* EdD 2015, Rivier University: learning disabilities, special education, teacher preparation

Ferrara, Denise L., *Lecturer,* MS 1997, Hofstra University: research and program evaluation

Kiely, Mary Theresa, *Assistant Professor*, PhD 2011, University of Florida: special education and research methods

Kim, Sun A., *Associate Professor,* PhD 2007, University of Texas at Austin: special education (learning disabilities and behavioral disorders)

Michaels, Craig, Dean of Education, *Professor,* PhD 1993, New York University: special education, educational psychology

Wang, Peishi, *Associate Professor*, PhD 2005, Teachers College, Columbia University: special education (intellectual disabilities and autism); Board-Certified Behavior Analyst–Doctoral level

Woolf, Sara B., *Assistant Professor,* PhD 2013, Long Island University: interdisciplinary educational studies

Admission Requirements for MSEd in Special Education

Applicants to the graduate programs in Special Education must:

- Hold an initial/provisional certificate in general education in the age/school range of the special education program to which they apply (Birth–Grade 2; Grades 1–6; Grade 7 through age 21).
- Have an overall grade-point average (GPA) of 3.0 or better from their undergraduate studies
- Take the GRE General Test
- Write a well-organized, well-conceptualized essay that clearly communicates their reasons for pursuing a degree in special education.
- Provide three letters of recommendation from professional sources. The letters must demonstrate the applicant's superior abilities, qualities, and potential as a graduate candidate in special education.
- Indicate the nature of their current and past experiences with people with disabilities.

Additionally, applicants for the MSED in the Adolescent Special Education Generalist Program must have taken prerequisite courses as listed in the undergraduate course distribution that follows:

- *English Language Arts:* Successful completion (i.e., a grade of *B* or better in each course) of 2 English courses (6 credits), one must be English Composition.
- *Social Sciences:* Successful completion (i.e., a grade of *B* or better in each course) of 2 Social Sciences courses (6 credits). At least one of these courses must be a U.S. history course.
- *Math:* Successful completion (i.e., a grade of *B* or better in each course) of 2 mathematics courses (6 credits). Must include college algebra, geometry, or comparable courses. Up to 3 credits of statistics can count toward the math prerequisite.
- *Science:* Successful completion (i.e., a grade of *B* or better in each course) of 2 science courses (6 credits). Must include Biology, Chemistry or other science courses; one course must also include an associated laboratory component.

Admission Requirements for the Post-Master's Advanced Certification Programs in Special Education

Applicants to the Post-Master's Advanced Certification Programs in Special Education must:

- Have completed a master's degree in education.
- Have an overall grade-point average (GPA) of 3.0 or better in their master's program.
- Take the GRE General Test
- Have New York State Teacher Certification at the Initial (Provisional) and/or Professional (Permanent) level in general education (either in early childhood education, childhood education, or in a secondary content area).
- Write a well-organized, well-conceptualized essay that clearly communicates their reasons for pursuing a degree in special education and describes relevant current and past experiences with people with disabilities.
- Provide three letters of recommendation from professional sources. The letters must demonstrate the applicant's superior abilities, qualities, and potential as a graduate candidate in special education.
- Candidates with master's degrees and existing certification in early childhood education are eligible for either the early childhood special education advanced certificate program or the childhood special education advanced certificate program.
- Candidates with master's degrees and existing certification in childhood education are eligible for either the childhood special education advanced certificate program or the early childhood special education advanced certificate program.
- Candidates with master's degrees and existing certification in a secondary content area (e.g., history,

mathematics, chemistry, English) are eligible for the adolescent special education generalist advanced certificate program.

Additionally, applicants for the Post-Master's Advanced Certification in Adolescent Special Education Generalist Program must have had an undergraduate course distribution in the following prerequisites:

- *English Language Arts:* Successful completion (i.e., a grade of *B* or better in each course) of 2 English courses (6 credits), one must be English Composition.
- *Social Sciences:* Successful completion (i.e., a grade of *B* or better in each course) of 2 Social Sciences courses (6 credits). At least one of these courses must be a U.S. history course.
- *Math:* Successful completion (i.e., a grade of *B* or better in each course) of 2 mathematics courses (6 credits). Must include college algebra, geometry, or comparable courses. Up to 3 credits of a statistics course can count toward the math prerequisite.
- *Science:* Successful completion (i.e., a grade of *B* or better in each course) of 2 science courses (6 credits). One of the courses must have a lab component.

Maintenance and Graduation Requirements

Once admitted, all candidates are expected to demonstrate professional behaviors and dispositions that are consistent with (a) the Core Values of the Education Unit at Queens College of "promoting Equity, Excellence, and Ethics in urban schools and communities;" and (b) the code of ethics for special education professionals, as adopted by the Delegate Assembly of the Council for Exceptional Children (2010). https://www.cec.sped.org/Standards/Ethical-Principles-and-Practice-Standards

Additionally, candidates must:

- Receive a grade of *B* or better in ECPSE 720 and ECPSE 722 to register for ECPSE 725, Internship in Severe Disabilities. Candidates should meet with faculty advisor if they receive a grade lower than *B* in these two courses.
- Complete all prerequisite courses to register for ECPSE 725, Internship in Severe Disabilities.
- Maintain a 3.0 GPA overall to register for internship course and research courses.
- Maintain a 3.0 GPA and demonstrate professional dispositions and behavior to remain matriculated and to graduate.
- Meet with an advisor if they get a course grade lower than *B*- or if they demonstrate questionable professional dispositions or behavior. A candidate and his/her advisor will then make a plan to determine (a) how to rectify any academic or behavioral deficiencies, and (b) the conditions for continuing in the program.
- Receive a grade of *B* or better in ECPSE 725 Internship in Severe Disabilities.
- Purchase and maintain an electronic portfolio, Chalk & Wire account for the entire duration of the designated program (e.g., 3 years for MSED/MAT programs; 1 year for Post-Master's programs).
- Should an individualized plan needed to address academic or behavioral deficiencies within an internship situation, a candidate may be required to participate in a guided internship experiences. The candidate would then be required to register for Supervised Internship in Special Education (ECPSE 754) to fulfill the requirements of the individualized plan.
- As per Queens College graduate student governance policy, "a matriculated graduate student who is dismissed must remain out of the College for at least one semester. To return, the student must file a formal application for re-entry and pay a non-refundable re-entry fee by the appropriate deadline. The student must also petition the Office of Graduate Studies for permission to re-enter. Requests for re-entry will be reviewed on an individual basis. Permission to re-enter following suspension may be granted one time only." (*Graduate Bulletin* 2017–2018, p. 30)
- Candidate leave or a break in the continuity of study requires a review by the faculty before candidates return to the program and study is resumed. Such reviews could result in requiring candidates to retake courses or other requirements to ensure competencies are maintained. Graduate students must follow all college policies in regard to reentry into a program. Please refer to policies in this *Bulletin* regarding reentry procedures.

Teacher Certification Requirements

Candidates who meet these requirements for graduation, and who have completed all required New York State seminars and have passed the Content Specialty Test (CST) in Students with Disabilities, Multi-Subject Test at their respective age/grade level will be recommended to the New York State Education Department by the Queens College Office of Teacher Certification for extensions to their licenses in Teaching Students with Disabilities at the appropriate age/grade level.

Admission Requirements for MAT Dual Certification Program in Childhood Education and Special Education

Applicants to the dual certification MAT graduate program in Childhood Education and Special Education must:

- Have an undergraduate major in Liberal Arts or Science with a minimum of 30 credits.
- Have an overall grade-point average (GPA) of 3.0 or better.
- Take the GRE General Test.
- Write a well-written essay explaining why the applicant chose to pursue dual certification in elementary and special education.
- Provide three letters of recommendation that demonstrate the applicant's abilities, qualities, and promise as an educator.

Academic Prerequisites

Additionally, applicants must have had an undergraduate course distribution in the following prerequisites:

English Language Arts: Successful completion (i.e., a grade of *B* or better in each course) of 2 English courses, one must be English Composition.

The Arts: Successful completion of 2 Art courses (i.e., a grade of *C* or better in at least one of these courses).

Social Sciences: Successful completion (i.e., a grade of *C* or better in each course) of 4 Social Sciences courses. At least one of these courses must be a U.S. history course.

Math, Science, and Technology: Successful completion (i.e., a grade of *C* or better in each course) of 6 courses selected from the areas typically classified as mathematics, science, and technology. At least one of these courses must be a lab science course.

Foreign Language: Successful completion of two semesters of foreign language at the college level (grade of *C* or better) or 3 years of high school study in the same language with a passing grade on NYS High School Regents examination in Foreign Language.

Admission Requirements for the Urban Teaching Residency (Transitional-B MAT)

Applicants must:

1. Have earned an overall grade-point average (GPA) of 3.0 or higher in their undergraduate studies;
2. Write a well-organized, well-conceptualized essay that clearly communicates their reasons for pursuing a degree in special education and indicates the nature of their current and past experiences with people with disabilities;
3. Provide three letters of recommendation from professional sources (e.g., former college instructors, school administrators from student teaching or jobs, and supervisors in paid employment). Letters must demonstrate the applicant's superior abilities, qualities, and potential as a graduate candidate in special education.

Academic Prerequisites

Applicants must demonstrate that they have successfully met the following undergraduate prerequisites:

1. *English language arts:* Successful completion (i.e., a grade of *B* or better in each course) of English courses (6 credits). One must be English composition.
2. *Social sciences:* Successful completion (i.e., a grade of *B* or better in each course) of two social sciences courses (6 credits). This includes multiple disciplines, including political science, history, economics, sociology, and psychology. One course of the two must be a U.S. history course.
3. *Math:* Successful completion (i.e., a grade of *B* or better in each course) of two mathematics courses (6 credits). One course must be college algebra, geometry, or a comparable course. Up to 3 credits of statistics are acceptable.
4. *Science:* Successful completion (i.e., a grade of *B* or better in each course) of two science courses (6 credits) such as biology, earth science, or chemistry. One of these courses must include an associated laboratory component.
5. Submission of Graduate Record Examination (GRE) scores.
6. Applicants whose first language is not English, and who do not hold an undergraduate or graduate degree from a nationally accredited college (i.e., in the United States), must submit proof of having achieved a score of 600 or higher on the paper-based Test of English as a Foreign Language (TOEFL) or equivalent.

The following qualifications are preferred but not required:

Candidates who have math and science backgrounds (e.g., undergraduate math, engineering, statistics, physics, chemistry, and biology) are strongly preferred.

Candidates should have some prior experience with secondary-school-age children (e.g., paid employment in a school or afterschool program, academic tutoring, volunteer/community-based experience, summer camp counselor, and/or involvement in leisure, recreational, or other activities).

Maintenance Requirements

All candidates who are matriculated within the special education programs are required to maintain a 3.0 GPA. The faculty is committed to maximizing the potential success of each candidate. Any resident who achieves a grade in any course lower than a *B-* will meet with an ECP advisor.

Graduation Requirements

UTR candidates are required to achieve a 3.0 GPA to graduate.

Admission Requirements for MSEd in Integrated Bilingual Early Childhood Special Education

In addition to the general requirements for matriculation at Queens College (see https://www.qc.cuny.edu/admissions/graduate/applying/Pages/Matriculation.aspx), to be considered for admission into the MSED in Integrated Bilingual Early Childhood Special Education program, candidates must:

1. Hold an initial/provisional certificate in either childhood education or early childhood education from New York State.
2. Be fluent in a language other than English and be able to pass the New York State Bilingual Education Assessment (BEA) exam in that same language.
3. Have a minimum GPA of 3.0.
4. Write a well-organized, well-conceptualized essay that clearly communicates their interest in the bilingual early childhood special education program.
5. Provide three letters of recommendation from professional source (e.g., former professors, school administrators).
6. An interview may be required.

MAT Transitional B Adolescent: Generalist 7–12

		credits
SEYS 536	Educational Foundations	3
SEYS 552	Educational Psychology	3

SEYS 700	Language, Literacy, and Culture in Education	3
SEYS 767.3	Workshop in Secondary Education	3
ECPSE 577	Clinical Residency I	3
ECPSE 578	Clinical Residency II	3
ECPSE 579	Clinical Residency III	3
ECPSE 700	Foundations of Special Ed.	3
ECPSE 703	Introduction to Assessment in Adolescent Special Ed.	3
ECPSE 714	Language and Literacy: Principles and Practices in Adolescent Spec. Ed.	3
ECPSE 708	Collaboration with Families and School-based Teams	3
ECPSE 722	Applied Behavior Analysis and Positive Behavioral Supports	3
ECPSE 740/	Curriculum and Instruction Adolescent Spec. Ed.	3
ECPSE 741/	Advanced Seminar in Adolescent Spec. Ed.	3
ECPSE 746	Research in Special Education	3
Total		**45**

COURSES IN THE INTEGRATED BILINGUAL EARLY CHILDHOOD SPECIAL EDUCATION (MSED)

		credits
ECPSE 800	Foundations of Special & Bilingual Education	4
ECPSE 803	Oral Language Development in Bilingual Children with Special Needs	4
ECPSE 804	Applied Behavior Analysis in Multicultural Contexts	3
ECPSE 801	Assessment for CLD Children with Special Needs	4
ECPSE 808	Collaboration with Multicultural Families and Professionals	4
ECPSE 802	Language & Literacy Development in Special/Bilingual Education	4
ECPSE 805	Culturally Responsive Early Intervention (Birth –Age 3)	3
ECPSE 807	Curriculum & Instruction for ECSE & Bilingual Education I (Ages 3-5)	4
ECPSE 746	Research in Special Education	3
ECPSE 809	Curriculum & Instruction for ECSE & Bilingual Education II (Ages 5-8)	4
ECPSE 748	Advanced Research in Special Education	3
ECPSE 806	Practicum in Bilingual Early Childhood Special Education	3
Total		**43**

Maintenance Requirements

Once admitted to the dual certification program, candidates must:

- *Chalk & Wire:* Candidates are required to purchase and maintain a *Chalk & Wire* ePortfolio subscription from the Queens College bookstore in order to submit their assignments as directed.
- Maintain at least a *B* average (3.0 grade-point average)and demonstrate appropriate professional dispositions and behaviors to remain matriculated and to graduate.
- A matriculated candidate whose grade-point average falls below 3.0 during the course of the program will be placed on probation. The candidate will then have up to 12 graduate credits within which to raise the grade-point average to 3.0. If this is not achieved, the candidate will be dismissed.

Similarly, a matriculated candidate who fails to demonstrate professional dispositions and behaviors in all classroom, field, and professional settings will be reviewed by the special education and elementary education faculty, who may recommend remedial action or dismissal from the program.

Graduation Requirements

To graduate, all candidates must:

- Maintain a 3.0 GPA and complete all coursework.
- Perform successfully on all program-level assessments.
- Apply for graduation in the spring of the semester they will graduate. (Deadline to apply for graduation is March 1 of every spring semester.)
- Candidates receiving MSEd and MAT degrees must also successfully complete a research project developed with and supervised and supported by a faculty member in either ECPSE or EECE.

Teacher Certification Requirements

Graduates who meet all requirements of the MAT degree program, and who complete the required seminars and New York State assessments, will be recommended to New York State for initial certification in both general education and special education at the childhood level (Grades 1–6). Professional Certification in both areas will follow automatically once a graduate has completed the equivalent of three years of teaching in New York State.

Special Notes

Due to changing state certification requirements and ongoing improvements to the Special Education programs, it is important for all candidates to double check critical information with their advisor.

Questions about the graduate Special Education programs should be directed to the advisor for the age or specialty: Early Childhood (Birth–Grade 2), Childhood

(Grades 1–6), Adolescent (Grade 7 through age 21), or Board-Certified Behavior Analyst. You may contact the advisor by phone or email. Please see the department website for the list of advisors and their contact information. A department secretary will direct you to the appropriate member of the faculty.

Candidates who enter a Special Education program but lack provisional or initial certification in general education in the grade/age range of their Special Education program may not be eligible for New York State certification. Such candidates are responsible for obtaining certification on their own and may have to take additional courses at Queens College or another accredited graduate school. Similarly, candidates who have not passed required state tests may not be eligible for certification and will have to pass these tests.

COURSES IN SPECIAL EDUCATION

ECPSE 350/ECPSE 550. Foundations of Special Education. 3 hr. plus 15 hr. fieldwork; 3 cr. Prereq.: Either (*a*) SEYS 552, Educational Psychology and SEYS 536, Educational Foundations; or (*b*) EECE 702, Social Foundations of Education, EECE 704, Major Contemporary Issues in Education, and EECE 705, School and Community Relations; coreq.: A discipline-specific teacher educator course with fieldwork. ECPSE 550 prepares non-special education teacher education candidates with the knowledge, skills, and dispositions necessary to provide instruction that will promote the participation and progress of students with disabilities in the general education curriculum and prepares candidates with competencies to work collaboratively with colleagues. Teacher education candidates across certification areas and age-ranges are exposed to research-validated professional practice that result in the creation of effective instructional environments for all students, with specific focus on those students who are classified for special education services and supports with mild, moderate, and severe disabilities. The historical and sociological treatment of people with disabilities, special education law, adapting curriculum and instruction, understanding Individualized Education Programs (IEPs), participating in IEP meetings, and advocacy and collaboration are also addressed. Candidates are provided with multiple opportunities to engage in reflective practice regarding the implications of course content to their specific educational disciplines in terms of personalizing instruction and building classroom communities that support the full diversity of learners. Fifteen hours of fieldwork focusing on meeting the needs of students with disabilities within candidates' certification area or age-range are required.

ECPSE 577. Clinical Residency I. 3 hr. plus 300 hours of fieldwork; 3 cr. Prereq.: SEYS 552, SEYS 536, and ECPSE 700. This course is the first of three intensive clinical residencies. In the first clinical residency, residents will have multiple, scaffolded opportunities to apply what they are learning in their college course work in secondary classrooms (i.e., grades 7–12), including students with or at risk for disabilities, as they endeavor to create safe and culturally sustaining learning environments that inspire critical engagement. Residents will reflect on and revise their teaching practice in authentic, diverse, urban teaching situations. They will be provided with significant support from both faculty and mentor teachers so that, by the end of the semester, residents are well on their way to developing and demonstrating knowledge, skills, and professional dispositions in fundamental aspects of pedagogy that are consistent with research-validated, discipline-specific best practices for promoting student learning and well-being.

ECPSE 578. Clinical Residency II. 3 hr. plus 300 hours of fieldwork; 3 cr. Prereq.: ECPSE 577. This is the second of three intensive clinical residencies. In this second clinical residency, residents will have multiple, scaffolded opportunities to apply what they are learning in their college course work in secondary classrooms (i.e., grades 7–12), including students with or at risk for disabilities, as they endeavor to create safe and culturally sustaining learning environments that inspire critical engagement. Residents will be provided with significant support from both faculty and mentor teachers so that, by the end of the semester, residents are well on their way to developing and demonstrating knowledge, skills, and professional dispositions in fundamental aspects of pedagogy that are consistent with research-validated, discipline-specific best practices for promoting student learning and well-being.

ECPSE 579. Clinical Residency III. 3 hr. plus 300 hours of fieldwork; 3 cr. Prereq.: ECPSE 578. This is the last of three intensive clinical residencies. In this clinical residency, residents will have multiple, scaffolded opportunities to apply what they are learning in their college course work in secondary classrooms (i.e., grades 7–12), including students with or at risk for disabilities as they endeavor to create safe and culturally sustaining learning environments that inspire critical engagement. Residents will reflect on and revise their teaching practice in authentic, diverse, urban teaching situations. They will be provided with significant support from both faculty and mentor teachers so that, by the end of the semester, residents are well on their way to developing and demonstrating knowledge, skills, and professional dispositions in fundamental aspects of pedagogy that are consistent with research-validated, discipline-specific best practices for promoting student learning and well-being.

ECPSE 700. Foundations of Special Education. 3 hr.; 3 cr. Education and psychology in Special Education are stressed, with emphasis on developing a broad background of knowledge about students with various disabilities and strategies for creating access to the general education curriculum. The historical and sociological treatment of people with disabilities, special education law and programs, advocacy and collaboration, and building classroom communities that support the full diversity of learners are also addressed. Twenty hours of fieldwork focusing on special education are required.

ECPSE 701. Introduction to Assessment in Early Childhood Special Education. 3 hr.; 3 cr. Prereq.: ECPSE 700. The purpose of this course is to prepare early childhood special education teachers across all age-range certifications to engage in reflective decision-making and research-validated professional practice that will result in the creation of effective instructional programs for all students, including those students who are classified for special education services and supports with mild, moderate, and severe disabilities. The emphasis is on familiarizing candidates with a wide range of assessment approaches and instruments, providing them with knowledge, skills, and dispositions associated with the application of assessment information in individual student and program evaluation, as well as to classroom and curriculum planning.

ECPSE 702. Introduction to Assessment in Childhood Special Education. 3 hr.; 3 cr. The purpose of this course is to prepare childhood special education teachers to engage in reflective decision-making and research-validated professional practice that will result in the creation of effective instructional programs for all students including those students who are classified for special education services and supports with mild, moderate, and severe disabilities. The emphasis is on familiarizing candidates with a wide range of assessment approaches and instruments, providing them with knowledge, skills, and dispositions associated with the application of assessment information in individual student and program evaluation, as well as to classroom and curriculum planning.

ECPSE 703. Introduction to Assessment in Adolescent Special Education. 3 hr.; 3 cr. The purpose of this course is to prepare secondary special education teachers to engage in reflective decision-making and research-validated professional practice that will result in the creation of effective instructional programs for all students including those students who are classified for special education services and supports with mild, moderate, and severe disabilities. The emphasis is on familiarizing candidates with a wide range of assessment approaches and instruments, providing them with knowledge, skills, and dispositions associated with the application of assessment information in individual student and program evaluation, as well as to classroom and curriculum planning.

ECPSE 708. Collaboration with Families and School-Based Teams. 3 hr.; 3 cr. Prereq.: ECPSE 700. This course offers intensive practical exposure to theory, research, and exemplary practice in collaborative process and team development, with particular emphasis on working with families and multiple school and community partners. Candidates examine specific practices to enhance cross-disciplinary, cross-cultural, and cross-constituent partnerships within inclusive school, community, and other settings. Candidates will apply knowledge to students with mild, moderate, and severe disabilities. Through active and guided participation, candidates acquire enhanced communication, problem-solving, facilitation and leadership skills necessary to develop integrated special education and related services. Co-teaching with another teacher or related service professional is a required field-based assignment.

ECPSE 709. Collaboration and Co-Teaching in Inclusive Education. 3 hr.; 3 cr. Coreq.: EECE 566. Candidates will complete one of two culminating assignments using collaboration skills to demonstrate their expertise in general and special education assessment, content knowledge and skills, pedagogical knowledge and skills, and evidence-based instructional strategies to co-plan, co-teach, and co-reflect on a unit of study designed to meet the needs of all learners. Candidates will learn the theory, research, and exemplary practices in collaboration and co-teaching (through coursework and instructor modeling). Through guided practices with faculty in general and special education, candidates will utilize collaboration best practices to co-plan and co-teach data-based instructional plans using a best fit co-teaching model to provide access to the general education curriculum based on the social, emotional, behavioral, and academic needs of all learners. Specifically, candidates will learn and engage in collaborative process, team development, and co-teaching in an environment with a diverse study body, including students with disabilities or struggling learners. Emphasis is placed on working effectively with families, schools, and community partners, in particular those from culturally and linguistically diverse backgrounds. Candidates examine specific practices to enhance cross-disciplinary, cross-cultural, and cross-constituent partnerships within inclusive school, community, and other settings. Through active and guided participation, candidates will refine various reflection, communication, problem-solving, facilitation, and leadership skills necessary to develop integrated special education and related services. Lectures, readings, and in-class activities utilize face- to-face and web-enhanced strategies to maximize candidates' application to classroom and other school settings.

ECPSE 710. Curriculum and Instruction for Childhood Special Education. 3 hr.; 3 cr. Prereq.: ECPSE 700, 722. Theory and research about children with mild, moderate, and severe disabilities at the childhood level (grades 1–6) and exemplary practices in informal assessment, curriculum design, adaptations, effective instruction, and supportive learning environments, with additional focus on the use of instructional and assistive technology. Field experience of at least 15 hours involves program candidates in assessment, curriculum adaptations, and teaching a small group of children who exhibit learning problems. Reflection on practice involves an analysis of learning and behavior change.

ECPSE 711. Advanced Seminar in Childhood Special Education. 3 hr.; 3 cr. Prereq.: ECPSE 710. This advanced seminar will explore critical issues related to assessment, curriculum, instruction, and research-validated best practices in childhood special education for students with mild, moderate, and severe disabilities. This advanced seminar will focus critically on the core values of the Queens College Education

Division related to promoting Equity, Excellence, and Ethics in urban schools and communities.

ECPSE 712. Language and Literacy: Principles and Practices in Early Childhood Special Education. 3 hr.; 3 cr. Prereq.: ECPSE 700, ECPSE 722, ECPSE 710. This course examines developmental and pedagogical principles of language and literacy development and explores best practices in curriculum and instruction for promoting language and literacy skill acquisition. Specifically, techniques and strategies are presented for addressing the diverse language and literacy needs of students with disabilities, English Language Learners, and students at risk for school failure at the early childhood level. Candidates will also examine reading and writing levels, formative evaluation strategies, motivational influences, and individual and group strategies for supporting language and literacy skill development.

ECPSE 713. Language and Literacy: Principles and Practices in Childhood Special Education. 3 hr.; 3 cr. This course examines developmental and pedagogical principles of language and literacy development and explores best-practices in curriculum and instruction for promoting language and literacy skill acquisition. Specifically, techniques and strategies are presented for addressing the diverse language and literacy needs of students with disabilities, English Language Learners, and students at risk for school failure at the childhood level. Candidates will also examine reading and writing levels, formative evaluation strategies, motivational influences, and individual and group strategies for supporting language and literacy skill development.

ECPSE 714. Language and Literacy: Principles and Practices in Adolescent Special Education. 3 hr.; 3 cr. This course examines developmental and pedagogical principles of language and literacy development and explores best-practices in curriculum and instruction for promoting language and literacy skill acquisition. Specifically, techniques and strategies are presented for addressing the diverse language and literacy needs of students with disabilities, English Language Learners, and students at risk for school failure at the secondary level. Candidates will also examine reading and writing levels, formative evaluation strategies, motivational influences, and individual and group strategies for supporting language and literacy skill development.

ECPSE 720. Trends and Issues in the Education of Learners with Severe Disabilities. 3 hr.; 3 cr. Prereq.: ECPSE 700, 722. This course is designed to acquaint students with the characteristics, assessment strategies, methods of teaching, team approaches, and current research and life span issues related to the education of learners with severe and multiple disabilities, and learners on the autism spectrum. Emphasis is placed on research-based methodology, language development, and teaching skills that increase self-determination and quality of life for students and their families.

ECPSE 722. Applied Behavior Analysis and Positive Behavior Supports. 3 hr.; 3 cr. Coreq: ECPSE 700. Program candidates will learn and examine environmental influences on student behavior. Additionally, candidates will learn about assessment of behavior problems, various educative and positive behavioral strategies, and the use of single subject designs to evaluate behavior change in applied settings for students with mild, moderate, and severe disabilities. Field experience of about 5 hours involve candidates in measurement and analysis of student behavior.

ECPSE 723. Applied Behavior Analysis I: Basic Concepts and Principles of Reinforcement. 3 hr.; 3 cr. Prereq.: Acceptance into the BCBA Track program in the Graduate Program in Special Education (GPSE). Candidates in this course learn the foundational concepts and principles of Applied Behavioral Analysis. This course provides the conceptual underpinnings of the behavior-analytic principles rooted in the seven dimensions of ABA: Applied, Behavioral, Analytic, Conceptually Systematic, Effective, Technological, and Generality. Major thematic focuses of this course include the relationship between human behavior and the environment, the difference between respondent and operant behavior, functional analysis technology, principles of reinforcement, and extinction.

ECPSE 725. Internship in Severe Disabilities. 3 hr. plus participation; 6 cr. Prereq.: ECPSE 700, 720, 722. Supervised teaching of students with severe disabilities within the candidate's certification area, with a focus on students on the autism spectrum. Candidates will be placed in a classroom with students with intensive support needs, where they will be provided the opportunity and guidance to participate in application of theories and practices discussed in prerequisite courses. Clinical component consists of full-time participation and teaching for the entire semester. Seminars supplement the clinical experience. Entry into this internship requires a *B* or better in both ECPSE 720 and 722.

ECPSE 726. Practicum in Significant Disabilities. 3 hr.; 3 cr., plus 45 days in supervised field site. Prereq.: ECPSE 722; coreq.: ECPSE 720. This field-based course is designed to provide candidates in the Master's of Arts Teaching (MAT) Dual Certification Program (non-BCBA candidates) with individualized supervision and group seminars focused on educating students with severe intellectual disabilities, including students on the autism spectrum. This course offers an integrated approach to teaching, which combines both knowledge and practice in a meaningful and comprehensive context. Each candidate is placed in a setting with an experienced teacher of special education and will participate in all classroom activities as assigned by the supervising teacher, the school, and college professors. Faculty will observe the candidate teaching lessons a minimum of three times over the course of the semester. This course is designed to offer candidates an advanced study of curriculum and instruction for children with severe disabilities within the context of a hands-on internship experience. This course will guide each candidate to ex-

SCHOOL PSYCHOLOGY DEGREE REQUIREMENTS (THREE-YEAR PROGRAM and FOUR-YEAR PART-TIME PROGRAM)

The content and sequence of the THREE-YEAR program are as follows:

Fall – first year	*credits*
ECPSP 860 Human Development	3
ECPSP 772 Theory and Practice in Assessment of Intelligence & Cognitive Functioning I	4
ECPSP 863 Exceptionality of Human Development	3
ECPSP 779 Multicultural Issues in Schools	3
Spring – first year	
ECPSP 862 Developmental Psychopathology	3
ECPSP 773 Theory and Practice in Assessment of Intelligence & Cognitive Functioning II	4
ECPSP 865 Learning & Instructional Strategies	3
ECPSP 774 Theory and Practice of Personality Evaluation I	3
Summer – first year	
ECPSP 782 Multicultural Interventions	3*
Fall – second year	
ECPSP 770 Behavioral Assessment and Intervention	3
ECPSP 775 Theory and Practice of Personality Evaluation II	3
ECPSP 778 Counseling Techniques for School Psychologists	3
ECPSP 781 Assessment of Linguistically and Culturally Diverse Students	3*
Spring – second year	
ECPSP 777 Practicum in School Psychology Assessment	4
ECPSP 867 Practicum in School Psychology Consultation	4
ECPSP 868 Advanced Counseling Practicum	3
Fall – third year	
ECPSP 771 Professional Issues in School Psychology	3
ECPSP 768 Internship in School Psychology I	3**
ECPSP 764 Introduction to Research in School Psychology	3
Spring – third year	
ECPSP 864 Research Design and Data Analysis in School Psychology	3
ECPSP 769 Internship in School Psychology II	3**

*Bilingual and Multicultural specializations only.

The content and sequence of the FOUR-YEAR PART-TIME program are as follows:

Fall – first year	*credits*
ECPSP 860 Human Development	3
ECPSP 772 Theory and Practice in Assessment of Intelligence & Cognitive Functioning I	4
ECPSP 779 Multicultural Issues in Schools	3
Spring – first year	
ECPSP 862 Developmental Psychopathology	3
ECPSP 773 Theory and Practice in Assessment of Intelligence & Cognitive Functioning II	4
Summer – first year	
ECPSP 782 Multicultural Interventions	3*
Fall – second year	
ECPSP 770 Behavioral Assessment and Intervention	3
ECPSP 863 Exceptionality of Human Development	3
ECPSP 781 Assessment of Linguistically and Culturally Diverse Students	3*
Spring – second year	
ECPSP 865 Learning & Instructional Strategies	3
ECPSP 774 Theory and Practice of Personality Evaluation I	3
Fall – third year	
ECPSP 775 Theory and Practice of Personality Evaluation II	3
ECPSP 778 Counseling Techniques for School Psychologists	3
Spring – third year	
ECPSP 777 Practicum in School Psychology Assessment	4
ECPSP 867 Practicum in School Psychology Consultation	4
ECPSP 868 Advanced Counseling Practicum	3
Fall – fourth year	
ECPSP 771 Professional Issues in School Psychology	3
ECPSP 768 Internship in School Psychology I	3**
ECPSP 764 Introduction to Research in School Psychology	3
Spring – fourth year	
ECPSP 864 Research Design and Data Analysis in School Psychology	3
ECPSP 769 Internship in School Psychology II	3**

**ECPSP 768.1, 769.1 Internship in Bilingual/Multicultural School Psychology I, II.

plore the curriculum development process, instructional methodology, and approaches to evaluation regarding students with severe disabilities. This course is paired with ECPSE 720. Candidates will apply practices studied in ECPSE 720 in their ECPSE 726 lesson plans and project assignment.

ECPSE 728. Applied Behavior Analysis II: Advanced Concepts and Treatment Strategies. 3 hr.; plus field work; 3 cr. Prereq.: ECPSE 723, Applied Behavior I, ECPSE 720, Trends and Issues in the Education of Learners with Severe Disabilities, ECPSE 725, Internship in Severe Disabilities. This course in applied behavior analysis is offered to graduate students in special education in the three age-level Master of Science in Education programs (MSEd: early childhood level—birth to grade 2, childhood level—grades 1 to 6, and adolescent level—grades 7–12) who are also interested in pursuing a Board Certified Behavior Analyst (BCBA) certification. This course focuses on enhancing candidates' knowledge, skills, and dispositions related to applied behavior analysis grounded in the ten content areas established by the Behavior Analyst Certification Board: (1) ethical considerations; (2) definition and characteristics, (3) principles, processes, and concepts; (4) behavioral assessment; (5) experimental evaluation of interventions; (6) measurement of behavior; (7) displaying and interpreting behavioral data; (8) selecting intervention outcomes and strategies; (9) behavior change procedures; and (10) systems support.

ECPSE 729. Ethics and Professionalism in Applied Behavior Analysis. 3 hr.; 3 cr. Prereq.: ECPSE 723 and ECPSE 728. This course is offered to graduate students in special education who are also interested in pursuing their Board Certified Behavior Analyst (BCBA) certification. Candidates who take this course must have already successfully completed ECPSE 722, Applied Behavior Analysis and Positive Behavior Supports and ECPSE 728, Advanced Workshop in Applied Behavior Analysis. This course prepares candidates for the ethical and professional practice of applied behavior analysis. Topics included in this course include professional representation of oneself and the field of behavior analysis, dissemination of professional values, evaluating behavior change, collaborating with other professionals, relationships with students, family members and colleagues and the Behavior Analyst Certification Board Guidelines for Responsible Conduct.

ECPSE 730. Curriculum and Instruction for Early Childhood Special Education. 3 hr.; 3 cr. Prereq.: ECPSE 700, 722. This course is designed to introduce program candidates to critical issues in curriculum and instruction for working with children with mild, moderate, and severe disabilities (birth through age 8) and their families in inclusive environments. Candidates will be provided with an understanding of developmentally appropriate programs and practices for young children with disabilities. Emphasis will be on the historical, educational, philosophical, and legal foundations that have guided practice and policy in early childhood special education and early intervention. Fifteen hours of field experience will include observation and analysis of young children, and school environments.

ECPSE 731. Advanced Seminar in Early Childhood Special Education. 3 hr.; 3 cr. Prereq.: ECPSE 730. This advanced seminar will explore critical issues related to assessment, curriculum, instruction, and research-validated best practices in early childhood special education for students with mild, moderate, and severe disabilities. The seminar will focus critically on the core values of the Queens College Education Division related to promoting equity, excellence, and ethics in urban schools and communities.

ECPSE 740. Curriculum and Instruction for Adolescent Special Education. 3 hr.; 3 cr. Prereq.: ECPSE 700. Theory and research about young adults with disabilities and exemplary practices in informal assessment, curriculum design and adaptation, effective instruction, person-centered planning, self-determination, supportive learning environments, and instructional technology for students with mild, moderate, and severe disabilities. Field experience of at least 15 hours involves program candidates in assessment, curriculum adaptation, planning, and implementing an intervention to assist a young adult achieve his/her goals. Reflection on practice involves an analysis of self-determination, empowerment, learning, community participation, and behavior change.

ECPSE 741. Advanced Seminar in Adolescent Special Education. 3 hr.; 3 cr. Prereq: ECPSE 740; coreq: ECPSE 708. This advanced seminar will explore critical issues related to assessment, curriculum, instruction, and research-validated best practices in adolescent special education for students with mild, moderate, and severe disabilities. The seminar will focus critically on the core values of the Queens College Education Division related to promoting equity, excellence, and ethics in urban schools and communities.

ECPSE 742: Foundations of Assistive and Instructional Technology. 3 hr.; 3 cr. Prereq.: ECPSE 700, 720 and either 740 or 710. Theory, research, and practice in identifying, implementing, and evaluating assistive and instructional technology for students with disabilities. Candidates will develop knowledge, skills, and dispositions to (*a*) integrate technology in planning and managing the teaching and learning environment, (*b*) use technology to conduct assessments, and (*c*) make appropriate technology-related adaptations for students with disabilities. The course is designed to provide a broad knowledge base, rather than disability-specific information with the goal of assisting candidates to develop technology competencies that they can apply with students with disabilities within their age specialization (elementary or adolescent) within special education and general education classrooms.

ECPSE 746. Research in Special Education. 3 hr.; 3 cr. With permission of the advisor. Study, understanding, and evaluation of basic research design and methodology in special education and interpreting research results for

classroom instruction. Program candidates will prepare a literature review and design research methodology that will be implemented in a research study in ECPSE 748. Research topics will be referenced to classroom needs as individually determined by each student's educational placement and their area of interest.

ECPSE 747. Intensive Practicum in Applied Behavior Analysis I. 3 hr.; 3 cr. Prereq.: ECPSE 722, 725, 728, 729; coreq.: ECPSE 746. This practicum course is designed to provide candidates in the BCBA track with the field experience and supervision required by the Behavior Analyst Certification Board (BACB) to qualify for the board exam. This is the first of a two course practicum sequence and the content focuses on basic implementation skills needed to be an effective behavior analyst. This intensive practicum requires candidates complete 375 hours of behavior analytic training at an approved applied or clinical practicum site. Candidates are required to complete 25 hours per week that are counted toward the 375 total hours per semester. Additionally, candidates are required to attend weekly seminar classes that are aligned with the 4th edition BCBA task list. Candidates will receive individual and group supervision totaling 37.5 hours during this practicum. Candidates will register for this practicum in the fall semester of the third year of course work in the Special Education/BCBA track.

ECPSE 748. Advanced Research in Special Education. 3 hr.; 3 cr. Prereq.: ECPSE 746. The continued study, understanding, and evaluation of research design and methodology in special education. Each program candidate will implement an independent field-based project based on the literature reviewed and methodology developed in ECPSE 746. Research topics are based on needs of candidates' classrooms and their research interests. A research paper is required. This paper serves as the thesis and culminating project.

ECPSE 749. Intensive Practicum in Applied Behavior Analysis II. 3 hr.; 3 cr. Prereq.: ECPSE 722, 725, 728, 729, 747; coreq.: ECPSE 748. This practicum course is designed to provide candidates in the BCBA track with the field experience and supervision required by the Behavior Analyst Certification Board (BACB) to qualify for the board exam. It is the second of a two course practicum sequence and it builds on the basic implementation skills learned in ECPSE 747. This course will focus on advanced implementation skills needed to be an effective behavior analyst. This intensive practicum requires candidates complete 375 hours of behavior analytic training at an approved applied or clinical practicum site. Candidates are required to complete 25 hours per week that are counted towards the 375 total hours per semester. Additionally, candidates are required to attend weekly seminar classes that are aligned with the 4th edition BCBA task list. Candidates will receive individual and group supervision totaling 37.5 hours during this practicum. Candidates will register for this practicum in the spring semester of the third year of course work in the Special Education BCBA track.

ECPSE 750. Workshop in Special Education. 3 hr.; 3 cr. Selected topics in the field of Special Education. Each semester, various topic areas are offered. The course may be repeated for credit if the topic changes.

ECPSE 754. Supervised Internship in Special Education. 3 hr. plus participation, 1 seminar hr.; 3 cr. Prereq.: ECPSE 715, 725, 735, or 745. Candidates who receive a grade of *B*– or lower in ECPSE 715, 725, 735, or 745 are required to register for this course. Additional supervised experience in teaching individuals with disabilities in the same age/grade level as the prior internship will be provided. Seminars will supplement the internship, as well as individual meetings with the instructor. Course assignments will be determined by the individual needs and experiences of the candidate.

ECPSE 800. Foundations of Special and Bilingual Education. 4 hr.; 4 cr. This course presents the background and origins of bilingual and special education. Topics highlight the historical and sociological treatment of bi/multilingual children with exceptionalities, special education and bilingual education policies and mandates, and the importance of successful advocacy and collaboration with parents and professionals in inclusive settings.

ECPSE 801. Assessment for CLD Children with Exceptionalities. 4 hr.; 4 cr. The purpose of this course is to prepare bilingual early childhood special education teachers to understand various assessment issues as they affect bi/multilingual children with exceptionalities such as accountability, bias, special education referral/classification/placement testing, language proficiency, and accommodations in formal testing situations. Candidates will become familiarized with the different purposes of assessment (e.g., screening, diagnostic, placement, language proficiency, academic achievement, and monitoring) and the basic concepts of assessment so that they are prepared to assess bi/multilingual children. Candidates will engage in reflective decision making and research-validated best practices that will result in the creation of effective instructional programs for all students, including bi/multilingual students with and without exceptionalities. Assignments will require between 8 and 10 hours of field-based work.

ECPSE 802. Language and Literacy Development in Bilingual Children with Special Needs. 4 hr.; 4 cr. This course centers on differentiating instruction for bi/multilingual children with exceptionalities as they develop a new/second language and biliteracy. The course is grounded in the premise that the education of young bi/multilingual children with exceptionalities should include explicit language and content area instruction.

ECPSE 803. Oral Language Development in Bilingual Children with Special Needs. 4 hr.; 4 cr. This course explores the development of oral language(s) in bi/multilingual children with and without exceptionalities and those raised bilingually. It addresses theories of home (or first) and new (or second) language development, literacy development, and critical theory to practice approaches to support the learning needs of bi/multilingual children with exceptionalities.

ECPSE 804. Applied Behavior Analysis in Multicultural Contexts. 3 hr.; 3 cr. This course examines the principles and application of operant learning. It is primarily focused on the relationship between behaviors and environmental events (e.g., antecedents, setting events, and consequences) that influence behavior. A substantial emphasis of this course is placed on functional behavioral assessment and the use of educative, positive behavior support strategies to create meaningful changes in environments and the quality of life of young children and their families. Candidates will also learn how to design and employ single subject research designs. All course assignments are field based; the FBA assignment requires a minimum of 5 hours for direct observation of a child with a disability (or at risk).

ECPSE 805. Culturally Responsive Early Intervention (Birth–Age 3). 3 hr.; 3 cr. This course introduces candidates in the early childhood special and bilingual education integrated MSEd program to federal and state policies and regulations for Early Intervention (EI) services. Candidates will become familiarized with the developmental needs of children from birth to age 3 and the important roles that families play in their children's development. Special emphasis will be placed on working with families, infants, and toddlers from culturally and linguistically diverse (CLD) backgrounds. Candidates will be exposed to evidence-based and culturally responsive early intervention strategies for developing and implementing Individualized Family Support Plans. Twenty hours of field experience are required to observe and interact with a CLD family and their young child with special needs.

ECPSE 806. Practicum in Early Intervention with Children and Families from CLD Backgrounds. 3 hr.; 3 cr. This course provides candidates with supervised experience in team-oriented early interventions with infants and toddlers with disabilities or at risk for developmental delays and their families from linguistically and culturally diverse backgrounds. It integrates learned theoretical models to real-life situations and affords candidates opportunities for supervised practice in the Individualized Family Support Plan (IFSP) and/or Individualized Education Program (IEP) process. Candidates will also participate in the planning and implementation of intervention strategies for infants (0–3) and young children with special needs. Collaborative work will include working with families and other early intervention and special education professionals. Particular emphasis is given to experiences that help increase candidates' observation, assessment, and intervention planning skills that are culturally sensitive toward the unique needs of families with infants and young children with special needs. Candidates will receive individualized supervision and ongoing group support to enhance their understanding of how to apply evidence-based and culturally responsive early intervention and special education services to young bi/multilingual children with disabilities and their families.

ECPSE 807. Curriculum and Instruction for ECSE and Bilingual Education I (Age 3–5). 4 hr.; 4 cr. This course is designed to introduce program candidates to critical issues in curriculum and instruction for teaching bi/multilingual children with exceptionalities (ages 3 to 5) and their families in inclusive environments. Candidates will be taught about developmentally appropriate programs (DAP) and practices for bi/multilingual children with exceptionalities. This course will also emphasize the historical, educational, philosophical, and legal foundations that have guided practice and policy in bilingual education and early childhood special education (ECSE). Fifteen hours of field experience are required and will include observation and analysis of young bi/multilingual children with exceptionalities in both home and school environments.

ECPSE 808. Collaboration with Families and School-Based Teams. 4 hr.; 4 cr. This course offers intensive practical exposure to theory, research, and exemplary practice in collaborative process and team development. Emphasis is placed on working effectively with families, school, and community partners, in particular those from culturally and linguistically diverse backgrounds. Candidates examine specific practices to enhance cross-disciplinary, cross-cultural, and cross-constituent partnerships within inclusive school, community, and other settings. Candidates will apply knowledge to enhance educational outcomes of students with mild, moderate, and severe disabilities. Through active and guided participation, candidates will refine various communication, problem-solving, facilitation, and leadership skills necessary to develop integrated special education and related services. Co-teaching with another teacher or related service professional is a required field-based assignment and the co-teaching assignment requires between 8 and 10 hours.

ECPSE 809. Curriculum and Instruction for ECSE Early Childhood Special Education and Bilingual Education II (Ages 5–8). 4 hr.; 4 cr. This course will explore critical issue related to assessment, curriculum, instruction, and research-validated best practices in bilingual education and early childhood special education for bi/multilingual children with exceptionalities between the ages of 5 and 8. This course will focus on designing and implementing developmentally appropriate and culturally responsive curriculum and instruction to ensure positive academic outcomes for these children. Fifteen hours of field experience are required for observation of and teaching bi/multilingual children with exceptionalities between the ages of 5 and 8 in a variety of environments.

School Psychology

Coordinator: Marian C. Fish

CERTIFICATE AND MASTER'S DEGREE PROGRAMS IN SCHOOL PSYCHOLOGY

The graduate program in School Psychology at Queens College is cast in the scientist-practitioner model. This model seeks to integrate theoretical knowledge and applied skills in all coursework as well as in practica and internships in order to promote educationally and psychologically healthy environments for all children and youth. The goal is to prepare psychologists with high levels of ethical and professional competencies to provide sound educational and psychological services in the school and other educational settings. We are committed to training school psychologists who embrace principles of fairness, equity, and social justice in their personal and professional lives and who will provide exemplary, culturally responsive services to the diverse constituencies we are privileged to serve.

This 61-credit specialist-level program provides the skills necessary for the professional preparation of school psychologists. It meets the academic and internship requirements for New York State Certification in School Psychology and is approved as a training institution in School Psychology by the New York State Department of Education and the National Association of School Psychologists (NASP). The program leads to a Provisional Certificate in School Psychology and a degree of Master of Science in Education. It can be completed in three years of full-time study, including a one-year internship, or in four years on a part-time basis, with three years of part-time study and a final year of full-time internship. Furthermore, candidates may enroll in either a Bilingual or Multicultural Specialization. The Bilingual Specialization leads to a Bilingual Extension (provided by the New York State Education Department to bilingual candidates meeting the states' bilingual requirements). The Multicultural Specialization is for non-bilingual students who wish to obtain additional expertise in working with students from diverse cultural backgrounds. Both specializations require additional coursework (6 additional credits) and a special internship experience.

The curriculum is sequenced, with the first year focused on theoretical foundations and skill development, followed by more experiential components in the later years. The sequence is designed to introduce complex concepts slowly, building upon the basics. The coursework is designed to cover the 10 Domains of School Psychology Training and Practice that are part of the NASP Standards for Training and Field Placement experience and practica. Close supervision of skills is followed by an internship, where students are given the opportunity to integrate these experiences in a practical, professional environment, both in school and clinical settings. All students follow the same basic sequence of coursework, with program modifications made to meet individual needs.

A graduate of the School Psychology program has expertise in both psychology and education, as well as a knowledge of the contributions of related disciplines. Using an ecological perspective, our graduates work with general education as well as special education students, teachers, administrators, parents, and with others in the community to develop greater understanding of all children and to contribute to constructive change in a variety of environments—including the classroom, school, and home. Particular attention is given to serving the needs of children of diverse cultural and linguistic backgrounds. As a member of the school faculty, the school psychologist shares with faculty members and with other professionals the responsibility for delivering services that prevent problems and maximize learning and personal growth in the child. The role of the school psychologist as a member of a team is addressed in training.

Program Objectives

The objectives of the graduate program in School Psychology are consistent with NASP's 10 Domains of School Psychology Training and Practice as well as aligned with the core values of the Education Unit of promoting Equity, Excellence, and Ethics in urban schools and communities.

Objectives of the program are to provide students with:

1. Broadly based knowledge of educational and psychological foundations including learning, development, and biological, social, and cultural bases of behavior.
2. Knowledge and skills to work effectively with students in both general and special education, at different ages (preschool and K–12) in urban and suburban settings.
3. Knowledge and skills in providing services for students and families with culturally and linguistically diverse backgrounds.
4. Knowledge of and skills in data-based decision-making and accountability (including assessment procedures to effectively identify the needs of students and to evaluate the learning environment), the use of assessment results to develop interventions, and the evaluation of the outcomes of the intervention.
5. Knowledge of and skills to function as a consultant at both the individual and group levels to enhance the learning and development of children, adolescents, and young adults.
6. Knowledge of and skills in a variety of prevention, pre-referral intervention, and remedial/counseling/therapeutic intervention strategies for dealing with school-related difficulties.
7. Commitment to the legal, ethical, and professional standards related to the practice of school psychology.
8. Knowledge of and skills in implementing the role and functions of the school psychologist in schools and related settings.
9. Knowledge of the school and other settings as systems that may facilitate policies and practices that maintain effective learning environments.
10. Knowledge of and skills in involving families and others in the community in education and service delivery.

11. Knowledge of and skills in using information sources and technology relevant to their work.
12. Knowledge of and skills in designing and carrying out research and program evaluation.

Bilingual Specialization in School Psychology

Candidates with bilingual proficiency may wish to complete a Specialization in Bilingual School Psychology, leading to a certificate with a bilingual extension. The Bilingual Extension is granted by the New York State Education Department to bilingual graduates who take courses focusing on bilingual and multicultural issues and who complete a bilingual internship experience. The Specialization in Bilingual School Psychology requires 67 credits, the 61-credit school psychology sequence and two additional courses (3 credits each) emphasizing bilingual and multicultural issues. Students are placed in bilingual internship sites with bilingual supervisors (internship experience is 3 credits a semester for a total of 6 credits). Candidates in the Bilingual Specialization are required to demonstrate proficiency in a second language by taking the Bilingual Education Assessment (BEA) exam, a content and language proficiency exam, administered by the New York State Education Department. Candidates are required to take and pass the BEA exam in English and in their second language prior to entering the practicum experience.

The School Psychology Program offers a sequence of courses for practicing school psychologists who already hold certification and are seeking a bilingual extension. For additional information, please refer to this *Bulletin* under Bilingual Extension for Pupil Personnel.

Multicultural Specialization in School Psychology

Candidates who are not bilingual and who have an interest in acquiring additional knowledge and skills in working with culturally and linguistically diverse students will complete the Specialization in Multicultural School Psychology. The Specialization in Multicultural School Psychology requires 67 credits, the 61-credit school psychology sequence and two additional courses (3 credits each) emphasizing multicultural issues. Candidates are placed in multicultural internship sites with supervisors who have expertise with culturally and linguistically diverse populations (internship experience is 3 credits a semester for a total of 6 credits).

Inquiries regarding the Bilingual and Multicultural Specializations should be directed to:

Dr. Cliff Yung-Chi Chen, Co-Director, Bilingual Specialization
Dr. Sherrie Proctor, Co-Director, Multicultural Specialization
Bilingual/Multicultural Specializations in School Psychology
Graduate Program in School Psychology
Powdermaker 033
Educational & Community Programs
Queens College, CUNY
Queens, New York 11367-1597
718-997-5230
yungchi.chen@qc.cuny.edu
sherrie.proctor@qc.cuny.edu

The Department of Educational and Community Programs also offers a sequence of courses for practicing school psychologists who are seeking a bilingual extension. For additional information please refer to the information under Bilingual Extension for Pupil Personnel in this *Bulletin*.

FACULTY

Fish, Marian C., Coordinator, *Professor,* PhD 1974, Teachers College, Columbia University: family systems theory, family-school relations, learning environments, interventions

Chen, Cliff (Yung-Chi), *Assistant Professor*, PhD 2009, CUNY Graduate Center: impact of chronic illness on family and children, parent decision-making, minority stress

Gershon, Pam, *Doctoral Lecturer,* PsyD 1996, New York University: culturally responsive counseling, play therapy, implementing social-emotional learning programs with preschoolers

Lopez, Emilia C., *Professor,* PhD 1989, Fordham University: multicultural and bilingual school psychology, multicultural consultation, working with linguistically and culturally diverse students

Proctor, Sherrie, *Associate Professor*, PhD 2009, Georgia State University: critical theories, multicultural school psychology, qualitative research, recruitment and retention of minoritized graduate students, social justice

Requirements for Admission

Applicants for admission to the graduate program in School Psychology are required to meet the general requirements for matriculation for the Master of Science in Education degree. Matriculation is limited to graduates of approved colleges who have had adequate preparation in subject matter courses and in professional courses. Candidates are expected to meet the standards with respect to residence, citizenship, health, character, and personality as noted in this *Bulletin.*

All candidates must have completed a satisfactory undergraduate program of study in a relevant major. Candidates are accepted for admission to begin the program only in the Fall semester.

There are 9 prerequisite courses for the graduate program in School Psychology. All candidates are required to have had a course in each of the following areas of Psychology and Education, and all courses must have been taken at an accredited college or university for a minimum of 3 credits:

1. General Psychology
2. Statistical Methods in Psychology
3. Psychological Testing and Measurement (e.g., Psychometrics)
4. Experimental Psychology
5. Abnormal Psychology

6. Physiological Psychology (e.g., Behavioral Neuroscience)
7. Developmental Psychology
8. Foundations of Education (e.g., Philosophy of Education)
9. Literacy Education (e.g., Teaching Beginning Reading and Writing)

At the time of matriculation into the School Psychology program a minimum of 7 of the 9 prerequisites must have been satisfactorily completed. No student may matriculate without completing Psychometrics (Psychological Testing and Measurement). Once enrolled in the program, any outstanding prerequisites must be completed before the beginning of the second year of the program.

Inquiries should be directed to:
Dr. Marian C. Fish, Coordinator
Graduate Program in School Psychology–Powdermaker 033
Educational & Community Programs
Queens College, CUNY
Queens, New York 11367-1597
718-997-5230; fax 718-997-5248;
email: schoolpsych@qc.cuny.edu

Advanced Certificate Program in School Psychology

Admission to the Advanced Certificate Program in School Psychology is limited to (*a*) students already possessing a master's degree in psychology, education, or related fields who want to obtain certification as school psychologists' and (*b*) satisfactory completion of nine prerequisite courses.

Six credits of full-time internship are required. The additional coursework (24–54 credits) will be determined from the list of program courses based on review of student's prior graduate record.

Additional program criteria include the following:

- *Grade-Point Average:* Students must maintain a *B* (3.0) grade-point average in order to remain matriculated in the program.
- *Seminars:* Before receiving certification, New York State law mandates that all candidates provide documentation that they have completed seminars in (*a*) Alcohol and Substance Abuse, (*b*) Child Abuse, Prevention and Intervention, (*c*) Harassment, Bullying, and Discrimination Prevention and Intervention (DASA), (*d*) School Safety, which consists of Fire and Arson, Child Abduction, and Safety on Highways, and (*e*) School Violence Prevention and Intervention.
- *Culminating Experience:* All candidates in their internship year prepare a Professional Performance-Based Portfolio for submission to faculty. This portfolio consists of case studies in areas including assessment, intervention, counseling and consultation, a research project, a resume, and a personal statement. The portfolio will be reviewed by the faculty and provide evidence of competency in all 10 NASP domains.
- *PRAXIS Examination:* All candidates are required to take the PRAXIS II (specialty) exam in School Psychology prior to graduation. These scores must be reported to the program office and are required in order to become a Nationally Certified School Psychologist. Registration information can be obtained from the Educational Testing Service (ETS) at 609-771-7395 or www.ets.org/praxis. Other information is available at nasponline.org.
- *Candidate Personal Characteristics:* Each semester a review of candidates will be conducted to decide whether they are progressing satisfactorily. Responsible training for work in school and mental health settings requires that in addition to meeting academic requirements, candidates have appropriate personal characteristics. These include but are not limited to communication skills, interpersonal skills, respect for human diversity, professional judgment, and ethical conduct. In addition, candidates are expected to demonstrate sensitivity to client issues and effective management of personal stress or adjustment difficulties. At the end of each semester, the faculty of the School Psychology program will evaluate each candidate's suitability for continuation in the program, considering information from all sources in the program and related settings.

The decision that a student must leave the program on academic and/or personal grounds will be made by the program faculty and may be appealed, should the student wish, to a special Ad Hoc Appeals Committee of the department, which will include no one who participated in the initial evaluation.

- *Chalk &Wire:* Candidates are required to purchase and maintain a Chalk & Wire ePortfolio subscription from the Queens College bookstore in order to submit their assignments as directed.
- *Candidate Professional Behavior:* Candidates must demonstrate professional work characteristics, including ethical and legal conduct. All candidates must follow the APA and NASP Ethical Codes, and are expected to abide by the CUNY Policy on Academic Integrity.

Admissions Procedures

Applicants will be admitted through admissions procedures that include the following:

1. A review of undergraduate records with a minimum cumulative average of 3.0 and an average of 3.0 in all courses in psychology and education.
2. A personal statement.
3. Three written recommendations. At least two must be from undergraduate or graduate instructors in psychology and/or education. All reference letters should be on the instructors' stationery. Additional letters of recommendation are also appropriate from a current job or from a recent job related to education and/or psychology.
4. A personal interview.
5. A writing sample at time of interview.

Requirements for the School Psychology Program

The program for each student will be modified individually depending on the student's background and preparation. The program is a structured sequence that may be completed in three years of full-time study (including a one-year internship) or four years of part-time study (including a one-year full-time internship). In the Spring semester before internship, students must spend one day a week in a school setting chosen by the program. In addition, students must receive a grade of Pass in both semesters of internship in order to receive a degree and be eligible for a certificate.

Requirements to Advance to Practica and Internship

Candidates who do not receive *B* or better in assessment or practica courses (ECPSP 770, 772, 773, 774, 775, 777, 778, 861, 867, 868) may not proceed to subsequent practica and internships except with permission of the faculty. Candidates may be asked to do additional work like retaking a course or courses and/or spending additional time in the field, if it is thought this will be sufficient to help them demonstrate competency in a reasonable time.

Continuity of Study

Candidate leaves or a break in the continuity of study requires a review by the faculty before candidates return to the program and study is resumed. Such reviews could result in requiring candidates to retake courses or other requirements to ensure competencies are maintained.

All candidates must meet appropriate academic and scholarship standards to remain in and complete the program. They must also demonstrate appropriate personal, professional, and ethical conduct as established by the program and school profession (i.e., ethical and professional standards in psychology and school psychology, including APA and NASP). Candidates are expected to abide by the CUNY policy on Academic Integrity. All candidates are subject to review and sanctions, including dismissal, as a result of academic and/or professional deficiencies. Candidates have the right to appeal all decisions regarding academic performance and personal and/or professional behavior as per college, department, and program policies.

COURSES IN SCHOOL PSYCHOLOGY

ECPSP 764. Introduction to Research in School Psychology. 3 hr.; 3 cr. Prereq.: Matriculation in the School Psychology program. This course focuses on the study, understanding, and evaluation of basic research design and methodology in school psychology and the interpretation of research. This is the first of a two-course sequence (see ECPSP 864).

ECPSP 766. Fieldwork in School Psychology I. 3 cr. Prereq.: Written permission of the department. Candidates start in October and spend 2 days a week in a school placement. They follow the academic calendar of the school in which they are placed. Graded on a Pass/Fail basis only. Fall

ECPSP 767. Fieldwork in School Psychology II. 3 cr. Prereq.: ECPSP 766 or written permission of the department. Candidates spend 2 days a week in a school placement. They follow the academic calendar of the school in which they are placed until the school year ends. Graded on a Pass/Fail basis only. Spring

ECPSP 768. Internship in School Psychology I. 3 hr.; 3 cr. Prereq.: Permission of the department; coreq.: ECPSP 771. Candidates spend 5 days a week in internship settings with a minimum of 600 hours a year in a school setting. Other settings include mental healthagencies and clinics. They begin in September and follow school and agency calendars. Candidates meet biweekly for group supervision at the college. Taken in the last year of study. Graded on a Pass/Fail basis only. Fall

ECPSP 769. Internship in School Psychology II. 3 hr.; 3 cr. Prereq.: Permission of the department and ECPSP 768. Candidates spend 5 days a week in internship settings with a minimum of 600 hours a year in a school setting. Other settings include mental health agencies and clinics. Candidates follow school and agency calendars. Candidates meet biweekly for group supervision at the college and remain in their placements through June. Taken in the last year of study. Graded on a Pass/Fail basis only. Spring

ECPSP 770. Behavioral Assessment and Intervention. 3 hr.; 3 cr. This course is designed to familiarize candidates with principles and procedures of behavioral assessment and intervention. Major emphases are placed on the observation, recording, analysis, and modification of children's behaviors in school and other related settings. Applications of behavioral techniques in treating different disorders are also covered. In addition, candidates are prepared to serve as behavioral consultants to school and mental health personnel. Fall

ECPSP 771. Professional Issues in School Psychology. 3 hr.; 3 cr. Coreq.: ECPSP 768. This is an integrative seminar that accompanies the first semester of internship. It prepares candidates for their professional role in the schools by covering topics that include ethical and legal behavior, models of service delivery, effective schooling practices, and current issues. The relationship of the school psychologist to other school personnel, families, and community agencies is emphasized. Fall

ECPSP 772, 773. Theory and Practice in Assessment of Intelligence and Cognitive Functioning I, II. 4 hr.; 4 cr. each course. Prereq. for 772: a course in psychological testing and matriculation in the graduate program in School Psychology or permission of the department; coreq. for 772: ECPSP 860. Prereq. for 773: ECPSP 772; coreq. for 773: ECPSP 862. A combined laboratory and didactic

experience designed to develop the candidate's competency in the administration and interpretation of individual and group tests of intelligence, perception, language, and neuro-developmental functioning and in communicating test findings to school personnel. Responsibilities involved in the use of tests in psychologist-client relationships in general are considered. 772 – Fall; 773 – Spring

ECPSP 774, 775. Theory and Practice of Personality Evaluation I, II. 3 hr.; 3 cr. Prereq.: Matriculation in the graduate program in School Psychology or permission of the department; ECPSP 860, 772. A combined laboratory and didactic experience designed to develop the candidate's competency in the use of objective and projective techniques in personality evaluation and assessment. The course is also designed to increase skill in written reporting of psychodiagnostic findings. 774 – Spring; 775 – Fall

ECPSP 777. Practicum in School Psychology Assessment. 4 hr.; 4 cr. Prereq.: ECPSP 772, 773. Candidates work under supervision with youngsters who have learning, behavioral, or other school-related problems. Emphasis is placed on linking formal and informal assessment strategies with interventions using a problem-solving approach. Candidates are required to spend a minimum of one day a week in a school setting. Spring

ECPSP 778. Counseling Techniques for School Psychologists. 3 hr.; 3 cr. Prereq.: Matriculation in the graduate program in School Psychology. This course is intended to build skills in the helping process using a cognitive behavioral therapy model. Students practice micro skills with volunteer subjects and with each other. Students also develop beginning skills in conducting play sessions with young children. Active listening using the language of play is taught, as well as structured play techniques that may be used in cognitive behavioral play therapy or incorporated into counseling with younger children. Class sessions are devoted primarily to direct instruction in and micro training of counseling and interviewing skills and play therapy techniques. Both cultural and developmental adaptations to cognitive behavioral therapy are discussed. In addition, relaxation and social skills training and stop-and-think interventions are introduced. Fall

ECPSP 779. Multicultural Issues in Schools. 3 hr.; 3 cr. This course introduces graduate students to multicultural issues, with "multicultural" defined broadly. It examines the theoretical, empirical, and practical literature relevant to racially, ethnically, culturally, and linguistically diverse clients as well as issues relevant to gender, sexual identity, and social class. Multicultural issues are explored in terms of their relevance to the development of cross-cultural competencies and the delivery of multiple services provided by school professionals (e.g., assessment, counseling, consultation). Candidates will have the opportunity to discuss multicultural issues within the contexts of families, classrooms, and schools. Issues discussed will be relevant to culturally and linguistically diverse children ranging from early childhood to adolescence. The course is part of the multicultural and bilingual specializations for school psychologists and the bilingual extension for bilingual pupil personnel. Fall

ECPSP 780. Educational and Psychological Tests and Measurements. 3 hr.; 3 cr. A fundamental course in testing and measurement in education and psychology. Areas covered include psychometric properties of tests, technical and methodological principles in test development, social and ethical implications of testing, and issues in the use and interpretation of tests. Course is limited to candidates in the School Psychology program. All others must get the permission of the program. Credits for this course will not apply toward a School Psychology certificate.

ECPSP 781. Assessment of Linguistically and Culturally Diverse Students. 3 hr.; 3 cr. Prereq.: ECPSP 779. Students develop knowledge and skills needed to assess linguistically and culturally diverse students. A major emphasis is placed on learning culturally responsive assessment methods and procedures to assess language proficiency, intelligence, academic skills, and personality-behavioral functioning. Fall

ECPSP 782: Multicultural Interventions. 3 hr.; 3 cr. Students acquire knowledge and skills related to instructional, mental health, and systemic interventions for culturally and linguistically (CLD) diverse students. Summer

ECPSP 860. Human Development. 3 hr.; 3 cr. The course of development through the lifespan is studied as the interplay between individual predispositions (genetic and biological factors, past history, current stage) and forces in the environment (other individuals, social factors, cultural tradition, training methods). Among the specific topics examined from an interactionist point of view are motivation and adaptation, the role of anxiety and other affects in regulating behavior, sense of self, attachment, and self-esteem regulation. Relevant infant and child research is reviewed. Fall

ECPSP 861. Seminar in Special Issues. 3 hr.; 3 cr. This course will be devoted to special topics of current interest to school psychologists. The subject matter will change as needs arise. Topics to be addressed will include interventions, assessment and intervention with linguistically and culturally diverse students, cognitive theory and research, consultation models, legal and ethical issues, etc. Fall

ECPSP 862. Developmental Psychopathology. 3 hr.; 3 cr. Prereq.: Matriculation in the graduate program in School Psychology or permission of the department. This course is designed to familiarize candidates with deviant behavioral patterns occurring from infancy through adolescence. Social, biological,

and emotional factors in the origin of these pathological conditions will be studied. Attention will be paid to psychopharmacological treatment as well as other approaches in effecting change. Spring

ECPSP 863. Exceptionality of Human Development. 3 hr.; 3 cr. Prereq.: Matriculation in the School Psychology program or permission of the department. This course introduces students to the characteristics of exceptional learners and their education, emphasizing research-supported interventions and instructional practices. The course explores the psychological, sociological, and medical aspects of disabilities and giftedness. The course also includes examination of historical, ethical, and legal issues related to the education of students with exceptionalities. Critical pedagogy guides the instruction. This pedagogy facilitates students' understanding of challenges that traditionally underserved students with disabilities (e.g., English Language Learners, students of color) and their families can encounter when interfacing with U.S. education systems. Fall

ECPSP 864. Research Design and Data Analysis in School Psychology. 3 hr.; 3 cr. Prereq.: ECPSP 764 and matriculation in the School Psychology program. An advanced course concerned with problems, procedures, and accepted practices in conducting research. A research project will be required of candidates. Computerized statistical techniques commonly used in analyzing and interpreting research data are covered. Spring

ECPSP 865. Learning and Instructional Strategies. 3 hr.; 3 cr. Prereq.: Matriculation in the graduate program in School Psychology or permission of the department. This course focuses on theoretical approaches to human learning and explores factors that influence the learning process, including developmental issues, motivational levels, and cultural/linguistic background. Theoretical models for instructional and curricular design are discussed for general as well as special education students. Emphasis is placed on applying learning and instructional approaches to children of different ages and backgrounds. Spring

ECPSP 866. Seminar in Special Issues. 3 hr.; 3 cr. This course will be devoted to special topics of current interest to school psychologists. The subject matter will change as needs arise. Topics to be addressed will include interventions, assessment and intervention with linguistically and culturally diverse students, cognitive theory and research, consultation models, and legal and ethical issues. Summer

ECPSP 867. Practicum in School Psychology Consultation. 4 hr.; 4 cr. This course is designed to train school psychology candidates to serve as consultants in the schools. Models of school-based consultation are explored. Specific assessment and intervention strategies are discussed as they relate to the consultation process. Candidates are placed in a school setting to practice consultation skills.

ECPSP 868. Advanced Practicum in School Psychology Counseling and Crisis Intervention. 3 hr.; 3 cr. Prereq.: ECPSP 778; coreq.: ECPSP 777. This practicum provides candidates with practice in counseling with real clients in field settings and instructs students in crisis intervention. It gives them the opportunity to apply theoretical knowledge about counseling obtained from ECPSP 778, Counseling Techniques for School Psychologists, to real situations. Candidates spend time weekly in the schools and learn to conceptualize cases and plan their work with clients. They present audiotaped sessions of their work in class on a regular basis where it is reviewed and critiqued. Ethical and legal issues as they relate to counseling are addressed. Candidates review evidence-based techniques for providing culturally responsive counseling to a variety of ethnic, cultural, and religious groups. They also learn procedures for threat assessment and gain knowledge of a multi-tiered approach to crisis intervention. Empirically validated programs for prevention and intervention of suicide, bullying, risky behaviors, school refusal, and violence are studied.

SPECIALIZATIONS IN BILINGUAL AND MULTICULTURAL SCHOOL PSYCHOLOGY

The specializations in Bilingual and Multicultural School Psychology require 66 credits: the 60-credit School Psychology sequence, and two additional courses (3 cr. each) emphasizing bilingual and multicultural issues.

ECPSP 781. Assessment of Linguistically and Culturally Diverse Students. 3 hr.; 3 cr. Prereq.: ECPSP 779. Students develop knowledge and skills needed to assess linguistically and culturally diverse students. A major emphasis is placed on learning culturally responsive assessment methods and procedures to assess language proficiency, intelligence, academic skills, and personality-behavioral functioning. Fall

ECPSP 782: Multicultural Interventions. 3 hr.; 3 cr. Students acquire knowledge and skills related to instructional, mental health, and systemic interventions for culturally and linguistically (CLD) diverse students. Summer

In addition, candidates in the Specialization in Bilingual School Psychology will enroll in special sections of the internship:

ECPSP 768.1. Internship in Bilingual/ Multicultural School Psychology I. 3 hr.; 3 cr. Prereq.: Permission of the department; coreq.: ECPSP 771. Candidates spend 5 days a week in internship settings with a minimum of 600 hours a year in a school setting. Other settings include mental health agencies and clinics. The placements are in settings with a bilingual or multicultural population, and candidates are under the supervision of qualified supervisors. The candidates meet biweekly for group supervision at the

college. They begin in September and follow school and agency calendars. Taken in the last year of study. Graded on a Pass/Fail basis only.

ECPSP 769.1. Internship in Bilingual/ Multicultural School Psychology II. 3 hr.; 3 cr. Prereq.: Permission of the department; coreq.: ECPSP 771. Candidates spend 5 days a week in internship settings with a minimum of 600 hours a year in a school setting. Other settings include mental health agencies and clinics. The placements are in settings with a bilingual or multicultural population, and candidates are under the supervision of qualified supervisors. The candidates meet biweekly for group supervision at the college. They begin in September and follow school and agency calendars. Taken in the last year of study. Graded on a Pass/Fail basis only.

Practica and Internship Courses

It is necessary for candidates in practica and internships to purchase malpractice insurance, which is available at low cost through the American Psychological Association or the National Association of School Psychologists. Student membership in either organization is required in order to be eligible for insurance. A fee of approximately $30 will be charged for each year of insurance.

Practica courses require that candidates spend a minimum of one full day a week in a school setting in the spring semester prior to internship.

Note that all candidates in internships (ECPSP 768, 769, 768.1, 769.1) are required to meet with college supervisors biweekly for one hour for supervision.

COURSES IN RESERVE

ECPCE 730. Overview: General Introduction to Alcoholism and Substance Abuse Sequence.

ECPCE 731. Family and Substance Abuse.

ECPCE 732. Specialized Counseling Techniques for the Addictive Population: Individual and Group.

ECPCE 733. Special Issues and Special Populations in Alcoholism/Substance Abuse.

English

Chair: Glenn Burger

Directors of Graduate Studies: Caroline K. Hong, Hillary Miller

Directors of MFA Creative Writing and Literary Translation Program: Nicole Cooley, Maaza Mengiste

Dept. Office: Klapper Hall 607, 997-4600

Website: http://english.qc.cuny.edu

The graduate English program at Queens College is staffed by faculty devoted to critical analysis, research skills, and creative publication. Its faculty have recently been honored with grants and awards from the National Endowment for the Humanities, the Guggenheim Foundation, the American Academy in Berlin, the Folger Institute, and the Woodrow Wilson International Center for Scholars. Books by Queens English faculty include Ryan Black's *The Tenant of Fire;* Nicole Cooley's *Girl after Girl after Girl;* Seo-Young Chu's *Do Metaphors Dream of Literal Sleep? A Science Fictional Theory of Representation*; Annmarie Drury's *Translation as Transformation in Victorian Poetry;* Kimiko Hahn's *Brain Fever;* Carrie Hintz's *Reading Children's Literature: A Critical Introduction;* Briallen Hopper's *Hard to Love;* Steven Kruger's *The Spectral Jew: Conversion and Embodiment in Medieval Europe;* Maaza Mengiste's *The Shadow King;* Hillary Miller's *Drop Dead: Performance in Crisis, 1970s New York;* Talia Schaffer's *Romance's Rival: Familiar Marriage in Victorian Fiction*; Roger Sedarat's *Haji as Puppet: An Orientalist Burlesque;* Jason Tougaw's *The Elusive Brain: Literary Experiments in the Age of Neuroscience;* and John Weir's *What I Did Wrong.*

The graduate program provides faculty, library, courses, and facilities for advanced study in the following disciplines:

1. Literary, rhetorical, and linguistic theory
2. Textual criticism, descriptive and enumerative bibliography, techniques of scholarship
3. History of English, American literature, and global literatures in English
4. History and analysis of the English language
5. Practical analysis, interpretation, and evaluation of works of literature
6. Creative writing
7. Writing studies

The program enables students to bring their vocabulary, techniques, and judgment in these disciplines to a point at which they feel secure in and capable of independent pursuit of knowledge among the primary and secondary materials of the field. In the degree structure of the City University, the Queens College program leads to the MA degree in English. The first 30 units of coursework may be counted toward the PhD in the City University. Such courses must be taken while enrolled in the MA program.

The Queens College program provides training in creative writing. This course of study is described below. It does not provide training in comparative literature. The needs and interests of the individual student receive full attention, however, and participation in related programs at sister institutions in the City University is encouraged. A full-time student can complete the requirements for the MA degree in 12 months, although in most cases a longer time is needed. All requirements must be completed within four calendar years of admission. The time period is calculated from the date of the first graduate course for which credit is granted, whether it was taken at Queens or at another institution.

The Queens College program also provides training in creative writing, in an MFA program that is distinct from but also cooperative with the MA program. The MFA course of study is described below. The MFA program does not include coursework in comparative literature. The needs and interests of the individual student receive full attention, however, and participation in related programs at sister institutions in the City University is encouraged. A full-time student can complete the requirements for the MFA degree in 12 months, although the average is four or five semesters spread over about two years. All requirements must be completed within four calendar years of admission. The time period is calculated from the date of the first graduate course for which credit is granted, whether it was taken at Queens or at another institution. Further information may be found at http://english.qc.cuny.edu/graduate-programs/ma-in-english/.

FACULTY

Burger, Glenn D., Chair, *Professor,* DPhil 1981, Oxford University: Medieval literature and culture, gender theory

Cooley, Nicole R., Director of MFA Creative Writing and Literary Translation Program, *Professor,* PhD 1996, Emory University; MFA 1993, Iowa Writers Workshop: poetry writing, postmodern American literature

Hong, Caroline K., Director of Graduate Studies, *Associate Professor,* PhD 2009, University of California at Santa Barbara: Asian American studies, comedy and satire, graphic narrative, American race and ethnic studies

Alryyes, Ala, *Associate Professor,* PhD 2001, Harvard University: 18th-century literature, global Arab novel, rhetoric of science

Alvarez, Sara, *Assistant Professor,* PhD 2018, University of Louisville: writing studies, urban and bilingual education

Black, Ryan, *Assistant Professor,* MFA 2004, New York University: poetry, poetry writing, composition

Bowen, Barbara, *Associate Professor,* PhD, Yale University

Cassvan, Jeffrey, *Lecturer,* MA 1997, City University of New York: Medieval and contemporary Irish literature, critical theory

Chu, Seo-Young, *Associate Professor,* PhD 2007, Harvard University: cultural theory, poetics, Asian America, transnational studies, multi-ethnic literatures of the United States

Drury, Annmarie, *Associate Professor,* PhD 2008, Yale University: Victorian literature and culture, especially poetry, nineteenth-century translation

English, Hugh A., *Assistant Professor,* PhD 1996, Rutgers University: rhetoric and composition, American literature, modernisms, gender studies

Faherty, Duncan, *Associate Professor*, PhD 2003, City University of New York: early American literature, American cultural materialism

Ferguson, Kevin, *Associate Professor,* PhD 2007, City University of New York: composition, postmodern American literature, film studies

Fisk, Gloria, *Associate Professor,* PhD 2003, City University of New York: world literature, novel studies, postcolonial studies, critical writing

Gardaphé, Fred, *Distinguished Professor,* PhD 1993, University of Illinois at Chicago: Italian American literature

Goldhaber, Sue, *Lecturer,* MA 1974, Teachers College, Columbia University: College English as a Second Language, TESOL, composition

Grier, Miles P., *Assistant Professor,* PhD 2010, New York University: Shakespeare studies, Early American studies, African American studies

Hahn, Kimiko, *Distinguished Professor,* MA 1984, Columbia University: poetry writing

Hintz, Carrie, *Professor,* PhD 1998, University of Toronto: British literature 1600–1800, utopian studies, literary theory

Hopper, Briallen, *Assistant Professor,* PhD 2010, Princeton University: nonfiction writing

Khan, Ahktar, *Lecturer,* MA 2004, City University of New York: South Asian literature, composition

Kruger, Steven F., *Professor,* PhD 1988, Stanford University: late Medieval poetry and culture, critical theory, queer studies and gender theory

Mak, Cliff, *Assistant Professor,* PhD 2015, University of Pennsylvania: twentieth-century literature and evolutionary theory; modernism; film, animation, and media studies; gender and sexuality studies; critical animal studies

Mengiste, Maaza, Assistant Director of MFA in Creative Writing and Literary Translation, *Assistant Professor,* MFA 2007, New York University; fiction writing, world literature, African/African-diasporic literature

Miller, Hillary, Assistant Director of MA Program, *Assistant Professor,* PhD 2013, City University of New York, MFA in Dramatic Writing from the Tisch School of the Arts, New York University: twentieth- and twenty-first-century drama, playwriting

Moreland, Wayne, *Lecturer,* MA 1972, New York University: African American literature, popular culture

Navarro, Marco, Director of QC Writing Center, *Lecturer*, PhD 2018, Rensselaer Polytechnic Institute: writing studies

Orchard, William, *Associate Professor,* PhD, University of Chicago: Latina/o literature and culture, contemporary American literature, visual culture, critical race and ethnic studies, gender and sexuality studies

Paslawski, Megan, Associate Director of First Year Writing Initiative, *Lecturer*, PhD, City University of New York

Perez Rosario, Vanessa, *Professor,* PhD 2007, University of California, Davis: Latino/a literatures, feminist theories

Roberts, Sian Silyn, *Associate Professor,* PhD 2008, Brown University: the novel, eighteenth-century transatlantic literary relations, political philosophy, narrative theory

Sargent, Michael G., *Professor,* PhD 1979, University of Toronto: Medieval studies

Schaffer, Talia C., *Professor,* PhD 1996, Cornell University: nineteenth-century British literature, British modernism, cultural studies

Schanoes, Veronica, *Associate Professor,* PhD 2007, University of Pennsylvania: children's literature, myth, women's studies

Sedarat, Roger, *Professor*, PhD 2005, Tufts University: poetry writing, literary translation, nineteenth- and twentieth-century American poetry, Middle-Eastern American literature

Sirlin, Rhoda, *Chancellor's Lecturer,* PhD 1988, City University of New York: modern British, American, and Continental drama, twentieth-century American literature

Tougaw, Jason, *Professor,* PhD 2000, City University of New York: British novel, rhetoric, cultural studies

Wan, Amy, *Associate Professor*, PhD 2007, University of Illinois at Urbana: rhetoric, writing, literacy studies

Weingarten, Karen, *Associate Professor,* PhD 2009, City University of New York: early-twentieth-century American literature and gender studies

Weir, John, *Associate Professor,* MFA 1987, Columbia University: fiction writing

Whitaker, Chastity, *Lecturer,* MFA 2003, New York University: creative writing, composition

Williams, Chris, *Lecturer,* MFA, Columbia University: composition, creative writing

Zimroth, Evan, *Professor,* PhD 1972, Columbia University: poetry, creative writing, Jewish studies

MASTER OF FINE ARTS PROGRAM IN CREATIVE WRITING AND LITERARY TRANSLATION

http://english.qc.cuny.edu/graduate-programs/mfa-in-creative-writing/

The MFA program has four tracks: poetry writing, fiction writing, playwriting, and literary translation. The course of study centers on writing workshop classes in which faculty lead students in critiques of one another's writing. Students take three workshops in their own genre, and a crossover workshop in another genre, and they take two craft classes, one in their own genre and one in another genre. They also take a course in critical theory and literature electives that help them to develop a critical vocabulary and a knowledge of various literary and cultural periods and traditions. The faculty will provide intensive discussion and supervision of student work. The program is committed to the integration of creative writing and literary studies.

Requirements for Matriculation in the MFA Program

This list is in addition to the general college requirements:

1. A minimum average grade of *B* in all undergraduate work and in all English courses.
2. Three satisfactory letters of recommendation, preferably from writers and teachers of writing, addressing the candidate's academic proficiency and writing skills.
3. A 500-word statement of interest.
4. Candidates should submit a writing sample: either 10 pages of poetry, or 20 pages of prose, or two one-acts or a full-length play.
5. For the translation track, candidates should demonstrate an appropriate level of fluency in a language besides English and submit previously translated work (5–10 pages) as their writing sample.

Fulfillment of these requirements does not guarantee admission; it simply makes a student eligible for consideration.

All students must meet the above requirements. The MFA program does not accept non-matriculated students.

Requirements for the Master of Fine Arts Degree

The student must:

1. Take four creative writing workshops (chosen from ENGL 751, Workshop in Fiction; ENGL 753, Workshop in Poetry, ENGL 755, Workshop in Drama; ENGL 757, Workshop in Translation). Three of these are in the student's genre of focus while one must be in a genre outside of their genre of study.
2. Take two craft/form courses: ENGL 760, 761, or 762 or 763 (as applicable to genre of study)
3. Take ENGL 636, History of Literary Criticism
4. Take elective courses in the English Department from the list of available graduate literature courses. Courses in literary studies outside the English Department (for example, in Comparative Literature) may also be counted towards the MFA, with permission from the MFA Director.
5. Take a thesis sequence: ENGL 758, MFA Thesis Workshop and ENGL 759, Advanced Writing Project (Thesis). The thesis, written in the second year of the program, will be written under the guidance of an advisor and a second reader and will consist of either: 25–30 pages of poetry; 60 pages of fiction (novel or short stories); a one-act play; or a quality translation of a foreign language text.

Students may transfer up to 12 credits of graduate work from an accredited institution that correlates to courses in the English Department at Queens College, subject to the approval of the MFA Director. However, workshop courses may not be transferred.

Further information may be found at http://qcpages.qc.cuny.edu/Creative_Writing.

MASTER OF ARTS PROGRAM

The graduate Master of Arts literature program provides facilities for advanced study of literary texts. Students learn to read texts within philosophical and theoretical frameworks and become acquainted with terms and concepts of critical discourse as used in the discipline. Students develop skills at advanced research in scholarly monographs, collections, and journals, using both digital and archival sources, learning to find materials and to parse them critically. Examining cultural artifacts and becoming acquainted with the complex historical, geopolitical, and gendered structures of texts, graduate students acquire a sense of the richness of literary study. Students learn to express this sophisticated reading ability in well-researched papers that express mastery of their chosen fields. Further information may be found at http://english.qc.cuny.edu/graduate-programs/ma-in-english/.

Requirements for Matriculation in the MA Program

This list is in addition to the general college requirements:

1. A minimum of an average grade of *B* in all undergraduate work and in all English courses.
2. A minimum of 24 undergraduate credits in English or American literature; at the discretion of the department, fewer courses may be acceptable for full matriculation.
3. Three satisfactory letters of recommendation, preferably from instructors in English, addressing the candidate's academic proficiency.
4. One satisfactory essay, 10–15 pages in length, showing an understanding of higher-level literary study and mastery of writing skills.
5. A 500-word statement of interest explaining why you wish to pursue a master's degree in English at Queens College.

Fulfillment of these requirements does not guarantee admission; it simply makes a student eligible for consideration.

Students who do not meet the above requirements may be permitted to enter with deficiency courses (undergraduate courses required to achieve the minimum number of undergraduate credits), or as probationary matriculants (requiring the first 12 credits of coursework to achieve a minimum average of *B*). Students who do not meet these requirements may also request that the Director of Graduate Studies consider them for nonmatriculated student status.

Requirements for the Master of Arts Degree

The student must:

1. Take a minimum of 30 credits in English (which may include certain related courses, with permission of the department) with an average grade of *B* or above. This program must include a graduate course in methodology and a graduate course in literary

criticism. The student chooses electives for the other courses. Any graduate course in the English department may count as an elective, and related courses in other departments may count with the permission of the Director of Graduate Studies.

2. Write a culminating essay of at least 20 pages. The essay is an advanced research paper with a minimum of 10 sources, developed in consultation with an advisor and a reader chosen by the student.

Students may also elect to satisfy this requirement with the honors alternative: writing a full master's thesis of at least 60 pages, in consultation with an advisor and a reader chosen by the student. Students may qualify for the honors-track master's thesis by achieving a grade-point average of at least 3.7 or obtaining special permission from the Director of Graduate Studies.

Both the culminating essay and the master's thesis require the thesis course. At the conclusion of both the culminating essay and the master's thesis, the candidate will meet with the advisor and reader for a one-hour examination, when the thesis will be assigned a grade. Students admitted before 2007 may choose to do the earlier thesis options instead (a full-length master's thesis or three papers submitted in lieu of the thesis).

Students may transfer up to 12 credits of graduate work from an accredited institution that correlates to courses in the English Department at Queens College, subject to the approval of the Director of Graduate Studies.

The MA degree must be completed within four calendar years of admission, calculated from the date of the first graduate course for which credit is granted, whether it was taken at Queens or at another institution. Students who require more time may apply for an extension subject to the approval of the Director of Graduate Studies and the Dean of Graduate Studies.

Students whose performance does not meet the standards of the English Department may be told to leave the program, including students whose behavior is disruptive or whose overall grade-point average falls below a *B*. Such cases will be addressed by the Director of Graduate Studies and the Dean of Graduate Studies.

Inquiries concerning admission, course selection, thesis preparation, transfer credits, and other matters pertaining to the program should be addressed to the Director of Graduate Studies.

Relationship to the City University PhD program

1. The first 30 graduate credits in English at Queens College may be counted toward the PhD in English literature in the City University. The University doctoral program in English is described in the *Bulletin* of the Graduate School of the City University of New York and at www.gc.cuny.edu.
2. Candidates who wish to proceed to the PhD in the City University should apply for admission direction to the PhD program instead of to Queens. Inquiries should be addressed to the Executive Officer of the PhD Program, 365 Fifth Avenue, New York, NY 10016-4309.

PROGRAM FOR THE MASTER OF SCIENCE IN EDUCATION DEGREE

Requirements for Matriculation

The following is in addition to the general requirements.

A cumulative index and English index of at least *B,* as well as a *B* index in education are required for matriculated status. Students who do not meet the above requirements may be permitted to enter as probationary matriculants. Probationary status will be removed when the first 12 credits of approved coursework have been completed with a minimum average of *B*.

Requirements for the Degree

1. Candidates in this program have two advisors, one in the Division of Education and one in the Department of English; both advisors must be consulted before registering in the program, and both must sign the approved program of studies. The Education advisor should be consulted *first*.
2. Course requirements for students specializing in English include the following: 15 credits in English, including:

ENGL 702.	Graduate Methodology for English/Education Students;
ENGL 703.	Composition Theory and Literacy Studies; and
ENGL 662.	The English Language.

Students who have taken the undergraduate equivalent of ENGL 662 (e.g., ENGL 290 at Queens) should substitute a literature course.

COURSES IN ENGLISH

Courses on the 600 level are designed for students who have not already had work in the area concerned, and are open to qualified undergraduates with permission of the department.

ENGL 613. Introduction to Old English. 2 hr. plus conf.; 3 cr. Language and literature of the Anglo-Saxons.

ENGL 618. Introduction to Middle English. 2 hr. plus conf.; 3 cr.

ENGL 619. Major Works of the Middle Ages. 2 hr. plus conf.; 3 cr.

ENGL 620. Major Writers of the Renaissance Exclusive of Shakespeare. 2 hr. plus conf.; 3 cr.

ENGL 621. Major Writers of the Seventeenth Century. 2 hr. plus conf.; 3 cr.

ENGL 622. Major Writers of the Eighteenth Century. 2 hr. plus conf.; 3 cr.

ENGL 623. Major Romantic Writers. 2 hr. plus conf.; 3 cr. Poetry and prose, exclusive of the novel.

ENGL 624. Major Victorian Writers. 2 hr. plus conf.; 3 cr. Poetry and prose, exclusive of the novel.

ENGL 627. Major American Writers before 1918. 2 hr. plus conf.; 3 cr. Poetry and prose, exclusive of the novel.

ENGL 629. Major Modern Writers. 2 hr. plus conf.; 3 cr. British and American nondramatic literature since about 1918.

ENGL 635. Major English and American Novelists. 2 hr. plus conf.; 3 cr. The novel from the eighteenth century to the present.

ENGL 636. History of Literary Criticism. 2 hr. plus conf.; 3 cr. Readings in the major critics from Plato and Aristotle to the present.

ENGL 638. Modern Drama. 2 hr. plus conf.; 3 cr. American, British, and European dramatic literature and theatre from Ibsen to the present.

ENGL 662. The English Language. 2 hr. plus conf.; 3 cr. Structure and development of modern English including the historical evolution of the English language, current ideas on language acquisition, geographical and cultural diversity in language use (dialects, pidgins, and creolization), standard English phonology, morphology, syntax, and semantics.

ENGL 673. New Approaches to English Grammar. 2 hr. plus conf.; 3 cr. Recent theories and techniques in linguistics.

ENGL 681. Special Studies. 2 hr. plus conf.; 3 cr. A study of literature and a related topic. Subject will vary from semester to semester and will be announced in advance. In recent years the following courses have been offered: Influence of Myth, Influence of the Bible, Black Literature, Literature and Psychology, Great Books of the Twentieth Century, Literature and Politics, Literature and Cinema, and Literature and Theatre.

ENGL 701. Seminar in Graduate Methodology. 2 hr. plus conf.; 3 cr. Development of proficiency in literary research and bibliographical methods through individual research projects involving frequent library assignments. Normally to be taken in the first semester of graduate work, and certainly before the writing of the thesis.

ENGL 702. Graduate Methodology for English/ Education Students. 2 hr. plus conf.; 3 cr. Training in current research methods on literature combined with an understanding of contemporary literary and cultural criticism, along with the elements of literary and cultural theory needed to understand such criticism. In addition to frequent library assignments, a major research paper will be required.

ENGL 703. Composition Theory and Literacy Studies. 3 hr.; 3 cr. A study of literacy practices, the many varied forms of reading and writing, and of writing pedagogy in relation to texts that put literacy into wide historical and theoretical contexts. Recommended for MSEd in place of ENGL 701.

Note: Students should not, without the permission of the department, take any of the following courses unless they have had preparation in the area, such as an undergraduate elective, a 600-level graduate course, or the equivalent. Courses entitled "Studies in" may be repeated for credit if the subject is different.

ENGL 714. Studies in Old English. 2 hr. plus conf.; 3 cr.

ENGL 719. Studies in Medieval Literature. 2 hr. plus conf.; 3 cr.

ENGL 720. Studies in Renaissance Literature. 2 hr. plus conf.; 3 cr.

ENGL 721. Studies in Seventeenth-Century Literature. 2 hr. plus conf.; 3 cr.

ENGL 722. Studies in Eighteenth-Century Literature. 2 hr. plus conf.; 3 cr.

ENGL 723. Studies in Romantic Literature. 2 hr. plus conf.; 3 cr.

ENGL 724. Studies in Victorian Literature. 2 hr. plus conf.; 3 cr.

ENGL 726. Studies in Early American Literature. 2 hr. plus conf.; 3 cr.

ENGL 727. Studies in American Literature, 1820–1920. 2 hr. plus conf.; 3 cr.

ENGL 729. Studies in Modern Literature. 2 hr. plus conf.; 3 cr.

ENGL 736. Studies in Criticism. 2 hr. plus conf.; 3 cr.

ENGL 742. Studies in Shakespeare's Plays. 2 hr. plus conf.; 3 cr.

Courses numbered ENGL 751–759 are open *only* to candidates in the Creative Writing Sequence.

ENGL 751. Workshop in Fiction. 2 or 3 hr. plus conf.; 3 cr. May be repeated for credit.

ENGL 753. Workshop in Poetry. 2 or 3 hr. plus conf.; 3 cr. May be repeated for credit.

ENGL 755. Workshop in Drama. 2 or 3 hr. plus conf.; 3 cr. May be repeated for credit.

ENGL 757. Workshop in Special Topics in Creative Writing. 2 hr. plus conf.; 3 cr. An intensive study of one or more writing genres, with appropriate readings and writing practice; e. g., literary essay, children's literature, narrative poetry, science fiction, etc. May be repeated for credit.

ENGL 758. MFA Thesis Workshop. 2 hr. plus conf.; 3 cr. Course to be taken in final year of the MFA program as the first course in the MFA thesis sequence. A multi-genre MFA thesis workshop with an intensive focus on writing the MFA thesis, reading for the MFA exam and writing the required MFA process paper.

ENGL 759. Advanced Writing Project (Thesis). 3 hr.; 3 cr. Prereq.: Completion of coursework. Preparation of the required creative writing project under the supervision of an instructor.

ENGL 760. Fiction in Theory and Practice. 2 hr. plus conf.; 3 cr. An intensive study of the theory of fiction, with close reading of a number of stories, novellas, and/or novels and readings in literary criticism. (This is not a writing workshop course but one in the critical reading of fiction. It is designed especially for creative writers.) Repeatable for credit.

ENGL 761. Poetry in Theory and Practice. 2 hr. plus conf.; 3 cr. An intensive study of poetical theory, with close reading of a number of poets and readings in literary criticism. (This is not a writing workshop course but one in the critical reading of poetry. It is designed especially for creative writers.) Repeatable for credit.

ENGL 762. Drama in Theory and Practice. 2 hr. plus conf.; 3 cr. An intensive study of the theory of drama, with close reading of a number of plays and readings in literary criticism. (This is not a writing workshop course but one in the critical reading of drama. It is designed especially for creative writers.) Repeatable for credit.

ENGL 763. Translation in Theory and Practice. 2 hr. plus conf. 3 cr. An intensive study of the theory of translation, with close reading of translation theories and practices. (This is not a writing workshop course but one in the critical reading of translation theories. It is designed for translators and writers in the MFA Program.)

ENGL 775. Studies in English Linguistics. 2 hr. plus conf.; 3 cr.

ENGL 781. Special Seminars. 2 hr. plus conf.; 3 cr. Intensive analysis of a major figure, type, trend, or problem, under the guidance of a specialist. The subject will vary from semester to semester and will be announced in advance together with any special prerequisites.

ENGL 788. Cooperative Education Placement. Prereq.: Permission of the director of graduate studies. Experiential learning through placement. Opportunity to test and demonstrate academic learning in an organizational setting. Students receive academic credit as well as a stipend from the placement. A learning contract as well as an academically related project will be worked out with an advisor.
ENGL 788.1. 1 hr.; 1 cr.
ENGL 788.2. 2 hr.; 2 cr.
ENGL 788.3. 3 hr.; 3 cr.
ENGL 788.4. 4 hr.; 4 cr.
ENGL 788.5. 5 hr.; 5 cr.
ENGL 788.6. 6 hr.; 6 cr.

ENGL 791. Thesis Course. 3 hr.; 3 cr. Prereq.: Completion of coursework. Enables students to write culminating essay or begin thesis. Students must submit a Thesis Sign-Up Form to the Director of Graduate Studies in order to register for this course.

ENGL 792. Thesis Workshop. 1 hr.; 1 cr. Prereq.: ENGL 791. Enables students to complete thesis. If thesis is not completed by the end of the semester in which the student is registered for this course, a grade of *Incomplete* will be given, which must be made up no later than by the end of the four-year period allotted for completion of the master's degree.

***ENGL 793. Teaching College Writing**. 3 hr.; 3 cr. Prereq.: Permission of the director of graduate studies and the director of first year composition. A study of composition theories, writing pedagogy, and literacy studies in the context of the writing classroom. Required for all graduate students teaching in the English department at Queens College. *Pending board approval.

ENGL 795. Independent Study. Hr. to be arranged; 3 cr. Prereq.: Permission of the director of graduate studies and instructor. Tutorial for work in a special subject not covered by regular course offerings. May be repeated for credit if the topic is different. Open only to candidates for the MA in English.

European Languages & Literatures

Chair: Gerasimus Katsan

Dept. Office: Queens Hall 200, 997-5980; Fax 997-5072

Website: www.qc.cuny.edu/ELL

The Department of European Languages and Literatures offers the Master of Arts degree in French and in Italian. The degree leads to teaching careers in secondary education and college, and to admission to doctoral programs in these languages or comparative literature. In addition, students completing the MA degree have gone on to careers in business where knowledge of languages and cultures is required. Courses cover numerous aspects of the literature, culture and the arts, from the Medieval through the contemporary periods, viewed through various methods of literary criticism. Courses are also given in the history of the language, advanced translation, fashion, Italian-American culture and Francophone literature. Seminars are set aside for methodology, selected authors or literary topics. The Department of European Languages and Literatures, in cooperation with the Division of Education, also offers the Master of Science in Education degree in French and in Italian.

FACULTY

Katsan, Gerasimus, Chair, *Associate Professor*, PhD, Ohio State University

Attar, Karina F., *Assistant Professor,* PhD 2005, Columbia University: medieval and renaissance literature, multiculturalism, history of interfaith relations, the novella

Bird, Thomas E., *Associate Professor Emeritus*, MA, Princeton University

Brown, Royal S., *Professor,* PhD 1975, Columbia University: twentieth-century French literature, music, and cinema

Cheloukhina, Svetlana, *Associate Professor,* PhD, University of Toronto

Corradi, Morena, *Associate Professor,* PhD 2008, Brown University: 19th- and 20th-century Italian literature, Italian national unity and identity, popular culture

Fadoul, Paul *Lecturer,* PhD 2016, CUNY Graduate Center: French literature

Haller, Hermann W., *Professor Emeritus,* PhD 1971, University of Bern: romance philology, Italian dialect literatures

Jones, David Andrew, MA French Advisor, *Associate Professor,* PhD 2001, University of Wisconsin at Madison: twentieth-century French novel and theater, literary theory, gender studies

Joseph, Régine, *Assistant Professor,* PhD 2012, New York University: Francophone literature, especially of the Caribbean, contemporary French and Caribbean intellectual movements

Paulicelli, Eugenia, MA Italian Advisor, *Professor,* PhD 1991, University of Wisconsin at Madison: Renaissance and modern literature, critical theory and gender, fashion and film studies

Spreizer, Christine, *Associate Professor,* PhD, University of Pennsylvania: German language and literature

Sullivan, Karen A., *Associate Professor,* PhD 2002, Columbia University: eighteenth-century French literature, literature and the arts

Tamburri, Anthony Julian, *Distinguished Professor,* PhD 1983, University of California: literature, cinema, semiotics, Italian Americana

MASTER OF ARTS PROGRAM

Graduate Advisors: Eugenia Paulicelli (Italian), David Andrew Jones (French)

Requirements for Matriculation

These requirements are in addition to the general requirements for admission.

1. A strong undergraduate concentration in either French or Italian, consisting normally of a minimum of 20 undergraduate elective credits.
2. The credentials of each applicant are to be examined by a suitable departmental committee that shall have the authority to accept or reject the candidate. This committee may request an interview with a candidate for admission if it feels it is necessary to do so.

Requirements for the Master of Arts Degree

These requirements are in addition to the general requirements for the Master of Arts degree.

1. Students must consult the graduate advisor in their language for assistance and guidance in working out an approved program of studies.
2. Thirty credits are required for the Master of Arts degree. Completion of a thesis is optional. A minimum of 24 credits must be taken in the major language. The remaining credits may be taken with permission in a second language other than English.
3. All students are required to take the appropriate seminar (781) and course (701).
4. Students will be required to demonstrate their reading knowledge of another language other than English, in addition to their major language. A classical language may be substituted by special permission.
5. An oral examination will be administered in the major language, in which students will be tested on their knowledge of the important authors and literary movements and culture. A student may not attempt this examination more than twice.
6. A thesis based on original research (791, 792, Special Problems) may be substituted for two courses. This thesis will normally be written in English, or, by special permission, in the foreign language of the major field of the student's concentration.

ACCELERATED MASTER OF ARTS DEGREE

For undergraduates majoring in French or Italian, the department also offers an accelerated master's program. This course of study enables a qualified undergraduate to finish the MA in as little as one year. Speak to the appropriate graduate advisor for more information.

ADVANCED CERTIFICATE PROGRAM IN ITALIAN CULTURE FOR THE 21ST CENTURY

The Advanced Certificate in Italian Culture for the 21st Century is an 18-credit program consisting of six three-credit courses, including a capstone practicum course. Completion of the prescribed course of study will yield a Certificate of Advanced Study.

The advanced certificate provides students with a rigorous, dynamic, and interdisciplinary understanding of the richness of Italian culture and its manifestations in the arts, the culture of food, fashion, business, entrepreneurship, and advancement in science and technology. In this age of digital revolution, culture cannot be studied in isolation, and the worlds of business and technology cannot be fully understood if they are not connected to the arts and humanities.

Italian culture lends itself to such a new interdisciplinary approach to culture and the arts in the 21st century. Italy is a world leader in the humanities (e.g., literature and cinema), interior design, fashion, graphic design, photography, robotics, transportation equipment, and the culinary arts. The phenomenon of "Made in Italy," the result of the intersection between arts and culture, manufacturing and industry, offers itself as a gateway to studying Italy in a contemporary and international context.

Admissions Requirements and Oversight

In addition to the college's admission requirements, applicants must be upper-level undergraduates or have already earned a BA or BS with a grade-point average of 3.0 or better in their area of specialization. It is required that students have a good working knowledge of Italian. This is defined by a student having completed at least 4 courses taught in Italian at the 200 or 300 level or by permission of the Graduate Advisor after a placement test. Students who do not have the necessary preparation in Italian can be admitted to the Program on probation as long as they take extra language classes at the 200 level.

Curriculum

The certificate consists of 18 credits, 6 of which are required (Italian 781, Methodology and Italian, and 793 Capstone, Made in Italy: Culture, Arts, Technology). The other possible elective courses are:

ITAL 701. History of Italian Language. 3 cr.
ITAL 704. Problems in Italian Language. 3 cr.
ITAL 707, 708. Humanism and the Renaissance. 3 cr. each semester
ITAL 713, 714. Dante's *Divina Commedia.* 3 cr. each semester.
ITAL 722. Machiavelli & Guicciardini: Historians, Men of Letters, and Political Thinkers. 3 cr.
ITAL 723. Italian Literature in the Age of the Baroque. 3 cr.
ITAL 725. Italian Comedy from the Renaissance to the End of the Eighteenth Century. 3 cr.
ITAL 726. Aspects of Nineteenth- and Twentieth-Century Theatre. 3 cr.
ITAL 752. The Art and Humanism of Manzoni. 3 cr.
ITAL 753. Leopardi and Foscolo. 3 cr.
ITAL 755. Contemporary Italian Poetry. 3 cr.
ITAL 761. Italian Literary Criticism since 1870. 3 cr.
ITAL 762. The Modern Italian Novel. 3 cr.
ITAL 763. The Contemporary Italian Novel. 3 cr.
ITAL 778. Advanced Translation in Italian. 3 cr.
ITAL 779. Studies in Italian Cinema and Media. 3 cr.
ITAL 780. Trends & Events in Italian Civilization. 3 cr.
ITAL 782. Studies in Italian Literature and Culture. 3 cr.
IAST 704. Italian/American Cinema: Production and Representation. 3 cr.
MEDST 745. Advertising and Marketing. 3 cr.

MASTER OF SCIENCE IN EDUCATION PROGRAM

Graduate Advisors: David Andrew Jones (French) and Eugenia Paulicelli (Italian)

The Master of Science in Education program (French and Italian) responds to the needs of teachers and prospective teachers of foreign languages. The degree program combines coursework in: (1) culture, literature, and language; (2) foreign language education; and (3) professional education. The courses in culture, literature, and language are given by the Department of European Languages and Literatures. The courses in foreign language education and professional education are offered by the Division of Education.

For admission requirements to Secondary Education programs, see the section on this department.

Requirements for Matriculation

In addition to the general admission requirements stated in the Admission, Retention & Graduation section, applicants should have:

A. A strong undergraduate concentration in the language of specialization consisting of at least 21 credits above course 204.

B. Either an undergraduate minor in Secondary Education or completion of the following sequence of courses as part of the Secondary Education Initial Certificate (see Secondary Education Department):

	credits
SEYS 536. Educational Foundations	3
SEYS 552. Educational Psychology	3
SEYS 564. Methods of Teaching Foreign Languages in Middle and High School	3
SEYS 574. Student Teaching in Foreign Language for Secondary School	3
SEYS 584. Standards-Based Curriculum & Assessment in Teaching Foreign Language	3
SEYS 700. Language, Literacy, and Culture in Education	3

Requirements for the Master of Science Degree
The 30 credits required for the degree are to be distributed as follows:

A. Six courses in the major language:
Two courses (6 cr.) in language and linguistics
Four courses (12 cr.) in literature and civilization

B. Four courses in Secondary Education:
1. One course from the area of Foundations of Education: SEYS 701–708 (Prereq.: SEYS 201 or 536); 3 cr.
2. One course from the area of Psychological Foundations: SEYS 709, 710, 717, 718, 719, 738, or 768 (Prereq.: SEYS 222 or 552); 3 cr.
3. SEYS 743, Curriculum and Instruction in Foreign Language Education (Prereq.: SEYS 351 or 562); 3 cr.
4. SEYS 785, Seminar in Research in Foreign Language Education (Prereq.: SEYS 743) *or* SEYS 790, a thesis based on original research in language or literature, directed by an advisor in the major language; 3 cr.

C. Students should meet with the graduate advisor as soon as possible to plan their program of study and submit it for approval.

COURSES IN FRENCH

The specific topic in each course entitled "Studies in . . . " will be announced at registration. Each "Studies in . . . " course may be repeated for credit provided the topic is different.

FREN 701. History of the French Language.
2 hr. plus conf.; 3 cr.

FREN 704. Problems in French Language.
2 hr. plus conf.; 3 cr.

FREN 708. French Medieval Literature.
2 hr. plus conf.; 3 cr.

FREN 710. Rabelais and Montaigne.
2 hr. plus conf.; 3 cr.

FREN 711. French Renaissance Literature.
2 hr. plus conf.; 3 cr.

FREN 713, 714. French Classical Theatre of the Seventeenth Century. 2 hr. plus conf.; 3 cr. each semester. First semester: Corneille and Racine. Second semester: Molière.

FREN 715. Non-Dramatic Literature of the Seventeenth Century. 2 hr. plus conf.; 3 cr.

FREN 716. Voltaire and the "Philosophes."
2 hr. plus conf.; 3 cr.

FREN 717. The Eighteenth Century.
2 hr. plus conf.; 3 cr.

FREN 719, 720. French Novel of the Nineteenth Century. 2 hr. plus conf.; 3 cr. each semester. First semester: Balzac and Stendhal. Second semester: Flaubert and Zola.

FREN 721. The Poetry and Theatre of the Nineteenth Century. 2 hr. plus conf.; 3 cr.

FREN 722. Baudelaire and the Symbolists.
2 hr. plus conf.; 3 cr.

FREN 724. Contemporary French Literature.
2 hr. plus conf.; 3 cr.

FREN 728. Contemporary French Theatre.
2 hr. plus conf.; 3 cr.

FREN 730. Studies in Francophone Literature. 3 hr.; 3 cr. Prereq. or coreq.: This course is designed for students enrolled in the MA program. This is a variable topics course that focuses on the global dimensions of literary expressions in French. It derives from the diverse literary corpus produced in various parts of the world where the French language is a significant medium of literary expression, including within and between continental Europe, the Maghreb, West Africa, the Antilles, North America, and Asia. Topics will vary by semester, and may include but are not limited to Women Writers of the French Caribbean; The Modern Haitian Novel; World Literature in French; North American Literature in French; Contemporary Theatre in Africa and the Caribbean; Antillean Poetry; and Caribbean Surrealism. This course can be repeated for credit provided the topic is different.

FREN 750. Studies in Francophone Culture. 3 hr.; 3 cr. Prereq. or coreq.: This course is designed for students enrolled in the MA program. This is a variable topics course that focuses on the global dimensions of French history, theory, and culture. It derives from the fact that transnational cultural exchanges occurred across various parts of the world where French language is a significant medium of cultural expression, including within and between continental Europe, the Maghreb, West Africa, the Antilles, North America, and Asia. Topics will vary by semester, and may include but are not limited to Francophone Thought; Francophone Cinema; The French Empire and its Aftermath; Debates in Francophone Postcolonial Studies; The Maghreb; The Practice of Global Feminism; Introduction to Francophone Cinema; and Haiti and the United States. This course can be repeated for credit provided the topic is different.

FREN 778. Advanced Translation in French.
2 hr. plus conf.; 3 cr. The course will deal with translation in theory and in practice and will also include linguistics and stylistics. The translation will be from English to French and from French to English.

FREN 779. Studies in French Cinema.
4 hr.; 3 cr. The course will examine different aspects of the cinematic art. The approaches include: (1) Movements (neo-realism, new wave, etc.); (2) Genres; (3) Literature into films; (4) The cinema as a sociocultural phenomenon; (5) Cinematic stylistics. Films will be shown in French. Students will be expected to produce substantial works of film analysis.

FREN 780. Trends and Events in French Civilization. 2 hr. plus conf.; 3 cr. A study of the events and ideological trends of the civilization produced by France. Students will read and report on primary texts in fields such as political history, economics, sociology, and on significant artistic and cultural developments.

FREN 781. Seminar: Methodology and Selected Literary Topics. 2 hr. plus conf.; 3 cr.

FREN 782. Studies in French Literature. 2 hr. plus conf.; 3 cr. This course is intended as a seminar in the study of French literature. It is an open topics course; the title will be announced at the beginning of each semester in which it is offered. It can be repeated for credit, provided the topic is different.

FREN 791, 792. Special Problems. 3 cr. each semester. Individual study, under the supervision of an instructor, of a topic agreed on, normally involving research in literary history or criticism, and resulting in an acceptable thesis. No credit will be given for these courses until the thesis has been approved. No more than three credits in each course may be counted toward the degree.

COURSES IN ITALIAN

The specific topic in each course entitled "Studies in . . . " will be announced at registration. Each "Studies in . . . " course may be repeated for credit provided the topic is different.

ITAL 701. History of the Italian Language. 2 hr. plus conf.; 3 cr. This is a required course for all students in the MA and MSEd programs. The course traces the external and internal evolution of the Italian language from its popular Latin origins through the twenty-first century. Following a description of the major changes from Latin to the first appearance of written vernacular documents in the Middle Ages, the course will discuss the gradual elaboration and codification of a standard language in the Renaissance, side by side with the use of the country's dialects. The course will focus on language contact, the spoken vs. the written language, and the cultural and linguistic revolutions of the printing press and the Internet. It will be based on analyzing the multifaceted Italian language, including literary and nonliterary sources.

ITAL 704. Problems in Italian Language. 2 hr. plus conf.; 3 cr. Course topics may be on linguistic varieties of contemporary Italian; on Italian language and dialects across the globe; on issues of Italian syntax for prospective teachers of Italian; as well as other topics. The course is repeatable for credit, providing the topic is different.

ITAL 707, 708. Humanism and the Renaissance. 2 hr. plus conf.; 3 cr. each semester.

ITAL 707. Special attention will be given to the historical and cultural situation in *Quattrocento* Italy; Poliziano, Lorenzo de' Medici; the great centers of Florence, Naples, Rome, and Padua; the chivalric poems of Pulci and Boiardo.

ITAL 708. The *questione della lingua;* the treatise writers; Machiavelli, Ariosto, and Tasso. The *novelle* of Bandello, Firenzuola; the Counter-Reformation and the Academies.

ITAL 711. Italian Literature from its Origins to the Trecento. 2 hr. plus conf.; 3 cr.

ITAL 713, 714. Dante's *Divina Commedia*. 2 hr. plus conf.; 3 cr. each semester.

ITAL 715. The Early Italian Lyric and Petrarch. 2 hr. plus conf.; 3 cr.

ITAL 716. Boccaccio's *Decameron* and the Italian Novella. 2 hr. plus conf.; 3 cr. This course focuses on Boccaccio's *Decameron*, widely hailed as the fundamental text of early European vernacular prose storytelling, as well as on novellas of the fifteenth and sixteenth centuries (by Sercambi, Sacchetti, Salernitano, Firenzuola, and Bandello, among others). The course explores the narrative, formal, and sociological features of each work within relevant historical and literary contexts, and takes an interdisciplinary approach that can contribute to our understanding of ways of writing and reading (at times) distant from our own. The course also includes a discussion of the impact of Pietro Bembo's evaluation of the *Decameron* on its reception history and on the numerous novella collections of the Renaissance.

ITAL 721. Ariosto and Tasso. 2 hr. plus conf.; 3 cr.

ITAL 722. Machiavelli and Guicciardini: Historians, Men of Letters, and Political Thinkers. 2 hr. plus conf.; 3 cr. This course focuses on works of historiography and political science by two prominent Florentine Renaissance thinkers: Niccolò Machiavelli and Francesco Guicciardini. Texts will include Machiavelli's *Il principe, Discorsi sopra la prima deca di Tito Livio,* and *Dell'arte della guerra;* and Guicciardini's *Storia d'Italia, Considerazioni sui Discorsi di Machiavelli,* and *Storie fiorentine*. Excerpts from each of these texts are analyzed within their historical and generic contexts, paying close attention to the biographical, political, and cultural events that led to their composition.

ITAL 723. Italian Literature in the Age of the Baroque. 2 hr. plus conf.; 3 cr. This course explores the richness and novelties of the literary and cultural scenario of the Age of Baroque, too often considered decadent and identified with the Counter-Reformation. The course examines a wide range of literary and cultural expressions of the eighteenth century, from Marino's poetry to Galileo's scientific prose to Monteverdi's operas, vis-à-vis the reception of the Baroque through the centuries.

ITAL 725. Italian Comedy from the Renaissance to the End of the Eighteenth Century. 2 hr. plus conf.; 3 cr. This course focuses on Italian comedy from the Renaissance to the 18th century, investigating this theatrical genre through the analysis of its linguistic, cultural, psychological, and political components. Together with a selection of the major examples of Italian comedy (from Machiavelli to Goldoni), the course provides a theoretical frame through the reading of seminal texts addressing the comic and its functions (e. g., Bakthin's *Rabelais and His World*, Pirandello's *L'umorismo*).

ITAL 726. Aspects of Nineteenth- and Twentieth-Century Theatre. 2 hr. plus conf.; 3 cr.

ITAL 752. The Art and Humanism of Manzoni. 2 hr. plus conf.; 3 cr.

ITAL 753. Leopardi and Foscolo. 2 hr. plus conf.; 3 cr.

ITAL 754. Carducci, D'Annunzio, Pascoli. 2 hr. plus conf.; 3 cr.

ITAL 755. Contemporary Italian Poetry. 2 hr. plus conf.; 3 cr.

ITAL 760. History of Italian Literary Criticism, from the Renaissance to De Sanctis. 2 hr. plus conf.; 3 cr.

ITAL 761. Italian Literary Criticism since 1870. 2 hr. plus conf.; 3 cr.

ITAL 762. The Modern Italian Novel. 2 hr. plus conf.; 3 cr. The course explores the extraordinary tradition of the Italian modern novel and its implications with history, gender, social, and cultural contexts, linguistic and structure experimentations in different prose narratives. It will focus on the 19th century up to WWII: from the historical novel such as Alessandro Manzoni's *Promessi Sposi,* to Giovanni Verga and Luigi Pirandello, Carlo Colodi's *Pinocchio*, Camillo Boito and other writers belonging to the Scapigliati, Gabriele D'Annunzio, and the innovative narratives of women writers such as Matilde Serao, Sibilla Aleramo, Grazia Deledda, Alba De Cespedes, Gianna Manzini, Anna Banti, Paola Masino, and others. The course will also offer an in-depth examination of the intersections between the literary and journalistic writings of the authors in question and larger contexts and domains such as literature and visual culture; politics and popular culture; literary journalism; Italy's process of modernization; national identity and the transformation of urban identity and cities; the history of women; North versus South.

ITAL 763. The Contemporary Italian Novel. 2 hr. plus conf.; 3 cr. The course will focus on the rich landscape and development of the contemporary Italian novel and narrative prose techniques from the postwar movement called neo-realism to the present. Students will be exposed to an interdisciplinary framework that considers a variety of movements and experiments in the art of the novel and prose fiction. Students will examine Italian novels and their implications for a critical understanding of Italian history, cultural movements, avant-garde experimentations, word and image, the page and the screen, the digital, memoir and autobiography, and the fast-changing pace of today's literary landscape with study of migrant writing in Italian (Amara Lakhous, Igiaba Scego, etc). Other authors to be studied include Italo Calvino, Cesare Pavese, Alberto Moravia, Giorgio Bassani, Natalia Ginzburg, Umberto Eco, Vincenzo Consolo, Goliarda Sapienza, Irene Brin, and Elsa Morante.

ITAL 778. Advanced Translation in Italian. 2 hr. plus conf.; 3 cr. The course will deal with translation in theory and in practice and will also include linguistics and stylistics. The translation will be from English to Italian and from Italian to English.

ITAL 779. Studies in Italian Cinema and Media. 4 hr.; 3 cr. The course will examine different aspects of the cinematic art. The approaches include: (1) Movements (neo-realism, new wave, etc.); (2) Genres; (3) Literature into films; (4) The cinema as a sociocultural phenomenon; (5) Cinematic stylistics. Films will be shown in Italian. Students will be expected to produce substantial works of film analysis.

ITAL 780. Trends and Events in Italian Civilization. 2 hr. plus conf.; 3 cr. A study of the events and ideological trends of the civilization produced by Italy. Students will read and report on primary texts in fields such as political history, economics, sociology, and on significant artistic and cultural developments.

ITAL 781. Seminar: Methodology and Selected Literary and Cultural Topics. 2 hr. plus conf.; 3 cr. This is a required course for all students in the MA, MSEd, and certificate programs in Italian. It will explore different theoretical methods (critical theory, semiotics, fashion studies, etc.) to prepare students' critical and analytical skills for the 21st century. Students will work on specific projects focusing on teaching, research, digital humanities, literary studies, business culture, and Made in Italy.

ITAL 782. Studies in Italian Literature and Culture. 2 hr. plus conf.; 3 cr. This course is intended as a seminar in the study of Italian literature and culture. It is an open topics course; the title will be announced at the beginning of each semester and may include the following: word and image; Italian culture in the digital age; the graphic novel; fashion and Made in Italy; food culture; art and design; Italian literature and journalism; literature, arts, and material culture. It can be repeated for credit provided the topic is different.

ITAL 791, 792. Special Problems. 3 cr. each semester. Individual study, under the supervision of an instructor, of a topic agreed on, normally involving research in literary history or criticism, and resulting in an acceptable thesis. No credit will be given for these courses until the thesis has been approved. No more than three credits in each course may be counted toward the degree.

ITAL 793. Capstone/Practicum in Italian Culture in the 21st Century. 2 hr. plus conf.; 3 cr. Prereq.: Completion of at least 6 credits of the Advanced Certificate in Italian Culture in the 21st Century. Students will conduct research and in some cases carry out a hands-on practicum on a topic approved by the instructor. They will also gain experience in writing research proposals; learning general research methods including the use of libraries and archives; the reading of papers; preparing lectures and presentations on their selected topic. Students' progress will be monitored by way of weekly progress reports submitted to their instructor and advisor. This class offers an innovative educational experience to graduate students in the Advanced Certificate of Italian Culture in the 21st Century. The class is also open to students enrolled in the MA/MS Program in Italian and minors in Italian/American Studies. In addition, students from departments such as Art, Media Studies, FNES, and others who might be interested in the course can enroll upon permission of the director of the program.

IAST 701. Problematics in Italian/American Culture. 3 hr.; 3 cr. Prereq. or coreq.: None. This course offers a close examination of the more current issues that surround Italian/American culture. Along with the theoretical and analytical writings of select intellectuals residing both within and outside the world of Italian America, the course also examines the notions and concepts of Italian/American Studies from the perspective of "culture" in its varying manifestations.

IAST 702. Italian Americans and Ethnic Relations: Interdisciplinary Approaches to the Study of Interculturalism. 3 hr.; 3 cr. Prereq. or coreq.: None. This course examines immigration history from colonial America to the present with the major focus on the period from 1870 to the present. Comparative analysis with other ethnic groups within the United States will highlight similar experiences regarding formation, migration, and conflict. Throughout the semester we will discuss the following themes and more: ethnic discrimination and stereotypical images of Italian Americans; the project of multiculturalism; the historiography of Columbus; the relationship between ethnicity and race, religion, and politics; the development of Italian American literature and culture, etc.

IAST 703. Italian American Literature. 3 hr.; 3 cr. Prereq. or coreq.: None. This course examines the literary contributions of Italian Americans from the early 20th century to the present. Migration, settlement patterns, linguistic hybridity, ethnic/racial consciousness, conflicts between marginal and mainstream cultures, and gender ideology will be some of the topics germane to the literature under consideration. The development of secondary criticism and its reflections on Italian American literature is instrumental in defining a canon of texts central to a cultural group. Thus, second-order reflections will be read alongside primary texts in order to examine the strategies taken to offer "protocols of reading," compelling intertextual analysis.

IAST 704. Italian/American Cinema: Production and Representation. 3 hr.; 3 cr. Prereq. or coreq.: None. This course examines the celluloid works of some of the more prominent names in 20th-century Italian/American film. We will also see a few films, not made by Italian Americans, about Italian Americans. Along with the usual historical and thematic analyses of these works, the technique, "intention," and narrative "responsibility" of the modern/contemporary filmmaker will be examined. More specifically: How, why, and for whom does one make films and/or write? And, if applicable, how do they fit into the modernist vis-à-vis postmodernist discourse?

COURSES IN RESERVE

FREN 702. French Stylistics.

FREN 703. Advanced Phonetics.

ITAL 702. Italian Stylistics.

ITAL 703. Advanced Phonetics.

ITAL 705, 706. History of Italian Literature.

ITAL 712. Dante's Minor Works.

ITAL 751. The Pre-Risorgimento Period.

Family, Nutrition & Exercise Sciences

Chair: Ashima K. Kant

Deputy Chairs: Ya Ching (Lily) Hung (Exercise Science and Physical Education); Patricia K. Miner (Family & Consumer Sciences and Nutrition & Dietetics)

Graduate Advisors: Eve Bernstein (Post-Baccalaureate and MSEd Physical Education); Allison Charny (Dietetic Internship); Ashima K. Kant (Nutrition); Andrea Mosenson (Post-Baccalaureate and MSEd Family & Consumer Sciences Education); Anoop Balachandran Thozhuthungalba (Exercise Science, Nutrition & Exercise Sciences)

Dept. Offices: Family & Consumer Sciences and Nutrition & Dietetics, Remsen 306, 997-4475; Fax 997-4163; Exercise Sciences and Physical Education, FitzGerald 203, 997-2710; Fax 997-2749

Graduate programs in Family, Nutrition & Exercise Sciences (FNES) have several emphases including: curriculum and teaching in movement science and physical education designed for educators and clinical practitioners in schools, hospitals, and child-care centers; educational services in the community, business, and industry designed for those who wish to teach in community settings such as adult education, programs for the elderly, and public or private agencies; exercise science designed for students preparing for careers in corporate/executive fitness, cardiac rehabilitation, and general health promotion; nutrition and exercise sciences designed for those preparing for careers in fitness and health-promotion settings incorporating nutritional aspects; nutrition education designed for students who work or teach in hospitals, nursing homes, schools, or community settings; and teacher education in family and consumer sciences/home economics designed for students whose primary interest is in secondary school teaching.

The department offers a Dietetic Internship Program which is accredited by the Accreditation Council for Education in Nutrition & Dietetics (ACEND). For further information, contact the dietetic internship director, Allison Charny.

FACULTY

Kant, Ashima K., Chair, Graduate Advisor, Nutrition, *Professor,* PhD 1987, University of Maryland at College Park: nutritional epidemiology, dietary patterns, health disparities

Azzollini, Ann, *Lecturer,* MSEd 2005, Queens College, CUNY: fitness assessment and exercise prescription with a focus on enhancing heart health, reducing obesity, and increasing lifetime physical activity

Bernstein, Eve, Graduate Advisor, *Associate Professor,* EdD 2009, Teachers College, Columbia University: pedagogical aspects of physical education, competition in physical education

Charny, Allison, Dietetic Internship Director, *Lecturer,* MSEd 1991, Queens College, CUNY: nutrition education

Choi, Sung-Eun, *Associate Professor,* PhD 1999, Ewha Woman's University: food science, sensory evaluation of foods

Fredrick III, Ray N., *Assistant Professor*, EdD 2019, Teachers College, Columbia University: physical education, research on teaching, youth development

Herman, Ariela, *Associate Professor,* EdD 1999, Teachers College, Columbia University: pedagogical aspects of physical education, curriculum and instruction

Hung, Ya Ching, *Professor,* EdD 2007, Teachers College, Columbia University: motor learning and control, and kinesiology

Jasti, Sunitha, *Assistant Professor,* PhD 2003, University of North Carolina at Chapel Hill: nutrition, nutritional epidemiology, prenatal nutrition, immigrant health

Miner, Patricia K., Nutrition and Dietetics Director, *Lecturer,* PhD 2012, The Graduate Center, CUNY: physiological and psychological controls of food intake

Mosenson, Andrea, Graduate Advisor, *Assistant Professor,* PhD 2006, University of Nebraska at Lincoln: family and consumer sciences teacher education, technology in the classroom

Quiles, Norberto, *Assistant Professor,* EdD 2016, Teachers College, Columbia University: applied exercise physiology, physical activity, and health promotion

Riina, Elizabeth, *Assistant Professor,* PhD 2011, Pennsylvania State University: child and family development, sociocultural aspects in adolescent adjustment

Robila, Mihaela, *Professor*, PhD 2002, Syracuse University: child and family development, cross-cultural aspects of the family

Thozhuthungalba, Anoop Balachandran, Graduate Advisor, *Assistant Professor,* PhD 2016, University of Miami: improving and assessing physical function and body composition in aging populations

Toner, Michael M., *Associate Professor,* PhD 1979, Ohio State University: exercise physiology, temperature regulation during exercise

Westfal, Sandi, *Lecturer,* MS 2010, Long Island University, C. W. Post: clinical nutrition and dietetics

PROGRAM FOR THE MASTER OF SCIENCE DEGREE IN NUTRITION AND EXERCISE SCIENCES

The Master of Science Program in Nutrition and Exercise Sciences offers students the opportunity for advanced study in three areas of specialization including nutrition, exercise science, or nutrition and exercise sciences. Requirements for matriculation for students with backgrounds in nutrition, exercise science or allied discipline, general requirements for the degree, and descriptions of individual areas of specialization with required courses are listed below.

Requirements for Matriculation

These requirements are in addition to the general requirements for admission.

Nutrition Specialization

1. An undergraduate degree in nutrition or dietetics (and verification of equivalent program) with a minimum GPA of 3.0.
2. Approval of the graduate nutrition advisor.
3. An interview may be required.
4. Proof of proficiency in the English language is required of all applicants to the MS degree in Nutrition and Exercise Sciences (Nutrition Specialization) whose first language is not English and who were educated in a country where English is not the official language. The minimum required TOEFL scores are: Paper based: 600 or IBT: 98–100; IELTS band equivalent: 7.

Exercise Science Specialization

1. An undergraduate degree in physical education, exercise science, or an equivalent area with a minimum GPA of 3.0.
2. Students without an undergraduate degree in one of the above areas must satisfy the following:
   a) An undergraduate degree with a minimum GPA of 3.0.
   b) Make up deficiencies as specified by the department.
3. Approval of the graduate exercise science advisor.
4. An interview may be required.

Nutrition and Exercise Sciences Specialization

1. An undergraduate degree in nutrition and exercise sciences or an equivalent area with a minimum GPA of 3.0.
2. Students without an undergraduate degree in one of the above areas must satisfy the following:
   a) An undergraduate degree with a minimum GPA of 3.0.
   b) A course in anatomy and physiology (BIOL 043* or the equivalent).
   c) Two courses in nutrition (FNES 263* and 264* or the equivalent).
   d) A course in exercise physiology (FNES 342* or the equivalent).
3. Approval of the graduate nutrition and exercise sciences advisor.
4. An interview may be required.

**Note:* These courses have specific prerequisites that must be satisfied. BIOL 043 (prereq.: BIOL 011); FNES 263 (prereq.: CHEM 101.3, 101.1, 102.3, 102.1); FNES 264 (prereq.: FNES 263); and FNES 342 (prereq.: BIOL 043 and CHEM 101.3, 101.1).

General Requirements for the Master of Science Degree in Nutrition and Exercise Sciences

These requirements are in addition to the general requirements for the Master of Science Degree:

1. Students must complete 36 graduate credits with a minimum average of *B* (GPA of 3.0)
2. Students must complete a research project that culminates in a written research report (FNES 797), or pass a comprehensive examination in the major field of study. (*Note*: Students must select one of these options in FNES 796.)
3. All elective courses must be approved by the appropriate graduate advisor.

Areas of Specialization with Required Courses

Nutrition

The MS degree program with specialization in nutrition offers a sequence of courses that enhance the clinical background of dietitians and nutritionists who work with clients in hospitals, nursing homes, outpatient clinics, community programs, schools, wellness programs, private practice, and governmental and privately funded programs. The program offers opportunities for in-depth study through didactic learning and the development and completion of individual research projects. Students are prepared for careers in nutrition in a wide variety of corporate, hospital, media, and community centers, as well as in other clinical and public health agencies. In addition, the program will prepare students for more advanced study in nutrition.

Required courses in the nutrition specialization include FNES 702, 711VT, 717, 762, 763, 767, 768, 770, 796, and 797, plus two elective courses (6 credits), or pass a comprehensive examination plus three elective courses (9 credits) from FNES 707, 710, 711VT, 722, 723, 764, 773, 774, or other courses as approved by the graduate nutrition advisor. *Note:* The choice of the comprehensive exam will require one additional elective course.

Students interested in this program should consult with the graduate nutrition advisor, Dr. Ashima Kant.

Exercise Science

The MS degree program with specialization in exercise science offers a sequence of courses that prepare students for careers in adult fitness and wellness, corporate and executive fitness, general health promotion, and cardiac rehabilitation. Students are exposed to cardiovascular fitness programs in commercial and clinical settings where their primary responsibility is initiating, directing, and evaluating programs that promote enhanced health and fitness.

Coursework is blended with clinical experience, and students are mentored in the development and completion of individual research projects. The human performance laboratory provides for measurement of muscular strength and endurance, body composition analysis, and metabolic, cardiovascular, and respiratory function during exercise. Clinical research experiences that focus on the health implication of regular exercise as well as in-depth supervised field experiences are provided through a wide variety of corporate and clinical internships. In addition, the program prepares students for more advanced study in exercise science.

Required courses in the exercise science specialization include FNES 702, 719, 720, 721, 722, 723, 724, 725, 726, 796, and 797 plus one elective course (3 credits), or pass a comprehensive examination plus two elective courses (6 credits) from 707, 708, 762, 770 or other courses as approved by the graduate exercise science advisor. Note: A choice of the comprehensive exam will require one additional elective course. Students interested in this program should consult with the graduate exercise science advisor, Dr. Michael Toner.

Nutrition and Exercise Sciences

The MS degree program with specialization in nutrition and exercise sciences provides for advanced study in the combined disciplines of nutrition and exercise science. The program offers opportunity for in-depth study through didactic learning, hands-on field experience, and the development and completion of individual research projects. The program will develop highly competent professionals in the field of nutrition and exercise sciences who will be prepared to provide the general public with legitimate, prudent, and effective ways to improve health, wellness, and fitness in the global marketplace.

Students are prepared to direct and administer programs in nutrition, cardiovascular fitness and wellness in a wide variety of corporate, hospital, community, sports medicine, physical and cardiac rehabilitation centers, and other clinical and preventive health agencies. In addition, the program will prepare students to enter doctoral programs in nutrition and exercise sciences, and conduct research that will contribute to the body of knowledge in this new and growing discipline.

Required courses in the nutrition and exercise sciences specialization include FNES 702, 707, or 720 (based on student background and approval of the graduate advisor), FNES 721, 722, 724, 725, 726, 762, 767, 768, 796, and 797, or pass a comprehensive examination plus one elective course (3 credits) from FNES 707, 708, 719, 720, 723, 770, or other courses as approved by the graduate nutrition and exercise sciences advisor. Note: A choice of the comprehensive exam will require one elective course. Students interested in this specialization should consult with the graduate nutrition and exercise sciences advisor, Dr. Michael Toner.

Accelerated MS in Nutrition and Exercise Sciences—Nutrition Specialization

Participating Undergraduate Majors: BS Nutrition and Dietetics

Advisors: Patricia Miner (undergraduate); Ashima Kant (graduate)

With the permission of the undergraduate and graduate advisors, up to four approved graduate courses (up to 12 credits) may be taken in place of the regular undergraduate courses in the last two semesters of the BS in Nutrition and Dietetics program. Applications are due in the Summer or Fall before students' final two semesters—by June 15 or January 7.

Admission Requirements

Minimum major GPA of 3.7; minimum grade of *A* in FNES 263 and 264; minimum grade of *A* in 365 (to obtain approval to take FNES 767 to replace FNES 366); one professional reference; completion of 100 hours of professional nutrition fieldwork (paid or unpaid); a 250–300 word personal statement on how the fieldwork experience has enhanced the student's understanding of the nutrition care process.

Courses

FNES 762 (replaces FNES 337); FNES 767 (replaces FNES 366); FNES 770 (replaces FNES 382); FNES 711 VT or 717 (replaces an undergraduate elective)

Students will receive their BS degree and a DPD verification upon successful completion of all undergraduate requirements as outlined in the *Undergraduate Bulletin* or equivalent graduate courses as outlined above. They will receive their MS degree upon successful completion of the remaining graduate requirements as outlined in the *Graduate Bulletin.*

PROGRAM OF FAMILY AND CONSUMER SCIENCES TEACHER EDUCATION K–12

Post-Baccalaureate Initial Certificate

This is a sequence of courses for those planning to teach Family and Consumer Sciences at the secondary level by fulfilling all requirements for New York State Initial Certification in this area. The program does not fulfill requirements of the Master of Science in Education degree. Students interested in this program should consult with the graduate family and consumer sciences advisor, Dr. Andrea Mosenson.

Requirements for Admission

1. A bachelor's degree with a general education core in the liberal arts and sciences and an average of *B* (GPA of 3.0) or better in the undergraduate major.
2. The Graduate Record Examination General Test (GRE).
3. A personal statement or essay.
4. Two letters of professional recommendation.
5. An interview may be required.
6. Applicants who majored in Family and Consumer Sciences but do not hold an Initial Certificate, or applicants who come from disciplines other than Family and Consumer Sciences, will be required to satisfy 30 credits in courses that constitute at a minimum the following: FNES 101, 126, 140 or 745, 147, 151 or 751, 156, 163, or their equivalents.

Requirements for Maintenance

1. Students must maintain a *B* (GPA of 3.0) or better average in the program.
2. Course sequence must be approved by an education graduate advisor in the Family and Consumer Sciences unit.

Requirements for Initial Certificate

1. An overall average of *B* (GPA of 3.0) or better.
2. Completion of the following content core courses or their equivalent: SEYS 536, 552, 700, ECPSE 550, FNES 538, 563, 637, and 574.
3. At least 6 semester hours, or its equivalent, of a language other than English.

Requirements for the MS in Ed Degree

Professional Certificate

A sequence of courses for those with either provisional or initial certification in Family and Consumer Sciences who wish to fulfill the master's degree requirement for professional teacher certification.

Requirements for Matriculation

1. An average of *B* (GPA of 3.0) or better in the undergraduate major.
2. Initial certificate in Family and Consumer Sciences.
3. The Graduate Record Examination General Test (GRE).
4. Two letters of professional recommendation.
5. A personal statement or essay.
6. An interview may be required.

Requirements for Maintenance

1. Students must maintain a *B* (GPA of 3.0) or better average in the program.
2. Course sequence must be approved by graduate advisor in teacher education.

Requirements for Graduation

1. Students must complete a minimum of 30 credits with an academic average of *B* (GPA of 3.0) or better.
2. The following courses are required: FNES 636, 643, 731, 732, 747, 748, and 753; and three elective courses (9 credits) from the following list: FNES 707, 727, 728, 741, 742, 745, 749, 751, 755, 760, 781VT, or 782VT.
3. Students must pass a comprehensive examination in the major field of study.

PROGRAMS OF PHYSICAL EDUCATION TEACHER EDUCATION (PRE-K–12)

Post-Baccalaureate Initial Certificate

This sequence of courses prepares students for the New York State Initial Certificate to teach Physical Education Pre-K–12. It is designed for individuals who have completed an undergraduate major other than in teacher preparation in physical education, who want to teach physical education. This program does *not* fulfill the requirements of the Master of Science in Education degree in physical education. Students interested in this program should consult with the graduate physical education advisor, Dr. Eve Bernstein.

Requirements for Admission and Maintenance

Admission to the program begins with submission of an application for matriculation. In addition to the application, a student must submit a letter of intent, which includes the student's background in sport and physical education, experiences working in sport, recreation, or physical education settings with children and young adults, any teaching experience, a philosophical statement on the role of physical education in society, and future plans upon completion of the program. The applications are reviewed by an Admissions Committee, which considers, among other factors, the letter of intent, the graduate application with particular attention to performance in undergraduate work and in writing courses, the Graduate Record Examination General Test (GRE), and three professional letters of reference.

The applicant must hold a bachelor's degree with a general education core in the liberal arts and sciences. Applicants who majored in physical education but do not hold an initial certificate, or applicants who come from disciplines other than physical education, will be required to satisfy deficiencies by taking courses which constitute as a minimum the following: FNES 010, 011, 012 (2 courses), 013, 014 (2 courses), 030, 143, 253, 342, and/or their equivalents. (See the *Undergraduate Bulletin* for descriptions of these courses.)

Applicants are also required to have at least 6 semester hours, or its equivalent, of a language other than English. They must meet, as well, the general admissions requirements for graduate study at Queens College, including a cumulative and departmental average of at least a *B* (3.0 GPA). Students must maintain a *B* average to remain in the program.

Requirements for Initial Certificate

To complete the Initial Certificate the student must satisfy the following requirements:

1. Completion of the following courses, or their equivalents: FNES 560, 561, 562, 573, 722, 730, and 740, ECPSE 550, SEYS 536, 552, and 700, or EECE 525 and 711.
2. Students may enter FNES 573, Student Teaching in Physical Education, following the completion of FNES 560, 561, 562, 730, and 740, ECPSE 550, SEYS 536, 552, and 700, or EECE 525 and 711.
3. FNES 560, 561, and 562 must each be completed with a *B* or better.
4. Students are required to complete training in safety education, and prevention of child and substance abuse, and school violence prevention. In addition, students must hold a current certification in First Aid and Cardiopulmonary Resuscitation (CPR).

MS in Ed Degree in Physical Education and Professional Certificate

A sequence of courses on the theoretical study of curriculum and teaching integrated with the substantive study of human movement and its professional application to educational and clinical practice.

---

*Indicates a variable title.

Requirements for Admission and Maintenance

These requirements are in addition to the general requirements for admission:

1. A baccalaureate degree with a provisional or initial certificate in Physical Education K–12.
2. An average of *B* (3.0 GPA) or better in the undergraduate major; three professional letters of recommendation; a letter of intent; a personal statement; and the Graduate Record Examination General Test (GRE). Students with grade-point averages less than 3.0 may be admitted to the program, but are placed on academic probation. Students on academic probation must maintain a *B* average during the first 12 graduate credits.
3. Applicants who hold provisional certification and complete the Master of Science in Education degree will have met all the education requirements for permanent certification. Students who do not hold provisional certification will not be eligible for permanent certification. Students who hold an initial certificate and complete the MSEd degree program, will have met the degree requirement for the professional certificate. See the graduate advisor regarding the additional requirements for the professional certificate.
4. An interview may be required.
5. Applicants, whose backgrounds are deemed deficient or not current, may be required to make up deficiencies as specified by the department.
6. Applicants must maintain a grade-point average of at least *B* (3.0). Students admitted to the program who have been placed on academic probation must maintain a *B* or better grade-point average for the first twelve graduate credits to remain in the program.

Requirements for the MS in Ed Degree

To complete the MS in Education degree in Physical Education, the student must satisfy the following requirements:

1. FNES 702, 705, 713, 714, 715, 716, 722, 730, 740; one elective from SEYS or EECE 700-level offerings. The elective course must be approved in advance by the graduate advisor.
2. Students must complete a minimum of 30 graduate credits with an academic average of at least *B* (3.0 GPA).
3. Students must pass a comprehensive examination in the major field of study.

ACCELERATED MASTER OF SCIENCE DEGREE IN EDUCATION, PHYSICAL EDUCATION

Bachelor of Science, Physical Education (Pre-K–12)

Undergraduate Advisor: Ariela Herman

Master of Science, Physical Education (Pre-K–12)

Graduate Advisor: Eve Bernstein

With the permission of the undergraduate and graduate advisors, up to the following four (4) graduate courses may be taken in place of the regular undergraduate courses in years 2 through 4 of the Physical Education BS program. Note that each graduate course replaces a specific undergraduate course, and credit toward the undergraduate major will not be given for both courses. Admission into this program is limited to students with a major GPA of 3.5. (This is subject to final approval by the CUNY Board of Trustees.)

FNES 740, Motor Learning (if student has not taken this already); replaces FNES 343, which is a free-standing course with no prerequisites and therefore is generally taken in undergraduate year 1

FNES 715, Movement Experiences for Atypical Populations; replaces FNES 381, normally taken in the spring of undergraduate year 3

SEYS 700, Language, Literacy, and Culture Education; replaces SEYS 340, normally taken in the spring of undergraduate year 3

FNES 730, Mechanical Analysis of Human Movement; replaces FNES 235, normally taken in the spring of undergraduate year 3

COURSES*

FNES 538. Introduction to Teaching Family & Consumer Sciences. 3 hr.; 3 cr.; 10 hr. of field experience. The roles of the family and consumer sciences (FCS) teacher are explored. This course will introduce students to the essential concepts of becoming a FCS teacher including lesson planning, curriculum development, use of instructional strategies and technology, assessment, classroom management, and reflection.

FNES 560. The Teaching Process and Assessment in Physical Education. 3 hr.; 3 cr. This course looks at the teaching process and assessment in physical education through the analysis and assessment of student learning and teacher practice. Coursework includes developing and assessing lessons based on state and national standards. The grade required for this course is equal to or better than a *B*. To progress through the sequence you must receive a *B* or better.

FNES 561. Methods for Teaching Early Childhood and Elementary Physical Education. 3 hr. plus 25 hours fieldwork; 3 cr. Prereq.: A grade of *B* or better in FNES 560. This course examines relevant principles, methods and materials for teaching these specific age groups through teaching experiences. Includes methods for working with special populations and different ability levels. Students also learn about incorporating state and national standards into lessons and planning developmentally appropriate activities and content. The grade required for this couse is equal to or better than a *B*.

FNES 562. Seminar in the Teaching of Physical Education. 3 hr. plus 25 hours fieldwork; 3 cr. Prereq.: A grade of *B* or better in FNES 561. Examines relevant methods and materials for teaching students at the middle and high school levels. Includes methods of integrating State and National standards into the curriculum, specific to these age levels. The grade required for this course is equal to or better than a *B*.

FNES 563. Seminar in the Teaching of Family and Consumer Sciences. 4 hr.; 3 cr. Prereq. or coreq.: FNES 538, SEYS 552, and ECP 550. This course focuses on preparing students for the student teaching experience emphasizing teaching models, learning styles, State learning standards, curriculum, unit/weekly and daily lesson planning, classroom management, working with students with special needs, assessment and professional development. Fieldwork required.

FNES 573. Student Teaching in Physical Education. 2 hr. plus participation, 25–30 hr. per week for a minimum of 14 weeks; 6 cr. Prereq.: A grade of 3.0 in the major and a 3.0 average in foundations of education, child development, adolescent development, literacy and technology; a grade of *B* or better in FNES 560, 561, and 562. Supervised teaching and observation in elementary and secondary schools. Students are required to spend a minimum of 7 weeks at each level.

FNES 574. Student Teaching in Family and Consumer Sciences. 3 hr. sem., 25–30 hr. per week for 14 weeks; 6 cr. Prereq. or coreq.: SEYS 536, 552, FNES 563, 637; an overall GPA of 3.0; a grade of *C* or better in all Family and Consumer Sciences content courses; an average of 3.0 or better in the pedagogy core; a grade of *B* or better in FNES 563; and no open grades in required content courses. This course is the student teaching experience which involves spending 25–30 hours a week teaching Family and Consumer Sciences classes at two different school levels. The course also includes attending a three-hour on-campus seminar.

FNES 636. Technology Integration for Teaching and Learning in FCS. 3 hr.; 3 cr. This course provides teachers an opportunity to develop the skills necessary to effectively integrate technology into their curriculum, instruction, and assessment of FCS courses taught at the secondary level. A variety of digital tools will be explored and evaluated by the teachers for creating learner-driven activities that emphasize meaningful and responsible use of technology.

FNES 637. Contemporary Educational Trends and the Effect on Family and Consumer Sciences Curricula. 3 hr.; 3 cr. Prereq. or coreq.: SEYS 552. This course is part of the pedagogy core for preparing students for the student teaching experience. As part of the process, contemporary educational trends and their effect on teacher implementation of curricula will be examined.

FNES 643. Teaching Diverse Student Populations Family and Consumer Sciences. 3 hr.; 3 cr. Examination of the subject areas that constitute the discipline of Family and Consumer Sciences and analysis of how to adapt teaching techniques to meet the abilities, backgrounds, and interests of diverse student populations. Attention given to the process of nondiscriminatory authentic assessment.

FNES 702. Statistical Methods in FNES. 2 rec., 1 lab. hr.; 3 cr. Prereq.: A course in elementary statistics. Application of descriptive, correlational and inferential statistical methods in one-, two- and multi-group comparisons in parametric and non-parametric independent and correlated sample distributions.

FNES 705. Research Methods in FNES. 2 hr. plus conf.; 3 cr. Prereq.: FNES 702. Methods and techniques used in designing analytical, historical, descriptive correlational, methodological, epidemiological, experimental, qualitative and evaluative research in physical education.

FNES 707. Cultural and Ethnic Foods. 2 lec., 2 lab. hr.; 3 cr. Prereq.: Undergraduate coursework in foods and nutrition. Study of the food patterns of varying cultures and ethnic groups, and of the nutritional, economic, and sociological implications of these patterns. Field trips included.

FNES 708. *VT Seminar in Health, Physical Education, and Movement Science. 2 hr. plus conf.; 3 cr. Topic announced each semester. May be repeated for credit for different topic.

FNES 710. Enteral and Parenteral Nutrition Support. 3 hr.; 3 cr. Prereq.: FNES 263, 264, 365, 366, or 767; or equivalent. The provision of nutrition support, through enteral and parenteral nutrition, to treat or prevent malnutrition in acute and chronic disease states and critical illness. This course will focus on enteral and parenteral access, appropriate prescription of nutrition support based on evidence-based guidelines, and ethical issues related to nutrition support. This course may assist with preparation for taking the clinical nutrition support clinician (CNSC) certification examination.

FNES 711. *VT Contemporary Issues in FNES. 3 hr.; 3 cr. Prereq.: Permission of the department. Topics vary from semester to semester. Controversies and emerging topics of professional interest in FNES. May be repeated for credit for different topic.

FNES 713. Curriculum Development in Physical Education. 2 hr. plus conf.; 3 cr. Prereq.: FNES 573 or student teaching in physical education. The study of curriculum design in physical education. Students will study the methods and procedures for curriculum development, as well as the implementation of curriculum models in school settings. Course includes 4–6 site visits.

FNES 714. Analysis of Teaching Physical Education. 2 hr. plus conf.; 3 cr. Prereq.: FNES 573.

The study of the processes involved in teaching physical education. Students will study traditional and new styles of teaching physical education to all grade levels, as well as, ways of analyzing student and teacher behavior in physical education classes. Course includes 4–6 site visits.

FNES 715. Movement Experiences for Atypical Populations. 2 hr. plus conf.; 3 cr. Programmatic approaches to perceptual-motor skill development of individuals with learning handicaps and disabilities, emotional disturbances and physical handicaps. The course provides methods of teaching, assessment strategies, and team approaches.

FNES 716. Application of Contextual Issues in Physical Education. 3 hr.; 3 cr. (plus 4–6 site visits) Prereq. or coreq.: FNES 705, 713, 714. This course studies the contextual issues in suburban and urban physical education settings. Topics, such as technology, resources in physical education, body composition, fitness testing, and alternate ways of teaching competitive sport in physical education will be studied and applied within the school setting.

FNES 717. Geriatric Nutrition. 3 hr.; 3 cr. Prereq. or coreq.: FNES 263, 264, 365, 366 or 767, 368, or equivalent. This course is an overview of the normal, acute, and chronic physical changes associated with the aging process and its effect on nutritional status. Student will develop a basic understanding of nutritional concerns of older persons, and recognize dietary practices and nutritional needs specific to older individuals.

FNES 719. Cardiac Rehabilitation and Prevention. 2 hr. plus conf.; 3 cr. Overview of cardiac rehabilitation and prevention of coronary artery disease. Topics studied include the cardiovascular disease process, risk factors, stress testing and exercise prescription, lifestyle evaluation, and program description and administration.

FNES 720. Physiological Principles of Fitness and Training. 2 rec., 1 lab. hr.; 3 cr. Principles underlying specific fitness programs are examined within the framework of physiological adaptations to exercise and training.

FNES 721. Principles of Electrocardiography and Stress Testing. 2 hr. plus conf.; 3 cr. Study of the fundamentals of electrocardiography with special emphasis on its application to exercise stress testing.

FNES 722. Exercise, Nutrition, and Weight Control. 3 hr.; 3 cr. Interrelationships between exercise, nutrition, energy, metabolism, and weight control.

FNES 723. Physical Activity and Cardiovascular Health. 3 hr.; 3 cr. Review of research relating physical activity to coronary heart disease, with special emphasis on mortality/morbidity, reversal of atherogenesis, cardiovascular disease risk factors, and myocardial function.

FNES 724. Adult Fitness and Exercise Prescription. 3 hr.; 3 cr. Prereq.: FNES 721 or permission of the instructor. Use of exercise to evaluate and improve cardiovascular function in adults in health and disease.

FNES 725. Measurement of Physical Fitness and Body Composition. 3 hr.; 3 cr. Prereq.: FNES 720. Laboratory and field methods for assessing the various aspects of physical fitness.

FNES 726. Internship in Adult Fitness and/or Cardiac Rehabilitation. Hr. to be arranged; 3 cr. Prereq.: Completion of 24 cr. in the Exercise Science Program and/or permission of the instructor. In addition to regular seminar meetings on campus, the on-site hourly requirement varies according to the clinical nature of the internship program. This course will provide an in-depth, highly structured, practical experience in a formalized program dealing with fitness and health enhancement in healthy adult populations as well as populations involved in rehabilitative programs. The internship integrates the basic academic classroom and laboratory learning of the university setting and applies this knowledge to existing community, corporate, and/or clinically-based programs. (Some internships are paid; some are not.)

FNES 727. The Meanings of Dress. 3 hr.; 3 cr. The focus of this course is to expand awareness and understanding of the role dress plays in today's global society. The significance of dress will be investigated through different lenses that include psychology, sociology, culture, and sexual identity. How dress reflects self-expression, establishes social identities, and affects interpersonal encounters will be examined and discussed.

FNES 728. New Trends in Textiles and Apparel. 3 hr.; 3 cr. The study of the global textile and apparel industries and what influences trends to come and go. Discussions focus on cultural and societal trends, designer trends, and environmental trends that impact the industry. Learn how technology is changing the textile and apparel landscape to meet consumer demands and create unconventional textile products.

FNES 730. Mechanical Analysis of Human Movement. 3 hr.; 3 cr. An analysis of the mechanics of human motion based upon the application of principles and laws of physics.

FNES 731: Research I: Action Research in Family and Consumer Sciences Education. 3 hr.; 3 cr. This course examines action research and its role in decision making to improve educational practices. Teachers are introduced to various types of action research and to the elements of the action research process, including identifying a problem, determining a problem statement, conducting a literature review, planning for the collection and analysis of data, and

creating a plan of action. Methods for collecting, evaluating, and analyzing data are discussed.

FNES 732: Research II: Assessment and Evaluation in Family and Consumer Sciences Education. 3 hr.; 3 cr. Prereq.: FNES 731. This course focuses on using a variety of classroom assessments to improve student learning and teacher instruction. In part II of the research sequence, teachers will use the Classroom Assessment Cycle to learn about different assessment techniques and how to plan an action research project, collect evidence of student learning, and use student data to improve instruction.

FNES 740. Motor Learning and Performance. 2 rec., 1 lab. hr.; 3 cr. Psychological, physiological, and neurological principles that facilitate learning and performance of motor skills.

FNES 741. Drugs: A Family, School, and Community Problem. 3 hr.; 3 cr. A broad approach to the extremely complex drug abuse problem in society today—including the medical, legal, psychological, and social aspects of the problem—to create an awareness and better understanding of the problem, how it affects the individual, the family, the community, and society.

FNES 742. Child Study Lab in Family and Consumer Sciences. 3 hr., 3 cr. Prereq. or coreq.: Child development courses. This course is intended for Family and Consumer Science teachers who seek to develop and/or enhance an early childhood program involving secondary students and nursery school children. In this course, we will evaluate the needs of the school and larger community, discuss best practices in early childhood and teacher education, and explore ways to supervise high school students as teachers.

FNES 745. The Child in the Family. 3 hr.; 3 cr. Prereq.: FNES 147, Family Relations. The role of the child in the family from preschool through adolescence. Familial practices evaluated in terms of their effect on the child's development.

FNES 747. An Analysis of Teaching Family and Consumer Sciences. 3 hr.; 3 cr. Focuses on examining models of teaching and developing reflective planning, teaching, and evaluation strategies for enhancing professional performance. Provides an opportunity for Family and Consumer Sciences teachers to explore their current ideas and teaching practices for addressing the needs, interests, abilities, and learning styles of diverse student populations. Professional self-awareness will be developed using a variety of approaches including videotape analysis, peer review, and case studies.

FNES 748. Curriculum Development: Theories and Challenges for Family and Consumer Sciences. 3 hr.; 3 cr. An in-depth study of the conceptual framework and philosophy of Family and Consumer Sciences education and the challenges and opportunities the discipline presents for developing curriculum. Teachers will examine various approaches to curriculum development as well as National and NYS Learning Standards and plan curriculum that links them with practices that actively engage students.

FNES 749. Contemporary Home and Family Living. 3 hr.; 3 cr. Prereq.: FNES 147, Family Relations. Research and practices about family and interpersonal relations in contemporary living.

FNES 751. Resources for Consumer Education. 3 hr.; 3 cr. Prereq.: FNES 151, The Family and Consumer Studies. Materials and methods in teaching consumer education with special emphasis on the role of individuals and families as consumers.

FNES 753. Building Relationships Inside and Outside the Classroom. 3 hr.; 3 cr. This course focuses on building and maintaining positive relationships within a school: students in the classroom and people outside the classroom such as administrators, colleagues, and parents. Being able to work productively with others from different cultural backgrounds and diverse perspectives is an essential skill in today's world. Another key skill for teachers is learning how best to manage a classroom of students with a diversity of academic, social, and emotional needs. This course provides teachers with research-based strategies and best practices in developing a classroom environment that can build positive connections with students, partnerships with parents, and productive relationships with others in a school.

FNES 755. Sustainability Practices in Family and Consumer Sciences. 3 hr., 3 cr. As a discipline, Family and Consumer Sciences incorporates sustainability practices that allow individuals to strengthen and extend their capacity to live a more sustainable life. In response to sustainability initiatives around the world, preparing students for stewardship of their communities and planet becomes increasingly important. In this course, current topics in sustainability education and best practices will be examined across Family and Consumer Sciences through readings, videos, and discussions.

FNES 760. Food Trends and Issues in Family and Consumer Sciences. Prereq. or coreq.: Nutrition course. This course explores current trends and issues within the food industry. Students will explore how food has changed over time and evaluate the impact these changes have on today's families. Students will examine various health concerns including food allergies, sensitivities, and alternative diets. Current trends and issues will be researched and debated to gain a better understanding of the role food plays locally and globally.

FNES 762. Nutrition Counseling. 3 hr.; 3 cr. Prereq.: FNES 365, Nutrition, Counseling, and Assessment, and FNES 366, Medical Nutrition Therapy. Principles of dietary counseling for the general population and for individuals with special health problems.

FNES 763 Nutritional Pathophysiology I. 45 contact hr.; 3 cr. Prereq. or coreq.: One semester each of basic chemistry, organic chemistry, biochemistry, anatomy and physiology, biology and microbiology; two se-

mesters of nutrition science (for human nutrition; macro- and micronutrients); *or* a DPD verification statement *or* at least one year of work experience as clinical dietitian (not DTR). (Note: This course is *not* a pre- or coreq. for FNES 764.) The relation between nutrition and specific diseases is explored. This part of the course will focus on the systemic response to injury and systemic inflammation, endocrine dysregulation, genetic regulation, cardiac and cardiovascular disorders, pulmonary diseases, and nervous system disorders. The discussions will include the pathophysiology of the diseases, with risk factors, clinical manifestation, and current standard and emerging options for Nutrition therapy and prevention.

FNES 764 Nutritional Pathophysiology II. 45 contact hr.; 3 cr. Prereq. or coreq.: One semester each of basic chemistry, organic chemistry, biochemistry, anatomy & physiology, biology and microbiology; two semesters of nutrition science (for human nutrition; macro- and micronutrients); *or* a DPD verification statement *or* at least one year of work experience as clinical dietitian (not DTR). (Note: FNES 763 is *not* a pre- or coreq. for this course.) Standard and emerging options for nutrition therapy and prevention are explored for intestinal diseases, kidney diseases, and diseases of the joint and skeletal system. The discussion will be based on the pathophysiology of the diseases and will include risk factors and clinical manifestation.

FNES 765. Resources for Nutrition Education. 3 hr.; 3 cr. A detailed survey and assessment of resources for nutrition education applicable to a wide variety of audiences.

FNES 767. Advanced Diet Therapy. 3 hr.; 3 cr. Prereq.: FNES 365, Nutrition Counseling, and Assessment, and FNES 366, Medical Nutrition Therapy. This course examines the rationale of therapeutic diets and their physiological bases. Current trends in the practice of developing special diets for persons under medical care will be stressed.

FNES 768. Advanced Nutrition. 3 hr.; 3 cr. Prereq.: FNES 368, Advanced Nutrition. Recent advances in nutrition and interpretation. A systematic survey of journals and other sources. Every third semester.

FNES 770. Community Nutrition. 3 hr.; 3 cr. Prereq.: FNES 264, Nutrition II. A survey of the content, organization, and administration of the publicly and privately sponsored nutrition programs and services offered to the community and of the legislation regulating and affecting these programs. Research studies evaluating such programs will also be examined.

FNES 771, 772. Internship in Family, Nutrition, and Exercise Sciences I, II. Hours and credits for each course: 20 hr. per week including seminar; 3 cr. Prereq.: Permission of the department for FNES 771 and 772. Application and analysis of content area learning through internship. Students will work in approved field site placements under the supervision of experienced professionals. The accompanying seminar focuses on roles and responsibilities of professionals, application of knowledge, and education of client populations.

FNES 773, 774. Internship in Dietetics I, II. Hours and credits for each course: 40 hr. internship per week plus seminar; 6 cr. Prereq.: Permission of the department for FNES 773 and 774. Application and analysis of content area learning in a formal program of in-depth, highly structured, practical internships. Students will work in one or more approved field site placements (clinical, community, and management) under the supervision of experienced Registered Dietitians, Community Supervisors, and/or Food Service Management professionals. The accompanying seminar focuses on application of knowledge, roles, and responsibilities of professionals, and education of client populations. Only 6 credits of Dietetics Internship may be counted toward the M.S. in Education degree.

FNES 775. Advanced Food Service Management. 3 hr.; 3 cr. Prereq.: FNES 275, Institutional Management; FNES 378, Quantity Food Purchasing, Production, and Equipment, or equivalents. An advanced approach to three main areas of food service management: personnel, finance, and labor relations. Through lecture, case study, and analysis of current research reports, the principles of finance, managerial accounting, and the use of the computer are explored, as are general theories and concepts of management/personnel communications, labor relations, and legal problems in the food service industry.

FNES 777. Problems and Practices in Food Service Management. 3 hr.; 3 cr. Prereq.: FNES 275, Institutional Management. An integrative approach to the problems and practices of food service management, focusing on the contributions of various scientific disciplines to a study of the stages of production, processing, packaging, and preparation of food for consumption. Special emphasis is given to food sanitation and safety and their effects on the individual, the environment, and ecology.

FNES 781, 782. *VT. Seminar in Family and Consumer Sciences Education. 3 hr.; 3 cr. each semester. Topics will vary from semester, but will focus on emerging educational issues and professional interests in Family and Consumer Science Education.

FNES 788. Cooperative Study. Prereq.: Permission of the department. Cooperative Study performed by students participating in the Cooperative Education Program involves employment of the student in one of a variety of FNES-related jobs with the direct supervision of the employer and overview guidance provided by a faculty advisor. Cooperative Study supplements the traditional classroom and laboratory programs of study. The student prepares a report for the faculty supervisor upon completion of the Cooperative Study experience. No more than 6 credits may be taken in Cooperative Study.

FNES 788.1. 1 hr.; 1 cr.
FNES 788.2. 2 hr.; 2 cr.
FNES 788.3. 3 hr.; 3 cr.
FNES 788.4. 4 hr.; 4 cr.
FNES 788.5. 5 hr.; 5 cr.
FNES 788.6. 6 hr.; 6 cr.

FNES 791, 792. Independent Study in FNES. Prereq.: Permission of the department. Under the guidance of a FNES faculty member, students pursue advanced clinical work, undertake critical examination of original research, or carry out a clinical or laboratory research project, all of which culminate in a comprehensive written report. No more than 6 credits may be taken in independent study in FNES.

FNES 791.1. 1 hr.; 1 cr.
FNES 791.2. 2 hr.; 2 cr.
FNES 791.3. 3 hr.; 3 cr.
FNES 792.1. 1 hr.; 1 cr.
FNES 792.2. 2 hr.; 2 cr.
FNES 792.3. 3 hr.; 3 cr.

FNES 796. Research Methods in Nutrition and Exercise Sciences. 3 hr.; 3 cr. Prereq.: FNES 702. Research methods and design strategies, including development of research proposals used in analytical, descriptive, qualitative, and experimental research studies in nutrition and exercise sciences.

FNES 797. Research Project in Nutrition and Exercise Sciences. 3 hr.; 3 cr. Prereq.: FNES 796. Under the supervision of a faculty advisor, students carry out the research project planned in FNES 796 that culminates in a written research report.

COURSES IN RESERVE

FNES 701. History and Principles of Health and Physical Education.

FNES 703. Planning Facilities for Physical Education in Schools and Community.

FNES 704. Contemporary Issues and Problems in Physical Education.

FNES 706. Contemporary Issues and Problems in Health Education.

FNES 709. Workshop in Secondary School Physical Education.

FNES 712. The Role of Sport in Contemporary American Society.

FNES 743. Physical Education for the Mentally Retarded, Learning Disabled, and Emotionally Disturbed.

FNES 744. Physical Education for the Physically Handicapped and Sensorially Impaired.

FNES 746. Practicum in Special Physical Education.

FNES 750. Understanding Human Sexuality.

Hispanic Languages & Literatures

Chair: Juan Caamaño

Graduate Advisor: Beatriz Carolina Peña

Dept. Office: Queens Hall 100, 997-5660;
Fax 997-5669

The Department of Hispanic Languages and Literatures is committed to serving the large, culturally diverse community of Queens and surrounding areas by promoting critical thinking and disseminating knowledge of the Hispanic cultural and literary heritage.

Diversity in Queens refers to ethnic, cultural, and geographical origins. The department recognizes the varied academic traditions that such diversity implies. Our focus, therefore, is on building a foundation to bridge the students' cultural differences, in order to ensure their continued academic and career development.

With these goals in mind, the department has established a Master of Arts program and a Master of Science in Secondary Education program that serve a large group of students who are educators, as well as a number of students who will continue their graduate studies at the doctoral level. More specifically, the Master of Arts degree in Spanish leads to teaching careers in secondary education and college, and to admission to doctoral programs in Spanish or comparative literature. Courses cover numerous aspects of Spanish and Latin American literature viewed through various methods of literary criticism.

FACULTY

Caamaño, Juan, Chair, *Associate Professor,* PhD 2004, State University of New York at Stony Brook: nineteenth- and twentieth-century Spanish literature, contemporary critical theory, cultural history of Spain

Peña, Beatriz Carolina, Graduate Advisor, *Assistant Professor*, PhD 2007, The Graduate Center, CUNY: colonial Latin American literature

Casco, Mónica, *Lecturer,* MA 2001, City University of New York: foreign language education, Spanish linguistics, foreign language technology

Fernández, Álvaro, *Associate Professor*, PhD 2009, State University of New York at Stony Brook: nineteenth- and twentieth-century Spanish literature, Spanish cinema

Glickman, Nora, *Professor,* PhD 1978, New York University: twentieth-century Spanish-American literature, Spanish and Latin American cinema

Llorens, Irma, *Associate Professor,* PhD 1992, Princeton University: Spanish-American literature, women writers, literature of the Hispanic Caribbean

Martínez-Torrejón, José Miguel, *Professor,* PhD 1989, University of California at Santa Barbara: Medieval and Golden Age Spanish literature

Outes-Léon, Brais, *Assistant Professor,* PhD 2015, Yale University: Latin American literature and cultural history from 1870 to 1935

Sena, Isabel de, *Adjunct Professor,* PhD 1992, University of California, Santa Barbara: Medieval and Golden Age Spanish literature

Simerka, Barbara, *Professor,* PhD 1992, University of Southern California: Golden Age literature, gender studies

Villa, Laura, *Assistant Professor,* PhD 2010, City University of New York: Hispanic linguistics

Zinni, Mariana, *Associate Professor*, PhD 2008, University of Pittsburgh: colonial Latin American literature and culture.

MASTER OF ARTS PROGRAM

Graduate Advisor: Beatriz Carolina Peña

Requirements for Matriculation

These requirements are in addition to the general requirements for admission.

1. Undergraduate degree with strong component in Spanish (21 credits beyond the second-year of language), including the equivalent of SPAN 240, 250, 260, 280, 290, 310, or 312 and a 300-level elective course.

2. The credentials of each applicant are to be examined by a departmental committee which shall have the authority to accept or reject the candidate. This committee may request an interview with a candidate for admission if necessary.

Requirements for the Master of Arts Degree

These requirements are in addition to the general requirements for the Master of Arts degree.

1. Thirty-three credits, or 27 credits and a 6-credit thesis, are required for the Master of Arts degree. A minimum of 24 credits must be taken in Spanish. With special permission, the remaining credits may be taken in other departments.
2. Upon admission, all students are required to take SPAN 700. Stylistics and Composition, as part of the required 33 credits. SPAN 700 must be taken during the first or second semester of study, and students must pass the course with a *B* or higher, in order to continue in the program. The course may be taken only twice.
3. Students will be required to demonstrate their reading knowledge of another Romance language, in addition to their major language. Latin or any other language pertinent to the study of Hispanic literature may be substituted by special permission.
4. Students who wish to complete a thesis based on original research are required to take SPAN 791 and 792, as part of the 33-credit requirement. The 6-credit thesis sequence may be substituted for two of the required courses. This thesis will normally be written in Spanish, or, by special permission, in English, and it must follow the norms of the *MLA Style Manual.* Prior approval of the thesis topic must be obtained by the student from the graduate advisor who will guide the student to an appropriate thesis director. The thesis will be supervised by a committee composed of the thesis director, a second reader, and the graduate advisor. Upon completion of the thesis, it must receive signatures of approval from all three committee members and the Office of Graduate Studies.

Every student is urged to meet with the advisor at least once every semester to discuss her/his program and inform the advisor of her/his progress. No allowance will be made for a student's faulty planning of her/his own program.

COURSE BREAKDOWN

The 33 credits required for the degree are to be distributed as follows:

1. SPAN 700. Stylistics and Composition (3 credits). All students must take this course as soon as possible.
2. At least 9 credits in Latin American literature, and 9 credits in Peninsular literature.
3. Six credits in seminar courses:
   a) SPAN 783. Research Seminar: Hispanic Linguistics.
   b) SPAN 784. Research Seminar: Hispanic Literature.
4. At least 6 credits in elective courses (linguistics, literature, and/or culture courses); or SPAN 791. Thesis Seminar, and SPAN 792. Thesis Course.

MASTER OF SCIENCE IN EDUCATION PROGRAM

Graduate Advisor: Jennifer B. Eddy, Secondary Education and Youth Services (SEYS)

The Master of Science in Education Program (Spanish) responds to the needs of teachers and prospective teachers of foreign languages. The degree program combines coursework in (1) culture, literature, and language, (2) foreign language education, and (3) professional education. The courses in culture, literature, and language are given by the department of Hispanic Languages and Literatures. The courses in foreign language education and professional education are offered by the School of Education.

For admission requirements to Secondary Education programs, see their entries.

Requirements for Matriculation

In addition to the general admission requirements stated in this *Bulletin*, applicants should have:

A. Strong undergraduate concentration in Spanish, consisting of at least 21 credits above SPAN 204.

B. Either an undergraduate minor in Secondary Education or completion of the following sequence of courses as part of the Secondary Education Initial Certificate:

	credits
SEYS 536. Educational Foundations	3
SEYS 552. Educational Psychology	3
SEYS 564. Methods of Teaching Foreign Language	3
SEYS 574. Student Teaching	3
SEYS 584. Standards-Based Curriculum & Assessment in Teaching Foreign Language	3
SEYS 700. Language, Literacy and Culture in Education	3

Students should meet with the Graduate Advisors in both the Department of Secondary Education and the Department of Hispanic Languages and Literatures as soon as possible to plan their program of study and submit it for approval.

The Master of Science in Secondary Education: Spanish program consists of 33 credits: 15 credits of 700-level education coursework and 18 credits of 700-level coursework in Spanish. A minimum of 3.0 is required to enter and remain in the program. All candidates have a portfolio exit requirement.

COURSE BREAKDOWN

1. Five courses (15 cr.) in Secondary Education:
   a) One course from the area of Foundations of Education: SEYS 701–708, 720 (3 cr.). (Prereq.: SEYS 201W or 536.)
   b) One course from the area of Psychological Foundations: SEYS 709, 710, 717, 718, 719, 738 or

768 (3 cr.). (Prereq.: SEYS 221 and 350, or 552.)

c) SEYS 743: Curriculum and Instruction in Foreign Language Education (3 cr.). (Prereq.: SEYS 364 or 564.)

d) SEYS 785: Seminar in Research in Foreign Language Education (3 cr.). (Prereq.: SEYS 743.)

e) SEYS 786. Advanced Seminar in Research in Foreign Language Education (3 cr.). (Prereq.: SEYS 785.)

f) As an exit requirement candidates will complete a professional portfolio based on INTASC World Language Standards and Queens College conceptual framework (3 Es) to represent all content in MSEd. The candidate will also defend the portfolio with a panel of faculty members.

2. Six courses (18 cr.) from the Spanish graduate program. These courses are to be distributed as follows:

a) Two courses (6 cr.) in Language and Linguistics, including SPAN 700.

b) Three courses (9 cr.) in Literature.

c) One course (3 cr.) in Culture and Civilization. This requirement may be met by either SPAN 772 or 774.

COURSES IN SPANISH

SPAN 700. Stylistics and Composition. 2 hr. plus conf.; 3 cr. Prereq.: Admission to the MA program. Stylistic and grammatical analyses of readings of literary and nonliterary texts are combined with in-depth discussions and intensive writing. This course emphasizes the writing process: developing theses, structuring arguments, and generating a clear and cohesive style.

SPAN 702. History of the Spanish Language. 2 hr. plus conf.; 3 cr. This course traces the development of the Spanish language from Latin to the present, focusing upon the cultural, literary, and historical factors that have contributed to its evolution from Latin to early Romance, and then to the modern language. It will cover the internal and external history of the language.

SPAN 704. Foundations of Hispanic Linguistics. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700 or exemption. This course provides an introduction to Spanish linguistics and establishes the basis for future application of linguistic principles. The course begins with an exploration of the sound system of Spanish and its theoretical representation. Building on this, the discussion continues with topics in Spanish morphology such as word formation and verbal inflection. This is followed by issues in syntax and semantics that are analyzed both in isolation and in terms of their relationship to each other.

SPAN 706. Hispanic Sociolinguistics and Dialectology. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700 or exemption. This course is intended to familiarize students with the study of Spanish dialects based on historical and geographic criteria, as well as to introduce sociolinguistic concepts and issues. Sociolinguistic topics may include social and stylistic variation, language variation and change, dialects and the "standard norm," linguistic attitudes, language and gender, bilingualism, language contact, language attitudes, discourse analysis, etc.

SPAN 717. Creative Writing in Spanish. 3 hr.; 3 cr. This course will encourage students to exercise their power of observation of written storytelling elements, such as character, plot, dialogue, etc. In the process, they will use their imagination and also improve their grammar and writing skills in Spanish. For assignments, students will be asked to follow the evolution of specific literary aspects in selected texts. Thus, they will be exposed to different writing styles by working with a variety of outstanding Latin American authors. In class, the distinguishing traits of the writings will be discussed. Also, students will attempt to create their own versions of those texts following some of the parameters observed in each author's production. Students will be choosing among different writing styles, such as brief memoirs, TV, film, and book reviews, short stories, and dramatized scenes.

SPAN 720. Medieval Spanish Literature. 2 hr. plus conf.; 3 cr. May be repeated for credit with permission of the graduate advisor if the topic is different. The course will focus on different aspects of Medieval Spanish literature: the development of Castilian love poetry from its origins to the fifteenth century: traditional epic poetry and balladry, the development of narrative prose. Popular, courtly, and clerical forms are considered in each case, with special attention given to the evolution of recurrent themes and rhetorical forms within a European context.

SPAN 721. Pan-Hispanic Balladry: From *El Cid* to Lorca and Beyond. 3 hr.; 3 cr. Prereq.: SPAN 700. The most enduring and versatile poetic form of the Hispanic World, *Romancero* (balladry) is a prime field to study the interaction between popular and cultured poetry. This course will follow its history from medieval epic poetry to recent developments around the Mexican Revolution, the Spanish Civil War, and narcotrafic. Special attention will be given to canonic authors inspired by this popular poetry: Cervantes, Lope de Vega, Góngora, Machado, and García Lorca.

SPAN 722. Golden Age Spanish Literature. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700 or exemption. A survey of different cultural issues and literary genres within the period from 1500 to 1700 with a historicist focus. Specific topics will vary around different genres (the Renaissance, Comedia nueva, poetry, and narrative), and individual authors including Félix Lope de Vega, Miguel de Cervantes and Luis de Góngora.

SPAN 723. Golden Age Drama. 3 hr.; 3 cr. Prereq.: SPAN 700. A survey of the Spanish theatre of the Renaissance and Baroque periods. The development of a national theatre will be explored from the turn of the 16th century (Encina) to Calderón. Although the focus of the course will be the Comedia nueva, other genres will include the Egloga, Auto sacramental, Farsa, and Entremés.

SPAN 724. Miguel de Cervantes. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700 or exemption. Study of the works of Miguel de Cervantes other than *Don Quixote*. Special attention will always be given to the issue of literary genres, narrative techniques, and the historical-cultural context.

SPAN 725. *Don Quijote*. 3 hr.; 3 cr. Prereq.: SPAN 700. The most universal of Spanish works of art, *Don Quijote* will be mainly read as a book on books. This perspective will help us study the literary phenomenon itself. The novel will be a vehicle for the examination of the plentiful, enduring uses of different literary genres in their historical perspective and in their social functions and uses.

SPAN 726. Spanish Literature of the Eighteenth and Nineteenth Centuries. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700 or exemption. The course considers the development of liberalism and a new national identity in Spanish literature from the Age of Enlightenment through the post-colonial period. It will cover eighteenth-century essayists, the most important figures of Spanish romanticism (M.J. de Larra, J. Espronceda), and major exponents of realist fiction, in particular Benito Pérez Galdós and Leopoldo Alas, "Clarín."

SPAN 728. The Generation of 1898 and the Beginning of the Twentieth Century. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700 or exemption. Study of authors spurred into literary activity by the impact of Spain's colonial losses in Cuba, Puerto Rico, and the Philippines. Emphasis on historical contexts, aesthetic movements in Europe, artistic influences from Latin America, and the critical ethos expressed by this "generation": contrast/comparison of *Modernismo y Noventaiochismo,* the introduction of existentialism, the roots of *krausismo,* and the beginning of contemporary theatre.

SPAN 730. Literature of the Franco Era. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700 or exemption. The difficult years: A study of the Fascist and Anti-Fascist literature of the Franco era with an emphasis on the writers of *Inner Exile* and the emergence of an extremely important cadre of women writers. An analysis of the development of *compromiso social* in the various genres: *la poesía social, la novela social, y el teatro social.* Works studied will include Dámaso Alonso, José Hierro, Antonio Buero Vallejo, Alfonso Sastre, Juan Goytisolo, Carmen Laforet, Ana María Matute, Miguel Delibes, Carmen Martín Gaite, etc.

SPAN 732. Spanish Literature Since the Transition. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700 or exemption. This course examines the cultural change from dictatorship to democracy in Spain, and how literary practice can defend an ethical conscience based on a critical individualism against the tendency to homogenize, force consensus, and relinquish independence. Works read might include Luis Goytisolo, Antonio Muñoz Molina, Lourdes Ortiz, Esther Tusquets, Manuel Vázquez Montalbán, Lucía Extebarría, Fernando Savater, etc.

SPAN 750. Early Colonial Literature in Latin America. 2 hr. plus conf.; 3 cr. An overview of the Latin American literary production from the discovery (1492) to the end of the seventeenth century. The course will cover the *Crónicas de Indias,* historical texts written by the Spanish Conquistadores (e.g., Hernán Cortés), and the friars (e.g., Fray Bartolomé de las Casas). Then, it will focus on the works of Criollo writers (e.g., El Inca Garcilaso de la Vega), with an emphasis on the main exponents of El Barroco de Indias (e.g., Sor Juana Inés de la Cruz), which recreated Spanish Baroque styles, while introducing new themes that reflected Latin American reality.

SPAN 751. Vision of the Vanquished: Indigenous and Mestizo Voices of XVI- and XVII-Century Mexico and Peru. 3 hr.; 3 cr. Prereq.: SPAN 700. Texts produced by indigenous and mestizo-lettered authors, collected by clergy in some cases, during the early colonial times in Mexico and Peru.

SPAN 752. Eighteenth- and Nineteenth-Century Latin American Literature. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700 or exemption. A survey of Latin American literature from the eighteenth and nineteenth centuries. Some of the writers to be studied are: Andrés Bello, Domingo Faustino Sarmiento, and Gertrudis Gómez de Avellaneda. The course will cover a variety of topics, including recreating Neoclassicism, Romanticism, and Realism in the New World; emerging voices of the Criollos; and colonialism, nationalism, and independence.

SPAN 753. Great Works of Spanish American Romanticism: In Search of a Spanish-American Identity. 3 hr.; 3 cr. Prereq.: SPAN 700. Texts produced in Latin American during the XIX century by criollo authors in search of a new Spanish American identity.

SPAN 754. Modernismo in Latin American Literature. 2 hr. plus conf.; 3 cr. A survey of Latin American Modernista literature (from the 1870s to the

end of the 1920s), with an emphasis on poetry (e.g., Rubén Darío and Manuel Gutiérrez Nájera) and essays (e.g., José Martí and José Enrique Rodó). As a reaction to Positivism as well as Romanticism, Modernista writers initiated a movement of radical artistic and intellectual renovation, and aimed at creating a very refined literary discourse that would better express their redefined ideals of beauty. They covered a variety of themes, such as eroticism, exoticism (e.g., Orientalism), spiritualism, and the changing role of the artist in the new industrial society, etc.

SPAN 756. From the Avant-Garde to the Postmodern. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700 or exemption. This course spans the first six decades of the twentieth century. It covers the works of major authors in their respective genres: the "isms" (Jorge Luis Borges and Vicente Huidobro), the various phases of Pablo Neruda's trajectory, the re-emergence of feminist poetry, the decline of gauchoesque drama (Florencio Sánchez, Samuel Eichelbaum) leading to "reflexive" theatre. Other aspects covered are the novelists' reinterpretation of indigenous Latin American cultures (Alejo Carpentier, Carlos Fuentes), and the surge of the "Boom" (Julio Cortázar, Gabriel García Márquez, etc.).

SPAN 758. Latin American Literature into the Twenty-First Century. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700 or exemption. This course explores the works of the latest writers up to the present. It follows the evolution of the concepts and techniques of the "post-boom," the "post-modern" and the "novísma literatura." The course follows the changes in the literary trajectory of long-standing, acclaimed authors, as well as the ruptures that produced new alternatives: the writings of exile, testimonials, ethnic regionalism, journalistic fiction, detectivesque and cinematic narratives.

SPAN 760. Literature of the Hispanic Caribbean. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700 or exemption. A survey of the literature of the Hispanic Caribbean from the nineteenth century to the present. The reading list will include texts by renowned writers such as José Martí, Salomé Ureña de Henríquez, Eugenio María de Hostos, Julia de Burgos, Nicolás Guillén, and Juan Bosch. Some of the themes to be explored are colonialism and national identities; racism, poverty, and socio-political repression as causes of exile.

SPAN 770. Introduction to Literary and Cultural Theories. 2 hr. plus conf.; 3 cr. Prereq.: To be taken in the first year of graduate study. The course will provide a brief overview of traditional approaches to key Hispanic texts, introduce students to the main tenets of contemporary theory (cultural studies, postcolonialism, New Historicism, materialism, gender studies, postmodernism, periodization, narratology, psychological approaches, post-structuralism, etc.), and apply those concepts through analysis of critical articles about Hispanic texts.

SPAN 772. Peninsular Spanish Culture and Thought. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700. This course will address wide cultural issues ranging from the Medieval religious and ethnic interculture, the Renaissance effect in different cultural manifestations, the ideology of the conquest and colonization of America, and the changing of the political and cultural landscape in the 20th century.

SPAN 774. Latin American Culture and Thought. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700 or exemption. The course will provide an overview of the main topics and trends in the development of Latin American culture, civilization, and thought. It will take into account the fundamental structures of pre-conquest society, the establishment of colonial domination, and the transition to forms of neocolonialism, the formation of hybrid cultures and ethnicities, and the socio-cultural profile of contemporary urban life.

SPAN 776. Latino/Latina Writers in the United States. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700 or exemption. An overview of the culture and literary production of Latinos/as in the United States. The course will focus on works of fiction written by authors from diverse ethnic, racial, and socioeconomic backgrounds, and who have roots in several Latin American countries such as Puerto Rico, the Dominican Republic, and Colombia. Some of the topics to be explored are bilingualism and multiculturalism; immigration and the redefinition of national identity; preserving Hispanic culture vs. assimilating to the "American way of life," etc.

SPAN 778. Cinema and Literature in the Hispanic World. 2 hr. plus conf.; 3 cr. The course will examine different aspects of Hispanic cinema and its relationship to literature. The approaches include: (1) Movements (neo-realism, new wave, etc.); (2) Genres; (3) Literature into films; (4) The cinema as a sociocultural phenomenon; (5) Cinematic stylists. Films will be shown in the original language. Students will be expected to produce substantial works of film analysis.

SPAN 780. Independent Study. Hr. to be arranged; 3 cr. Prereq.: Second-year standing and permission of the graduate advisor and instructor. Tutorial for work in a special subject not covered by regular course offerings. Open only for candidates for the Master of Arts program in Spanish.

SPAN 783. Research Seminar: Hispanic Linguistics. 2 hr. plus conf.; 3 cr. Prereq.: three courses. This course introduces standard methodologies for planning, conducting, interpreting, and reporting research in an applied area of Hispanic linguistics. Course activities will include reading texts and articles, completing assigned exercises, participating

in group discussions, criticizing research articles, and conducting formal research projects. Students are required to focus the research project around their areas of interest. Students can only take this seminar twice, provided that the topics are different.

SPAN 784. Research Seminar: Hispanic Literature. 2 hr. plus conf.; 3 cr. Prereq.: SPAN 700 or exemption, plus 6 hours of graduate course work (i.e., two linguistics and/or literature courses). Students are advised to take SPAN 770. Introduction to Literary and Cultural Theories, as part of the 6-credit prerequisite. A series of courses devoted to the study of literature and culture with perspectives that cut across the conventional genre/period/geographic divides. These courses will include, for example, interdisciplinary, comparative, interatlantic approaches to Hispanic literatures, or track a genre across history, or deal with unconventional topics in literature, or be devoted entirely to the study of one author from different perspectives. Students can only take this seminar twice, provided that the topics are different.

SPAN 791, 792. Thesis. 3 cr. each sem. Individual study under the supervision of an instructor, of a topic agreed on, normally involving research in literary history or criticism, and resulting in an acceptable thesis. No credit will be given for these courses until the thesis has been approved. No more than three credits in each course may be counted toward the degree.

History

Chair: Kristin Celello

Director of Graduate Studies: Grace Davie

Dept. Office: Powdermaker Hall 352, 997-5350

The Master's Program in History can meet a variety of intellectual and professional needs: as preparation for doctoral study, as the academic requirement for permanent New York State teacher certification, and as an opportunity for students to upgrade their current job credentials and enrich their intellectual life. The department's graduate faculty have outstanding records of publication in many areas.

The history department offers the MA degree in History, as well as a joint MLS/MA degree in Library Science and History. We partner with the Department of Secondary Education and Youth Services on the MSEd degree. The history department also offers an accelerated graduate track (Accelerated MA) that allows qualifying students to apply credit for advanced courses taken as undergraduates to both their bachelor's and master's degrees.

FACULTY

Celello, Kristin, Chair, *Associate Professor,* PhD 2004, University of Virginia: United States women's history

Davie, Grace, Director of Graduate Studies, *Associate Professor,* PhD 2005, University of Michigan at Ann Arbor: African history

Allen, Joel, *Professor,* PhD 1999, Yale University: ancient history

Antonova, Kate, *Associate Professor,* PhD 2007, Columbia University: Russian history

Bemporad, Elissa, *Professor,* PhD 2006, Stanford University: Eastern European Jewish history and the Holocaust

Bregoli, Francesca, *Associate Professor,* PhD 2007, University of Pennsylvania: Sephardic Jewish history

Conolly-Smith, Peter, *Associate Professor,* PhD 1996, Yale University: United States immigration history

Covington, Sarah, *Professor,* PhD 2000, City University of New York: British and Irish history

Daniel, Evan, *Lecturer with CCE,* PhD 2011, New School: American and Latin American history

Frangakis-Syrett, Elena, *Professor,* PhD 1985, King's College, University of London: modern Greek history

Franklin, Arnold, *Associate Professor,* PhD 2001, Princeton University: ancient and medieval Jewish history

Freeman, Joshua B., *Distinguished Professor,* PhD 1983, Rutgers University: American labor history

Freundschuh, Aaron, *Associate Professor*, PhD, University of California at Berkeley: French history

Giardina, Carol, *Associate Professor,* PhD 2004, City University of New York

Matos Rodríguez, Félix V., Chancellor, *Professor,* PhD 1994, Columbia University: Latin American and Puerto Rican history

Ort, Tom, *Associate Professor,* PhD 2005, New York University: central European history

Placido, Sandy, *Assistant Professor,* PhD 2017, Harvard University: Latin American history

Richardson, Kristina, *Associate Professor,* PhD 2008, University of Michigan: history of Islam

Rossabi, Morris, *Distinguished Professor,* PhD 1970, Columbia University: Chinese history, Central Asian and Mongol history

Schlichting, Kara, *Assistant Professor*, PhD 2014, Rutgers University: history of New York, urban and environmental history

Sneeringer, Julia, *Professor,* PhD 1995, University of Pennsylvania: German history

Tavarez, Fidel, *Assistant Professor,* PhD 2016, Princeton University: Atlantic, global, and Latin American history

Vellon, Peter, *Associate Professor,* PhD 2003, City University of New York: Italian-American history

Wintermute, Bob, *Professor,* PhD 2006, Temple University: United States military and foreign policy history

Wolfe, Michael, *Professor,* PhD, Johns Hopkins University: late medieval and early modern France

Wu, Frank H., President, Professor, JD, University of Michigan, 1991: legal history

MASTER OF ARTS PROGRAM

Within the master's program, the department follows the contemporary trend in going beyond a national and Western framework of study and employs a variety of approaches—political, economic, social, and intellectual—requiring a considerable methodological range. The department aims to acquaint students with the goals, methods, and results of historical research, especially analysis of primary source evidence and historiography.

The department directs the attention of students to the possibilities of combining work in history with work in other departments and to the creation of individualized programs of study (to be arranged in consultation with the departmental director of graduate studies). Attention is also directed to history courses that may be useful in related fields such as library science, museum management, historical preservation, and the like.

Requirements for Matriculation

These requirements are in addition to the general requirements for admission.

1. The applicant must be approved by the department's MA Admissions Committee. Approval is based on the satisfactory completion of sufficient work in history or related fields to pursue graduate work in history.
2. An applicant whose undergraduate preparation is considered inadequate by the department's committee may be admitted as a qualifying nonmatriculated student. Satisfactory completion of approved courses will be required before the student can matriculate. Undergraduate courses taken to make up for inadequate preparation cannot be counted toward the MA degree. Graduate courses, provided they are approved by the director of graduate studies, may be counted toward the MA degree. In some instances, students whose undergraduate preparation in history is judged inadequate may be required to take additional hours in graduate history to remove those deficiencies.
3. Applicants whose first language is not English and who were educated in a country where English is not the official language must submit proof of having achieved a score of 575 or better on the Test of English as a Foreign Language (TOEFL).

Research and Professional Tracks

The MA in History can be completed by either of two tracks: the Research Track or the Professional Track. The Research Track is designed for students who have an interest in pursuing the PhD, working as professional historians at the university level, or simply the desire to develop their research skills and writing abilities during several months to one year of independent research and writing after their coursework is completed. The Professional Track is designed for those interested in history beyond the undergraduate level who, for whatever reason, do not have the time or ability to conduct the independent research and multiple revisions of thesis chapters required to complete the MA thesis. The Professional Track is ideal for students who view the MA as their terminal degree in the field, and it is often useful for teachers at the elementary and secondary level.

Students are encouraged to consult with the Director of Graduate Studies about their initial preferred course of study within 18 credits. Students interested in pursuing the Research Track must apply to the Director of Graduate Studies before their last semester of classes and before entering HIST 796. For more information on this application, see the department website.

All MA students (Research and Professional tracks) are required to take and pass a first comprehensive exam by the end of 18 credits. Professional Track students must pass a second comprehensive exam near or at the end of 36 credits. These exams are given in the context of courses, administered during the scheduled final exam period, and proctored by the professor teaching the course. Students will take comprehensive exams in a "field" that covers a general area in history, builds on the course syllabus, and reflects additional reading. MLS/MA students are exempt from both exams. Only full-time members of the History Department administer these exams. No comprehensive exams may be taken during summer courses.

Requirements

The following are the requirements for the Research Track for students who matriculated before Fall 2018.

1. Thirty credits of coursework, which must include HIST 791 (3 cr.) and HIST 796 (3 cr.).
2. An approved prospectus for the master's thesis. The prospectus is a detailed plan of what the student hopes to achieve with the thesis; the composition of a prospectus, typically around 12–15 pages, is largely the goal of HIST 796. The student must formally present, or "defend," the prospectus at a meeting of two faculty readers, who must approve it for the student to advance.
3. A master's thesis. The thesis is an original historical argument based on extensive research in both primary sources and secondary scholarship. It is written in consultation with a faculty advisor, who must formally approve the final draft. It must be a minimum of 16,000 words (approximately 65 pages).

The following are the requirements for the Research Track for students who matriculated in Fall 2019 or after.

1. Thirty-three credits of coursework, which must include HIST 791 (3 cr.), HIST 796 (3 cr.), and one independent study HIST 798.3 (3 cr.) taken with the student's thesis advisor in preparation for graduation.
2. An approved prospectus for the Master's thesis. The prospectus is a detailed plan of what the student hopes to achieve with the thesis; the composition of a prospectus, typically around 12–15 pages, is largely

the goal of HIST 796. The student must formally present, or "defend," the prospectus at a meeting of two faculty readers, who must approve it for the student to advance.

3. A Master's thesis. The thesis is an original historical argument based on extensive research in both primary sources and secondary scholarship. It is written in consultation with a faculty advisor, who must formally approve the final draft. It must be a minimum of 16,000 words (approximately 65 pages). During the required independent study, students will consult with their advisor and finalize revisions of their thesis. This course should be taken after the student passes the prospectus defense exam (discussed above).

4. First Comprehensive Exam. At or near 18 credits, students must pass one comprehensive exam, regardless of the student's intention to pursue the Research Track (see below).

The following are the requirements for the Professional Track.

1. Thirty-six credits of coursework, which must include HIST 791 (3 cr.).
2. Comprehensive exams. Students must pass two comprehensive exams in two broadly defined subject areas, which may be determined in consultation with the Director of Graduate Studies and relevant faculty members. Professional Track students take their first exam at or near 18 credits; the second is taken at or near 36 credits.
3. Capstone project. Students must complete a capstone project, which may be determined in consultation with the Director of Graduate Studies. The capstone is typically an electronic portfolio of papers that a student has written in coursework. An oral presentation delivered in a departmental context, conference paper, or a collection of other examples of historical work may also be considered, with approval from the Director of Graduate Studies.

Departmental Regulations for the Master of Arts Degree

A student may take usually no more than three courses of one semester each outside the History Department and only with the formal consent of the Director of Graduate Studies.

GRADUATE PROGRAM IN LIBRARY SCIENCE AND HISTORY (MLS/MA)

The MLS/MA is offered jointly by the Graduate School of Library and Information Sciences (GSLIS) and the History Department. The joint degree offers students the opportunity to develop skills in the methodologies of both library science, including archival management, and historical research. Graduates will be well suited for professional careers in academic libraries, museums, oral history, document conservation, and public or private archives and for admission into PhD programs in either History or Library Science

The 54-credit program can be completed in three years of full-time study. Students should consult advisors in either department in selecting courses relevant to their research and career goals. Students are also strongly encouraged to consider internships at local archives, museums, or academic institutions, for which either GSLIS or History credit will be awarded. Toward the end of the program, students will undertake a six-credit final thesis or project, under the advisement of faculty from both GSLIS and History.

Requirements (totaling 54 credits):
LBSCI 700. The Technology of Information
LBSCI 701. Fundamentals of Library and Information Science
LBSCI 702. Information Sources and Service: General
LBSCI 703. Introduction to Organization of Information
Any other four LBSCI graduate courses
HIST 791. Introduction to Historical Research
Any other seven HIST graduate courses
Thesis/project (6 credits): LBSCI 709. Research in Library and Information Studies and HIST 792. Research and Writing

COURSES FOR MASTER OF SCIENCE IN EDUCATION DEGREE

1. Candidates in this program should confer with a School of Education advisor as to which history courses best meet the requirements of this program.
2. The History Department offers two courses especially designed to strengthen the history background of MS in Ed students specializing in secondary social studies: HIST 795 and 797 (see course descriptions).

ACCELERATED MA DEGREE IN HISTORY

With the permission of the Director of Graduate Studies (DGS), as many as three (3) graduate courses may be taken as part of the completion of the BA degree in History. These courses (1) may satisfy the requirement for one course in upper-division non-Western history and/or (2) may count toward the student's concentration.

Applicants must have a 3.7 GPA in History to apply. They are required to submit the following by email attachment to the DGS (grace.davie@qc.cuny.edu): (1) a writing sample of two pages or more demonstrating some of the student's best work in a QC History course; (2) the full names of two History Department faculty members or instructors who have agreed to serve as the student's recommenders (no formal letter of recommendation needed); and (3) a CUNY ID number. Applicants may also submit a paper copy to the History Department's main office if they wish, but only in addition to the email application. Applications will be reviewed by the History Department's MA Admissions Committee on a rolling basis (no application deadline).

Students approved by the DGS to begin the Accelerated MA in History may take any History 700-level course except HIST 791, 792, or 796.

COURSES

Note: Prior to selecting courses for registration, students must check the courses listed below with department announcements distributed shortly before registration and with latest course offerings posted in the department.

HIST 705. History of World War II. 2 hr. plus conf.; 3 cr. Explores World War II as a military as well as a cultural phenomenon. The course takes a global perspective, examining the events and historiography on the war in various national theaters. It also explores World War II as a race war, a site of competing memories, and delves into debates over the morality of tactics such as the strategic bombing campaigns over Germany and Japan.

HIST 706. Military Theory and History. 2 hr. plus conf.; 3 cr. Focuses on how military theory has evolved from the ancients until the current day. We will examine various military thinkers and their ideas on how to effectively wage war, the human costs of war, and how at times theory and reality clash. We shall also consider the major threads of historiography of military history and the ethics of war.

HIST 707. War in European History. 2 hr. plus conf.; 3 cr. Studies in history of European warfare from antiquity to the modern period.

HIST 707.1. War in American History. 2 hr. plus conf.; 3 cr. Studies in the history of American warfare from the colonial period to the present. Emphasis will be placed on the growth and functions of American military institutions.

HIST 708. Arab-Israeli Wars 1948–73. 2 hr. plus conf.; 3 cr. Focuses on the events, circumstances, and personalities that led to establishment of the state of Israel, from the nineteenth-century rise of Zionism through into the twentieth century. Special emphasis will be placed on the Arab-Israeli conflict, wars with Egypt and Jordan, history of the Israeli-Palestinian conflict, and the United States' role in Israel.

HIST 710. Studies in Ancient History. 2 hr. plus conf.; 3 cr. Readings and discussion of selected topics in ancient history. Special emphasis is placed on historical method and interpretation.

HIST 711. Urbanism in Antiquity. 2 hr. plus conf.; 3 cr. Surveys the evolution of cities in the Greek and Roman worlds, from the Bronze Age through Late Antiquity. Examining cities offers a way to explore issues not covered in the typical sources on the ancient world, such as social relations, the economy, religion, culture, and the lives of non-elites as well as elites.

HIST 713. The Church in the Middle Ages. 2 hr. plus conf.; 3 cr. The history of Christianity in Western Europe to the eve of the Protestant Revolution, with attention to the Church's role in intellectual, social, and political life, and to Medieval religious organization, doctrine, and dissent.

HIST 714. Studies in Medieval History. 2 hr. plus conf.; 3 cr. Readings and discussion of selected topics in medieval history.

HIST 715. Cultures and Peoples of Eastern Europe. 2 hr. plus conf.; 3 cr. Prereq.: None. Explores the history of the peoples, states, and societies in Eastern Europe from early modern period to World War II. Particular focus will be paid to lands comprising modern-day Poland, Ukraine, Lithuania and Belarus, including the Jewish minority. Topics include: national identity formation and ethnic conflict; religious and literary movements; nation-state building; and dynamics between Marxism, Nationalism, Communism and Fascism.

HIST 716. The Idea of Eastern Europe. 2 hr. plus conf.; 3 cr. Prereq.: None. Inquires into the idea of "Eastern Europe"—its origins, the purposes it serves, how people have used and understood it. Engages with questions such as: Imagine Europe to be divided into East and West? What does this way of thinking clarify or obscure and what are its political consequences?

HIST 719. Studies in Modern French History. 2 hr. plus conf.; 3 cr. Readings and discussion of selected topics in recent French history.

HIST 720. Renaissance and Reformation Europe. Explores continental Europe from approximately 1350 to 1700, focusing on the intellectual rediscovery of the ancient world; transformations in art and culture; explorations of "the New World"; religious wars; and revolutions in science and medicine as well as the persistence of magic and heterodox beliefs. Special attention will also be given to research methods and sources.

HIST 721. Early Modern England. 2 hr. plus conf.; 3 cr. Introduces students to English history from the Tudors through the Stuart dynasty, including the rule of Oliver Cromwell, and the Restoration of Charles II. Special focus will be given to politics, religion, society, and civil war; to England's fraught relationship with Ireland and Scotland; and to present-day debates about this important historical period.

HIST 722. History of the Book. 2 hr. plus conf.; 3 cr. This class will introduce the history of the book as a material object by investigating the ways in which form and technology influence the production, control, and distribution of knowledge. After an exploration of the changing formats of books over the centuries, we will focus on the early modern transition from manuscript to print, the emergence of the author figure, the relationship between books and readers, the book trade, and ways in which knowledge was stored and organized in the past. We will conclude with a reflection on the future of the physical book and of libraries.

HIST 723. Great Britain in the Victorian Age. 2 hr. plus conf.; 3 cr. Studies in the development of British political and social institutions and in the growth of British power during the Victorian period.

HIST 724. Studies in Modern British History. 2 hr. plus conf.; 3 cr. Readings and discussion of selected topics in British history since the Victorian era.

HIST 725. The World Wars of the Twentieth Century. 2 hr. plus conf.; 3 cr. Emphasis is on processes of change affecting the political, economic, and social structure of Europe, science and technology, and Europe's international relationships.

HIST 726. Topics in World Slavery. 2 hr.; 3 cr. Introduces students to topics in the history of world slavery, within but especially beyond the United States. Special attention will be paid to slavery, resistance, abolition, and the memory of slavery in Africa, Latin America, the Caribbean, and the Indian Ocean World, as well as debates among scholars about comparative history, macro-history, and micro-history.

HIST 727. Europe and the Contemporary World: 1945 to the Present. 2 hr. plus conf.; 3 cr. Emphasis on postwar European political and social history, including the division of Europe, Cold War, Americanization, consumer culture, decolonization, social movements, dissidents in East Europe and the collapse of Communism.

HIST 728. The Collapse of the Soviet Union. 2 hr. plus conf.; 3 cr. This course explores the causes and consequences of the collapse of the Soviet Union in 1991. It considers a variety of interpretations of the causes of collapse (nationalism, ideology, technology, international relations, economics, etc.), the evolving historiography on the subject, and the effects of the USSR's collapse on its successor states as well as global politics.

HIST 729. The Cold War: Communism vs. Democracy. 2 hr. plus conf.; 3 cr. Focuses on the period 1945–1990 when a bipolar confrontation developed between the United States and the Soviet Union, characterized by propaganda, competing military alliances, arms races, nuclear brinksmanship and proxy wars. The course will analyze historians' competing interpretations of the origins and expansion of the Cold War from the end of World War II through the collapse of communism.

HIST 730. US–Israeli Relations 1948–Present. 2 hr. plus conf.; 3 cr. The United States was the first country to recognize Israel in 1948 and their support has been crucial to Israel's survival ever since. Course will explore this relationship in terms of strategic and national interests, moral and philosophical debates, domestic politics on both sides, and the U.S. role in the Middle East peace process.

HIST 731. Italian Immigration to the United States. 2 hr.; 3 cr. Examines Italian immigration to the United States from the 1890s to the present with a focus on the process of immigration, race-based immigration restrictions, labor relations, political radicalism, family structures, and the two world wars. Students will learn about fascism, inter-generational conflict, social mobility, ethnic backlash in the era of the Black Power Movement, the making of a unique Italian-American identity.

HIST 732. Russian History to 1917. 2 hr. plus conf.; 3 cr. A study of the principal political and social developments in Russia from Peter the Great to the October Revolution.

HIST 733. Studies in Soviet History. 2 hr. plus conf.; 3 cr. Readings and discussion of selected topics in Russian history since 1917.

HIST 734. Women in Modern European History. 2 hr. plus conf.; 3 cr. This course is intended as an introduction to European women's history from the French Revolution through the 1970s and 1980s. Readings survey the general history of women in western and eastern Europe, as well as outline recent methods of inquiry and topics of debate. The course takes a thematic approach within a roughly chronological framework.

HIST 735. Studies in German and Central European History. 2 hr. plus conf.; 3 cr. Selected topics in German, Austrian, and East Central European history. May be repeated when offered with a different topic.

HIST 736. Modern Italy. 2 hr. plus conf.; 3 cr. The development of modern Italy from the late 18th century to the founding of the postwar Italian Republic. The theme is the search for national identity. An examination of the rise of Italian national consciousness, the movement for unification, and the process of state-building, followed by a study of the Liberal State (1870–1915), including such issues as parliamentary development, the Southern Problem, and the rise of the Left. The course then looks at the rise of Fascism and Mussolini's regime, World War II and the anti-Fascist resistance, and the origins of the Republic.

HIST 738. Chinese History in the Nineteenth Century. 2 hr. plus conf.; 3 cr. An examination of the political, social, and economic developments from the eve of the Opium War to the Boxer Uprisings.

HIST 739. Chinese History since 1900. 2 hr. plus conf.; 3 cr. A study of important developments from the Boxer Uprisings to the present.

HIST 740. Memory and History: Museums, Monuments, Collective Memory, and Public Controversies. 2 hr.; 3 cr. Explores the contested legacy of the Second World War in Europe and the diverse ways in which it is remembered. Focuses on controversial public memories including the resistance myth, France's Vichy Syndrome, German memory of aerial bombardment, the question of Polish complicity in Nazi crimes, and the place of the Holocaust in pan-European memory debates.

HIST 742. History of Japan. 2 hr. plus conf.; 3 cr. Traces the major changes in Japanese history, with an emphasis on the more recent period.

HIST 745. Studies in Latin American History. 2 hr. plus conf.; 3 cr. Readings and discussions of selected topics in the history of Latin America. Content will vary and, with permission of the instructor and graduate advisor, the course may be repeated for credit.

HIST 747. The Political, Economic, and Social History of Latin America to 1825. 2 hr. plus conf.; 3 cr. A survey of the institutional, economic, and societal forces shaping Latin America from the discovery and conquest to the era of national emancipation.

HIST 748. The Political, Economic, and Social History of Latin America Since 1825. 2 hr. plus conf.; 3 cr. A survey of the institutional, economic, and societal forces shaping the nations of Latin America during the national period.

HIST 750. The History of Brazil. 2 hr. plus conf.; 3 cr. The political, cultural, social, economic, and intellectual history of Brazil from the colonial period to the present.

HIST 753. Studies in Brazilian History. 2 hr. plus conf.; 3 cr. Readings and discussions of selected topics in the history of Brazil.

HIST 755. Nationalism in South Asia. 2 hr. plus conf.; 3 cr. Examines the phenomenon of nationalism through the lens of South Asia (India and neighboring countries) from its 18th-century roots to the political conflicts of the present. Topics include nationalism's connections with race and gender, violence and nationhood, and the colonial roots of nationalism in the Third World.

HIST 756. Studies in Jewish History. 2 hr. plus conf.; 3 cr. Readings and discussion of selected topics in Jewish history. (Reading knowledge of either Hebrew or Yiddish is desirable but not required.)

HIST 757. History of Modern Genocide. 2 hr. plus conf.; 3 cr. Explores the emergence, evolution and causes of genocide in the twentieth century. Examples will be drawn from colonial genocides, the mass murder of Armenians, the Nazi Holocaust of Jews, Sinti and Roma, Soviet massacres, genocides in Cambodia and Rwanda, and "ethnic cleansing" in the former Yugoslavia.

HIST 758. Gandhi and Nonviolence. 2 hr. plus conf.; 3 cr. The history of violence and nonviolence in the context of colonialism and nationalism, with an emphasis on the life of M.K. Gandhi, his role in political and social movements, his theoretical writings, and his wider influence.

HIST 761. American Colonial Society. 2 hr. plus conf.; 3 cr. Studies of the English colonies in North America from the beginnings of exploration and settlement to the eve of the American Revolution. In the perspective of related European developments, stress is placed on political, social, and economic growth and transformation.

HIST 762. The Era of the American Revolution. 2 hr. plus conf.; 3 cr. An analysis of the English and American scene from 1750 to 1789. The focus is upon the events leading to the American Revolution, the War of Independence, the framing of the Constitution, and the foreign and domestic affairs of the Continental Congress.

HIST 763. The United States in the Early National Period, 1789–1828. 2 hr. plus conf.; 3 cr. An examination of the Federalist and Jeffersonian administrations of these years. Special attention is given to economic, ideological, sectional, and international problems that found expression in constitutional issues, the rise of parties, and early formulation of national policy.

HIST 766. Studies in Afro-American History. 2 hr. plus conf.; 3 cr. Readings and discussion of selected topics in the history of black people in America. May be repeated for credit with consent of instructor if topic changes. Spring

HIST 767. The Civil War and Reconstruction. 2 hr. plus conf.; 3 cr. An examination of conflicting interpretations of the causes of the war, the course of the war, and the problems of reconstruction.

HIST 769. Studies in the Progressive Movement. 2 hr. plus conf.; 3 cr. An investigation of the sources of the reform impulse and its influence on American development from the Spanish-American War to World War I.

HIST 771. The Depression and the New Deal. 2 hr. plus conf.; 3 cr. Political, social, and economic changes in the United States from 1929 to the outbreak of World War II.

HIST 772. Making of the American Empire. 2 hr. plus conf.; 3 cr. A study of the role of foreign policy in the expansion of the United States from the Revolution to the Spanish War.

HIST 773. The United States in World Affairs. 2 hr. plus conf.; 3 cr. The history of American foreign policy since 1895. The emergence of the United States as a world power, and selected problems in American diplomacy arising from war and peace in the twentieth century.

HIST 774. History of American Business. 2 hr. plus conf.; 3 cr. The history of business in American life, emphasizing the development of organization systems and management techniques as well as the interrelation of business with other social institutions.

HIST 775, 776. Constitutional History of the United States. 2 hr. plus conf.; 3 cr. each semester. The historical background of the Constitution and its evolution

through the leading decisions of the Supreme Court. Emphasis will be given to the role of the Court in the development of the American federal system, the protection of rights guaranteed by the Constitution, and the jural theories under which the Court has operated. HIST 775 covers the period to 1865; HIST 776 from the Civil War to the present. HIST 775–Fall; HIST 776–Spring

HIST 777. The City in American History to 1890. 2 hr. plus conf.; 3 cr. An examination of the origins, development, and significance of American cities and their role as "crucibles of culture" from the colonial era to the late nineteenth century.

HIST 777.1. The City in American History since 1890. 2 hr. plus conf.; 3 cr. Studies in the transformation of the metropolis in twentieth-century America.

HIST 778. The United States Bill of Rights, 1789 to the Present. 2 hr. plus conf.; 3 cr. This course traces the historical origins of the United States Constitution. The main focus will be on the United States Supreme Court decisions that extend the provisions of the Bill of Rights, originally applicable only to the federal government, to the states as well.

HIST 779. History of Women in the Modern United States. 2 hr. plus conf.; 3 cr. Examines women's social, political, cultural, and economic position in American society from 1920 (the passage of suffrage) through the present. Among the topics considered are notions of women's roles in the public and private sphere; how gender intersected with categories of race, class, ethnicity, and religion; women's lived experience; and how larger forces affected women's abilities to act in the public sphere.

HIST 780. The Family in U.S. History. 2 hr. plus conf.; 3 cr. Examines how familial roles and expectations have changed over the course of U.S. history, both in terms of private relations within families and the family's relationship to forces such as politics, the law, social movements, and the economy.

HIST 781. Studies in American Social, Intellectual, and Cultural History to 1870. 2 hr. plus conf.; 3 cr. Readings and discussion of selected topics in the development of American society and changing American attitudes and opinions.

HIST 783. New York City in the Colonial and Early National Periods. 2 hr. plus conf.; 3 cr. A study of the history, role, and influence of New York City during the formative years of American development. Attention is given to the principal archival and manuscript sources.

HIST 784. Sources of New York City History. 2 hr. plus conf.; 3 cr. An intensive examination of the chief archival resources basic for the study of the early history of New York City. Research papers and reports are prepared and presented by the student.

HIST 785.1. Formation of Modern American Culture I. 2 hr. plus conf.; 3 cr. Charts the development of American cultural values and practices from the onset of modernity through immediate post-WWII period. Equal emphasis on high and mass culture; on primary and secondary readings. Focuses on consumerism, art, propaganda, advertising, sports, film, and youth culture viewed through the lenses of race, ethnicity, class, and gender.

HIST 785.2. Formation of Modern American Culture II. 2 hr. plus conf.; 3 cr. Prereq.: HIST 785.1 recommended. lnvestigates post-WWII factors in the formation of modern American culture by examining Beats and Bop, Abstract Expressionism and Pop, television, advertising, civil rights, feminism and identity politics, the birth of the postmodern, cable TV, the digital revolution, and the Internet.

HIST 786. The American Urban Environment, 1830–1930. 2 hr. plus conf.; 3 cr. A history of the urban physical environment and the efforts to shape it since the early nineteenth century. Emphasis will be placed upon public health, civil engineering, landscape architecture, architecture, and early city planning.

HIST 787 Advanced Internship. Minimum of 40 hours on site per week; 3 cr. Prereq.: Good standing in History MA program, and permission of Director of Graduate Studies. A semester-long internship at a relevant site such as an archive, library, museum, historical site, or other organization. Purpose is to provide hands-on experience working with the collection or preservation of historical materials. The student must devise a program of internship work in consultation with a faculty sponsor and a representative of the host organization. The student must prepare and present a substantive final report, plus interim reports as requested. May only be counted once toward fulfillment of coursework for the History MA degree.

HIST 788. The United States and the Vietnam War. 2 hr. plus conf.; 3 cr. Explores the history of the U.S.'s role in the Vietnam War with an emphasis on the impact of the war on the political, social, and cultural life of the United States.

HIST 789. The United States Since 1945. 2 hr. plus conf.; 3 cr. Examines major developments in the history of the U. S. from the end of World War II to the present. Major themes include the dynamics of economic growth and stagnation, the politics of liberalism and conservatism, the struggles for political and social equality by African Americans and other groups, cultural change, the Cold War, the War in Vietnam, and the militarization of American foreign policy.

HIST 790. Studies in the History of Africa. 2 hr. plus conf.; 3 cr. Readings and discussion of selected topics in the development of Africa from the early Bantu dispersals to the era of independence. With the consent of the instructor, the course may be repeated for credit.

HIST 791. Introduction to Historical Research. 2 hr. plus conf.; 3 cr. An introduction to historiography, historical primary and secondary sources, research

methods, and the writing of history. Primary sources will include letters, diaries, documents, and contemporary newspapers. This course will analyze secondary texts, correct citations, and bibliography. Required of all history MA graduate students.

HIST 795. Studies in European History. 2 hr. plus conf.; 3 cr. Studies of selected key issues and topics in European history and the historical debates about those issues. Stress is on methodology, interpretation, and the clash of opinion among historians. Topics vary each semester, and the focus may be Europe, the non-Western world, or points of contact and exchange between them. The course is required for graduate students in the MS in Education program in Secondary Social Studies Education. The course may not be repeated for credit.

HIST 796. Advanced Research Seminar. 2 hr. plus conf.; 3 cr. Taken at the end of MA coursework, prepares students for the process of writing the Master's thesis. Research techniques are reviewed. Students devise a research question for their MA thesis, prepare a historiographic review, and draft a research proposal. Required of all History MA graduate students.

HIST 797. Studies in American History: Special Problems. 2 hr. plus conf.; 3 cr. Studies of selected key issues and topics in American history and the historical debates about those issues. Stress is on methodology, interpretation, and the clash of opinion among historians. Topics vary each semester, and the focus may be the United States, Latin America, or points of contact and exchange between them. The course is required for graduate students in the MS in Education program in Secondary Social Studies Education. The course may not be repeated for credit.

HIST 798.1–798.3. Individual Readings for Graduate Credit. Hr. to be arranged; 1–3 cr. With permission of the individual instructor concerned, the student's advisor, and the departmental graduate advisor, a student may enroll for 1–3 hours of credit in a program of directed readings. This course is designed to supplement existing course offerings and is not proposed as a substitute for the more formal course and seminar work in a field of graduate study. Fall, Spring

HIST 799. Problems in History. 2 hr. plus conf.; 3 cr. New courses and graduate seminars in different fields are currently being offered. Consult the department before registration or see announcements on the History Department's bulletin board.

COURSES IN RESERVE

HIST 708. The Ancient Near East

HIST 709. The Classical World

HIST 711. Social and Economic History of the High Middle Ages

HIST 731. Studies in Modern European Intellectual History

HIST 740. Chinese Historiography

HIST 741. Studies in Modern Chinese History

HIST 743. Modern Mexico

HIST 754. The Caribbean World in the Twentieth Century

HIST 760. Studies in the History of Modern Science

HIST 765. Jacksonian Democracy

HIST 770. Main Currents in Modern American Thought

HIST 782. Studies in American Social, Intellectual, and Cultural History since 1870

HIST 792. Seminar in Latin American History

Graduate School of Library & Information Studies

Chair and *Director of the School:* Kwong Bor Ng

Director of Admissions for the School: Roberta Brody

Graduate Advisor for Continuing Students: Christel Haesicke

Graduate Advisor for MLS/MA: Johnathan Thayer

Graduate Advisor for Library Media Specialist & Coordinator of Library Media Specialist Programs: Arlene Laverde

Dept. Office: Rosenthal Library 254

Voice: 718-997-3790; *Fax:* 718-997-3797

Website: https://sites.google.com/a/qc.cuny.edu/gslis/

The Graduate School of Library & Information Studies offers graduate programs in School Library Media Specialist, Certification Programs, Post-Master's Certificate Programs, and a dual degree MLS/MA in Library Science and History.

FACULTY

Ng, Kwong Bor, Chair, *Professor,* PhD 1998, Rutgers University: information retrieval algorithms; knowledge organization and representation; text encoding standards and metadata schemes

Brody, Roberta, Director of Admissions of the School, *Professor,* PhD 1996, Rutgers University: business information and competitive intelligence; digital humanities; reference

Thayer, Johnathan, Graduate Advisor for MLS/MA Program, *Assistant Professor*, PhD 2018, CUNY Graduate Center: archival studies

Kibirige, Harry M., *Professor,* PhD 1979, University of Pittsburgh: information retrieval; information science; systems analysis

Li, Ping, *Associate Professor,* PhD 2007, McGill University: reference and user services; instructional services; health sciences librarianship

Lowry, James, *Assistant Professor,* PhD 2019, University College London: government information, open government data

Wu, Shuheng, *Assistant Professor*, PhD 2014, Florida State University, knowledge organization and representation, socio-technical systems

MISSION AND GOALS

Mission

GSLIS is committed to providing affordable programs and rigorous teaching to educate critically minded, community-focused, service-oriented professionals who will contribute to diverse information-intensive environments, the vitality of their local and global communities, and the advancement of the LIS disciplines, research, and practice.

GSLIS Program Goals

1. Through a rigorous yet flexible curriculum, GSLIS will prepare graduates for employment and service in a diverse, global, and rapidly changing information society.
2. Through service to local, professional and other stakeholder communities, GSLIS will foster ethical, socially minded leadership in its students.
3. Through excellence in research, GSLIS will create new knowledge and contribute to the solution of today's information problems.

Student Learning Outcomes

Program and course requirements in the GSLIS are designed to ensure that graduates have met the following Student Learning Outcomes (SLOs). These SLOs (A–H) state that graduates will have the ability to:

A. Enable access to information and knowledge, including its creation, acquisition, organization, and management, storage, and retrieval.

B. Articulate the role and importance of ethics, values, lifelong learning, and advocacy underlying the practice of the information professions.

C. Apply appropriate standards, policies, tools and practices in various specializations of information science, as articulated by representative professional organizations.

D. Design and conduct research studies, critically assess research claims, and synthesize and disseminate findings.

E. Advocate for social justice, particularly in our metropolitan community, by understanding the needs, designing programs with, and amplifying the strengths of underserved groups.

F. Identify, evaluate, and implement current and emerging technologies to create, store, and present information in a way such that users can access, process, and experience it.

G. Explain and apply principles of effective management and leadership in the library and related information institutions in a rapidly changing society.

Admissions Policies and Procedures

Students may be admitted to the Graduate School of Library and Information Studies on a matriculated or a non-matriculated basis. The School admits students for both the Fall and Spring terms. Since deadlines for applications for each semester may vary, it is advisable to visit the School's website or telephone the GSLIS office for current information. Applications are made online from the Queens College website. For general policies, procedures and requirements, please consult the opening pages of this *Bulletin*. In addition, the following is also required:

1. Proof of proficiency in the English language is required of all applicants whose first language is not English, and who were educated in a country where English is not the official language. This requirement

is not based upon country of citizenship or permanent residency, but on the two stated conditions. Such applicants must fulfill this requirement by taking the Test of English as a Foreign Language (TOEFL) administered by the Educational Testing Service. A score of at least 600 on the TOEFL is required for admission to the School. Score reports must be received before a student can be admitted. Those whose score falls below 600 will be required to take and pass the graduate College English as a Second Language (CESL) course, which does not count towards graduate work.

2. Applicants whose undergraduate cumulative grade-point average is below 3.0, but who otherwise merit consideration for admission, may be required to take the Graduate Record Examination (GRE).

3. Applicants with undergraduate GPAs below 3.0 who hold advanced degrees are not required to take the GRE.

4. A meeting with the Director of the School, the Director of Admissions of the School, or a member of the School's Admissions Committee will be required before a decision on admission is made.

5. Applicants to all School Library Media Specialist programs must meet with the Graduate Advisor for Library Media Specialists

6. Admission to the Library Media Specialist Program for Certified Teachers additionally requires that the applicant possess a valid New York State teaching certification.

7. Admission to the Library Media Specialist Program for applicants who are not yet certified teachers in New York State additionally requires documentation of completion of the core background in Liberal Arts and Sciences stipulated by New York State, which is articulated in the Library Media Specialist program description below, as well as a satisfactory onsite writing sample.

8. Admission to the Library Media Specialist Advanced Certificate Program for applicants who are not yet certified teachers in New York State requires documentation of a completed Master's Degree in Library [and Information] Science from an ALA-accredited program, documentation of completion of the core background in Liberal Arts and Sciences stipulated by New York State (articulated in the Library Media Specialist Advanced Certificate Program description below) as well as a satisfactory onsite writing sample.

Non-Matriculated Status

Some students may register in the school as non-matriculants with permission of the Graduate School of Library and Information Studies. Students who are matriculated in another accredited library school may, with permission from their home institution and from the Director or Graduate Advisor of the GSLIS, register for individual graduate library science courses, when space is available.

Applicants who do not qualify for matriculated status may be admitted as non-matriculants with the approval of the Graduate Advisor for Admissions. Courses taken as a non-matriculated student may be credited toward the MLS degree if a grade of *B* (3.0) or better is attained. A non-matriculant wishing to matriculate may have a maximum of 12 credits accepted towards the degree by the School.

A student who has been awarded the MLS degree and wants to enroll for additional courses must file an application for admission as a graduate non-matriculant with the Graduate Admissions Office by the appropriate deadline date.

Registration

Students may register only after their program has been approved by a faculty member. Approved matriculated and non-matriculated students will receive instructions from the Graduate Admissions Office and the Graduate School of Library and Information Studies regarding dates and times of registration.

Academic Requirements

The curriculum has been designed as a coordinated, sequential program. Two major components comprise the curriculum: the required basic program—a group of core and required courses integrating the subject matter common to the field—and the elective program of specialized and advanced courses. Within this structure it is possible to design a generalist program for the student who does not want to specialize, as well as specialized single- or multi-purpose programs as described below. Specialized programs may include courses in other departments at Queens College and at other units of the City University of New York. The curriculum also provides opportunities for internship experiences and independent study.

Requirements for the Master of Library Science Degree

The program of courses leading to the Master of Library Science degree consists of 36 credits completed with an overall average of at least *B* (3.0 index). All requirements for the degree must be completed within four years after admission to the program or four years after the first course was credited, including credits earned as a non-matriculant or credits transferred. Extensions of time may be granted under compelling circumstances. The MLS degree is offered in three programs; Library Media Specialist for Certified Teachers, Library Media Specialist, and General for those working in all other library and information-intensive environments.

Please note that basic course/certificate requirements and descriptions are subject to change. For up-to-date information contact the Graduate School of Library and Information Studies.

Basic Core Sequence

The basic sequence consists of five courses required of all students, regardless of program. All entering students are expected to complete the following four core courses at the start of their studies:

LBSCI 700	The Technology of Information
LBSCI 701	Fundamentals of Library and Information Science
LBSCI 702	Information Sources and Service: General
LBSCI 703	Introduction to Organization of Information

In addition to the four courses listed above, after completing at least 21 credits, all students must complete this fifth required course, LBSCI 709, which includes a research project. The student's project report must give evidence of ability to integrate knowledge obtained from the individual courses constituting the MLS program. Satisfactory completion of a research project is mandated by the New York State Department of Education for receipt of the MLS degree.

Research Project

LBSCI 709. Research in Library and Information Studies

Students who have previously completed a master's thesis may apply to fulfill this requirement by completing LBSCI 791: Independent Study. Students who believe they are eligible to take LBSCI 791 should consult the Director of Admissions of the School to obtain approval at the outset of their program.

Programs for Specialization

Beyond the five required courses in the basic sequence, varied courses reflecting special areas of interest in library and information studies are offered. New courses are continuously added to further enrich the curriculum. Students should consult faculty advisors on the choice and scheduling of such courses.

Both the Library Media Specialist for Certified Teachers program and the Library Media Specialist program have previous professional education requirements as noted below. Except for specialization in the Library Media Specialist for Certified Teachers program or Library Media Specialist program, the MLS degree program does not *require* particular specialized offerings.

For all other students in the MLS program, courses are available for professional interests including, but not limited to, types of libraries and information-related agencies, functions within them, types of users and media. Types of libraries may include public, academic, research, and special libraries, as well as information-based agencies such as archives and media centers. Functions may include administration, reference/information services, and web-based and other technical services. The types of user may include children and young adults, and those in the corporate and the not-for-profit environments.

Queens College permits up to twelve graduate credits to be taken outside the School. Such courses must have the prior approval of the Graduate Advisor as well as of the other department or institution and must be appropriate to the student's program for the MLS degree.

SCHOOL LIBRARY MEDIA SPECIALIST PROGRAMS

Both of the LMS programs, the Library Media Specialist Program and the Library Media Specialist for Certified Teachers, emphasize the development of knowledge and skills needed to teach information literacy to the K–12 school community, to foster collaborative partnerships with the school's faculty and administration, to motivate and guide students in these settings in the use of information and materials, and to evaluate and select materials that promote and support the information needs of this specialized clientele. Library Media Specialists serve the needs of students and parents for informational, educational, and recreational materials as well as the needs of teachers, administrators and other personnel seeking information and materials related to their professional responsibilities.

LIBRARY MEDIA SPECIALIST (SCHOOL)

This 45-credit course of study is designed for students who are not certified teachers who wish to pursue initial NYS teacher certification in the area of Library Media Specialist (LMS). Graduates who successfully complete program requirements as well as other NYS requirements noted below will qualify to teach in NYS K–12 public school libraries.

Admission Requirements

Applicants to this program will need to first be admitted to GSLIS via the standard application procedure. Upon acceptance to GSLIS, students will be interviewed by the LMS Program Coordinator who will review their prior transcripts to ascertain whether applicants have the Core Liberal Arts and Science background required by NYSED for teachers. NYSED specifies exactly what type of coursework is acceptable for each of these areas at www.highered.nysed.gov/tcert. Applicants lacking any part of this requirement will be required to complete this coursework at an accredited institution of higher education before acceptance to this program.

Core Liberal Arts and Science: 30 credits

Artistic Expression
Communication
Information Retrieval
Humanities
Language Other Than English
Written Analysis and Expression
History and Social Sciences
Scientific Processes
Mathematical Processes

In addition, applicants will be required to present a satisfactory onsite writing sample evaluated by the LMS Program Coordinator.

All of these requirements must be fulfilled before students can be accepted to this program.

COURSE OF STUDY

Required courses in Education

EECE 702	Social Foundations of Education *or*
SEYS 705	School and Society *or* Equivalent
EECE 711	Ecological Perspectives on Development: The Childhood Years *or*
SEYS 710	Psychology of Adolescence *or* Equivalent

ECPSE 700: Foundations of Special Education *or* Equivalent

Required courses in LMS

LBSCI 737 Materials, Literature, and Collection Development for Children and Youth
LBSCI 761 Organization and Management: School Library Media Centers
LBSCI 764 Teaching Information Literacy in K-12
LBSCI 765 Resources for the School Curriculum
LBSCI 767 Reading Motivation Techniques for Children & Adolescents
LBSCI 795 Internship

Required Field Experience and Internship (Student Teaching Practicum)

Successful completion of this program requires 100 hours of LMS field observation, 20 hours of ECPSE field observation and 40 full days of internship experience to be completed as per NYSED requirements for registered LMS programs and to be completed as specified during functioning school hours. Students must be able to arrange their personal and professional schedules to comply with these requirements.

New York State Testing, Workshop, and Other Requirements

Applicants for LMS teacher certification in NYS must satisfy all NYS teacher certification testing, workshops and other requirements stipulated by NYSED in order to receive their teacher certification from New York State. NYS required workshops can be taken at Queens College through the Office of Continuing Education.

LIBRARY MEDIA SPECIALIST FOR CERTIFIED TEACHERS

This 36-credit course of study is designed for students who wish to pursue New York State (NYS) teacher certification in the area of Library Media Specialist (LMS). Graduates who successfully complete sequence requirements as well as other NYS requirements noted below will qualify to teach in NYS K–12 public school libraries.

Admission Requirements

In addition to the requirements for admission to the Graduate School of Library and Information Studies, students who choose this program must possess New York State teacher certification.

LMS sequence required courses:

LBSCI 737 Materials, Literature, and Collection Development for Children and Youth
LBSCI 761 Organization and Management: School Library Media Centers
LBSCI 764 Teaching Information Literacy in K-12
LBSCI 765 Resources for the School Curriculum
LBSCI 767 Reading Motivation Techniques for Children & Adolescents
LBSCI 795 Internship

Required Field Experience and Internship (Student Teaching Practicum)

Successful completion of this program requires 100 hours of field observation and 150 hours of internship experience as per NYSED requirements for registered LMS programs and to be completed as specified during functioning school hours. Students must be able to arrange their personal and professional schedules to comply with these requirements.

New York State Testing, Workshop, and Other Requirements

Applicants for LMS teacher certification in NYS must satisfy all NYS teacher certification testing, workshops and other requirements stipulated by NYSED in order to receive their teacher certification from New York State. NYS required workshops can be taken at Queens College through the Office of Continuing Education.

CERTIFICATE PROGRAMS

Two certificate programs are currently available: *Children and Young Adult Services in the Public Library* and *Archives and the Preservation of Cultural Materials*. Both of these are designed for multiple audiences, such as current MLS students who wish to make explicit their specialty, and working library/information service professionals who desire a further credential demarking their expertise. All students in these two certificate programs must meet the college's admissions standards; paraprofessionals may be required to enroll in core courses to provide the appropriate foundation for coursework in the two certificate programs.

The certificates are built around a similar structure. Within each, a core sequence of courses must have been completed. Library/information service professionals who already hold the MLS degree and may have already taken one or more of these core courses can fulfill their requirements by selecting from a menu of four elective courses.

Certificate in Children and Young Adults Services in the Public Library

Core (required) courses:

LBSCI 737 Materials, Literature, and Collection Development for Children and Youth
LBSCI 739 Materials for Young Adults
LBSCI 773 Public Library Services for Children
LBSCI 777 Planning and Delivering Young Adult Services in the Public Library

Elective courses:

LBSCI 738 Mythology and Folklore for Children and Adolescents
LBSCI 767 Reading Motivation Techniques for Children and Adolescents
LBSCI 771 Organization and Management: Public Libraries
LBSCI 775 Librarianship in a Multicultural Society: Materials and Services

Certificate in Archives and the Preservation of Cultural Materials

Core (required) courses:

LBSCI 730 Archival Appraisal, Arrangement, and Access
LBSCI 732 Archives and Manuscripts and the Shapes of Material History
LBSCI 733 Preservation of Cultural Heritage Materials
LBSCI 752 Digital Preservation
LBSCI 795 Internship

Elective courses:

LBSCI 729 Introduction to Metadata for the Cataloging and Classification of Internet Resources
LBSCI 731 From Manuscripts to eBooks: Studies in Print Culture
LBSCI 736 Records Management
LBSCI 753 Digital Libraries
LBSCI 757 Digitization of Cultural Materials

Students of the Graduate School of Library and Information Studies will obtain the certificate at the same time as the awarding of their degree. Library/information service professionals who complete a four-course sequence will be awarded the certificate by the college.

POST-MASTER'S CERTIFICATES

CERTIFICATE OF POST-MASTER'S STUDIES IN LIBRARIANSHIP (GENERAL)

The program leading to the Certificate in Post-Master's Studies in Librarianship is designed for graduate library/information service professionals who want to improve their competencies in present positions or to prepare for new positions as administrators, subject specialists, information officers, or technical specialists in libraries and related organizations, including media, educational resources, information and referral centers.

The one-to-three-year, 30-credit program will be designed by each student with a faculty member in accordance with the curriculum described in this *Bulletin*. An integral part of the program will be a major research or investigatory project in the student's field of interest. The program is registered by the New York State Education Department.

Admission Requirements

- A master's degree in Library/Information Studies from an ALA-accredited program.
- A minimum of two years of professional experience in library/information services or evidence of highly specialized needs that warrant advanced studies.
- An interview with a GSLIS representative.
- A 500-word statement of the candidate's professional objectives, specifying his/her special needs or interests.
- Three letters of reference from library/information service professionals and/or instructors in library/information studies.

General Requirements

The Certificate in Post-Master's Studies in Librarianship will be awarded upon the completion of ten three-credit courses with a grade in each course of *B* or better. Each course must be part of an approved program of studies that includes the preparation of an independent research project or an independent special project. All requirements must be completed within a three-year period. An individually tailored program will be formulated by each student and his/her faculty advisor, in accordance with the curriculum.

LIBRARY MEDIA SPECIALIST ADVANCED CERTIFICATE

This 27-credit course of study is designed for students who have completed a Master's Degree in Library [and Information] Studies [Science] at an American Library Association accredited library program who are not certified teachers in New York State (NYS) and who wish to pursue initial NYS teacher certification in the area of Library Media Specialist (LMS). Students who successfully complete certificate requirements as well as other NYS requirements noted below will qualify to teach in NYS K–12 public school libraries.

Admission Requirements

Applicants to this program must first be admitted to GSLIS via the standard application procedure. Upon acceptance to GSLIS, students will be required to produce documentation of their completion of a Master's Degree in Library [and Information] Studies [Science] at an American Library Association accredited library program. They will be interviewed by the LMS Program Coordinator who will review their prior transcripts to ascertain whether applicants have the Core Liberal Arts and Science background required by NYSED for teachers. NYSED specifies exactly what type of coursework is acceptable for each of these areas at www.highered.nysed.gov/tcert. Applicants lacking any part of this requirement will be required to complete this coursework at an accredited institution of higher education before acceptance to the Advanced Certificate Program in LMS.

Core Liberal Arts and Sciences: 30 credits

Artistic Expression
Communication
Information Retrieval
Humanities
Language Other Than English
Written Analysis and Expression
History and Social Sciences
Scientific Processes
Mathematical Processes

In addition, applicants will be required to complete a satisfactory onsite writing sample evaluated by the LMS Program Coordinator.

All these requirements must be fulfilled before students can be accepted to the Advanced Certificate Program in LMS.

COURSE OF STUDY

Required Courses in Education

EECE 702. Social Foundations of Education *or*
SEYS 705. School and Society *or* Equivalent
EECE 711. Ecological Perspectives on Development: The Childhood Years *or*
SEYS 710. Psychology of Adolescence *or* Equivalent
ECPSE 700. Foundations of Special Education *or* Equivalent

Required Courses in LMS

LBSCI 737. Materials, Literature, and Collection Development for Children and Youth
LBSCI 761. Organization and Management: School Library Media Centers
LBSCI 764. Teaching Information Literacy in K-12
LBSCI 765. Resources for the School Curriculum
LBSCI 767. Reading Motivation Techniques for Children & Adolescents
LBSCI 795. Internship

Required Field Experience and Internship (Student Teaching Practicum)

Successful completion of this program requires 100 hours of LMS field observation, 20 hours of ECPSE field observation and 40 full days of internship experience to be completed as per NYSED requirements for registered LMS programs and as specified during functioning school hours. Students must be able to arrange their personal and professional schedules to comply with these requirements.

New York State Testing, Workshop, and Other Requirements

Applicants for LMS teacher certification in NYS must satisfy all NYS teacher certification testing, workshops, and other requirements stipulated by NYSED in order to receive their teacher certification from New York State. NYS required workshops can be taken at Queens College through the Office of Continuing Education.

GRADUATE PROGRAM IN LIBRARY SCIENCE AND HISTORY (MLS/MA)

The MLS/MA is a dual degree program offered jointly by the Graduate School of Library and Information Studies and the History Department. It is coordinated by the Graduate Advisor for GSLIS and the Director of Graduate Studies in History.

The program offers students the opportunity to develop skills in the methodologies of both library science, including archival and special collections management, and historical research. Graduates of the program will hold two degrees, and will be well suited for professional careers in academic libraries, museums, oral history initiatives, document conservation, and public or private archives, and for admission into PhD programs in either history or library science.

The 54-credit program can be completed in three years of full-time study. The first several semesters should focus on the coursework requirements for both GSLIS and History. Students should consult advisors in either department in selecting courses that are relevant for their research and career goals. As part of their elective coursework, they are strongly encouraged to consider internships at local archives, museums, academic libraries, or other relevant institutions, for which either GSLIS or History credit will be awarded. Students may also consider the GSLIS certificate program in Archives and the Preservation of Cultural Materials in conjunction with the dual degree.

Toward the end of the program, students will undertake a six-credit final thesis or project, constituted by LBSCI 709 and HIST 792, to be taken concurrently, under the advisement of faculty members from both GSLIS and History.

Requirements

Students will complete the following components, totaling 54 credits: GSLIS, required (12 credits):
LBSCI 700. The Technology of Information
LBSCI 701. Fundamentals of Library and Information Science
LBSCI 702. Information Sources and Service: General
LBSCI 703. Introduction to Organization of Information
GSLIS, electives (12 credits):
Any other four LBSCI graduate courses

History, required (3 credits):
HIST 791. Introduction to Historical Research
History, electives (21 credits):
Any other seven HIST graduate courses, chosen in consultation with the DGS

Thesis/project (6 credits):
LBSCI 709. Research in Library and Information Studies
HIST 792. Research and Writing (taught by advisor)

Consult with the graduate advisor in the Graduate School of Library & Information Studies and History for further details.

COURSES IN THE GRADUATE SCHOOL OF LIBRARY AND INFORMATION STUDIES

LBSCI 700. The Technology of Information. 3 hr.; 3 cr. This course will introduce the student to the conceptual and practical elements of visual and computer literacy for the library and information science profession. Particular attention will be paid to the place and role of libraries and information centers. A laboratory session following each class will give students the opportunity to apply some of the concepts learned in class.

LBSCI 701. Fundamentals of Library and Information Science. 3 hr.; 3 cr. Overview of the curriculum, a history of librarianship and information science as a profession; professional literature; role

and structure of libraries and information centers in the conservation and dissemination of knowledge to various clientele; nature of research in library and information science.

LBSCI 702. Information Sources and Service: General. 3 hr.; 3 cr. Study and application of general reference, bibliographic and other information sources techniques and procedures for serving the needs of various clientele; criteria for evaluating reference sources and services and for developing appropriate collections.

LBSCI 703. Introduction to Organization of Information. 3 hr.; 3 cr. The focus will be on the principles of providing access to information using the current cataloging code and the provision of subject access to items through subject heading lists and classification systems. Study and practical exercises in various areas of information organization.

LBSCI 705. Organization and Management. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Fundamentals of administration; functions of management (planning, organizing, staffing, controlling and communicating) in various types of libraries and information centers.

LBSCI 706. Advanced Technological Concepts. 3 hr.; 3 cr. This will introduce the student to advanced levels of the conceptual and practical elements of visual and computer literacy for the library and information science profession. Online laboratory sessions and exercises will give students the opportunity to begin to apply some of the concepts learned in class.

LBSCI 709. Research in Library and Information Studies. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703, and completion of 21 course credits. Survey of research methods in library and information studies and supervised project that will prepare students to critically evaluate relevant research in the field and to make professional contributions.

LBSCI 711. Collection Development. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Design of collection policy; criteria for selection and maintenance; evaluation techniques; resource sharing; organization and management of collection development, electronic and print.

LBSCI 713. Information Sources and Service: Science and Technology. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Study and application of reference, bibliographic and other information sources in science and technology; techniques and procedures for serving the needs of various clientele; criteria for evaluating these sources and this service and for developing appropriate collections.

LBSCI 715. Information Sources and Service: Social Sciences. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Study and application of reference, bibliographic, and other information sources (print and electronic) in the social sciences; techniques and procedures for serving the needs of various clientele; criteria for evaluating these sources and this service and for developing appropriate collections.

LBSCI 717. Digital Humanities and Humanities Resources. 3 hr.; 3 cr. Prereq.: LBSCI 700, 702. Study and application of sources, resources, tools, infrastructure, standards, and multimodal entities in the humanities. Includes techniques and procedures for serving the needs of various clientele in the humanities and criteria for evaluation. Traditional electronic resources will also be included.

LBSCI 719. Government Information Sources. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Structure of the U.S. government in relation to its official publications, selection, acquisition, organization, and use of federal documents of the United States, with some attention to American state and municipal documents as well as international and United Nations publications; print and electronic access.

LBSCI 720. The Design and Evaluation of Visual Information for the Web. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Introduction to the techniques and tools used in the planning, production, and evaluation of multimedia visual displays of information. Special attention will be devoted to Internet Web pages and ways of presenting statistical and qualitative information in multimedia.

LBSCI 721. Advanced Technical Services. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. A survey course including several ancillary activities required for maximum access to the materials in a library collection. Principal topics are acquisitions; circulation policies and procedures; preservation and conservation; online public access catalogs; interlibrary loan procedures; and the administration of the technical services department.

LBSCI 729. Introduction to Metadata for the Cataloging and Classification of Internet Resources. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. This is a course about encoding and applying metadata standards to describe and represent electronic information as objects (e.g., eBooks, websites, etc.) in a distributed network environment. Covers various applications in libraries and information institutions, with a focus on the meta mark-up language XML.

LBSCI 730. Archival Appraisal, Arrangement, and Access. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703; or permission of instructor. This course provides an in-depth exploration of the archival principles of Appraisal, Arrangement and Description. Within a practical and theoretical framework students will consider how recent advances in technology provide opportunities for more dynamic and interactive tools for archival access. They will construct electronic finding aids, including Encoded Archival Description (EAD).

LBSCI 731. From Manuscripts to eBooks: Studies in Print Culture. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703, or permission of the instructor. This

course will explore the evolution of the "text" from its early conceptions in manuscript culture through its revolutionary transmission into print and finally into the digital age. Discussion will combine technical aspects of print culture as well as theoretical concerns for how knowledge is transmitted (how knowledge is "made"). Recent critical interests in the history and technology of the book, the interplay between word and image, and mechanisms of reading are included.

LBSCI 732. Introduction to Archival Materials. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703, or permission of the instructor. This is an introductory course designed to orient students to fundamental archival theories as well as current practices. Historic background to archival methods will be discussed in order to understand current discipline perspectives. Theoretical concerns will address the meaning, formation, and contestation of "memory" in current post-modern archival discourse. Students will also be introduced to basic archival practices of appraisal, arrangement, description, and access.

LBSCI 733. Preservation of Cultural Heritage Materials. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703, or permission of the instructor. Examines the preservation needs of different information formats commonly found in libraries, archives, and institutions of social memory including book, paper, photographic, and audiovisual materials. Attention will be paid to how environmental and storage conditions influence rates of deterioration. A range of preservation functions required for long-term stability of materials will be explored. Funding sources for preservation activities will be discussed.

LBSCI 734. Art Librarianship & Visual Resources Curatorship. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Survey of present practices in art and visual resources librarianship/curatorship; organization, administration, collection development, instruction, and assessment of user needs; special issues in art libraries and visual resources collections. Guided visits to various types of art libraries and arts organizations will be included.

LBSCI 736. Records Management. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 703. Examines the theories and practices of modern records management both in routine and non-routine organizational procedures and situations. Contemporary records and information management (RIM) focuses on traditional and on electronic records; approaching their management (storage, retrieval, access, disposal) by evaluating the record's life cycle as a whole. These processes are performed in the context of legal requirements, system architecture, industry standards and organizational guidelines.

LBSCI 737. Materials, Literature, and Collection Development for Children and Youth. 3 hr.; 3 cr. Introduction to the forms and types of literature, including but not limited to both print and digital material; criteria for excellence; techniques for selection and evaluation for collection development; and identification of appeal and suitability for different types of young users.

LBSCI 739. Materials for Young Adults. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702. Survey of materials for young people ages 12–17; includes historical development of specific genres, and consideration of the reading interests and information needs of young adults.

LBSCI 746. Design and Construction of Bibliographic Databases. 3 hr.; 3 cr. Prereq.: LBSCI 700. Covers the basic principles, elements and concepts of design, implementation and utilization of bibliographic databases using a database management systems (DBMS) approach. Examines various data models and several database models for bibliographic data (i.e. records of information-bearing entities with necessary attributes of bibliographic data and subject representation). Administrative tasks in the bibliographic database management environment are also addressed.

LBSCI 747. Selected Technology Applications in Information Management. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Introduction to some of the latest developments in information technology of immediate relevance to information professionals; hands-on laboratory experience of the systems selected. Units and contents may be changed from time to time to reflect new developments in the information arena.

LBSCI 748. Web Programming. 3 hr.; 3 cr. Prereq.: LBSCI 700 or permission of the instructor. This course examines the basic principles, elements, and concepts of design, writing, debugging, and implementation of programmatic utilities in a distributive environment (i.e., the Internet). The focus is on problem-solving and learning to design web programs that are readable, well-documented, efficient, and correct. The emphasis of the course is digital library applications.

LBSCI 752. Digital Preservation. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703; or permission of the instructor. Complementing LBSCI 733: Preservation of Cultural Heritage Materials, this course examines the theory, tools/technologies, and issues associated with the long-term retention, preservation, and accessibility of material digitally born or subsequently digitized/reformatted. Topics covered will include the characteristics of digital media, standards and quality control, digital asset management, and best practices. The role of digital preservation in the process of digital curation will be highlighted. Completion of LBSCI 729: Introduction to Metadata and/or LBSCI 757: Digitization of Cultural Materials, prior to enrollment, is recommended. The goal is to introduce students to the theoretical, practical and technological aspects of digital preservation and to place preservation in the broader context of digital curation.

LBSCI 753. Digital Libraries. 3 hr.; 3 cr. Prereq.: LBSCI 700, 703. Overview of digital libraries; the historical reasons for their development; the nature of their cre-

ation, uses and evaluation. Methods of collection building, knowledge organization, interface design, and information retrieval techniques appropriate to multimedia digital materials are covered. Emphasis is also given to the social, economic, and legal aspects of digital libraries, in particular as they relate to the traditional library.

LBSCI 754. Human-Computer Interaction. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 703. This course will introduce students to the fundamental principles of human-computer interaction (HCI) with a strong focus on understanding the nature of how people interact with, or avoid, computer technology; the problems they encounter in these interactions, and the design principles that address the tactics used in making computers more usable and effective to a wide variety of people, including children, the elderly, the handicapped, and other special populations.

LBSCI 755. Design and Production of Multimedia. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Provides an overview of the theories, tools, and techniques involved in the design and production of digitized information communication and interaction in varied formats; introduces students to practical technological methods related to digital capture and manipulation of textual, audio, and video information and materials.

LBSCI 756. Managing New Technologies. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Introduces students to the administration of digital and multimedia resources (software, hardware, peripherals, tools, and services) in libraries, with an emphasis on strategic planning and change management. Other issues addressed will include funding, staffing, training issues, evaluation, selection, accessibility and intellectual property issues relating to new technologies. Focuses on technology grant writing. Current and developing uses of emerging technologies (e.g., Web 2.0, Library 2.0) in libraries and information centers will be discussed and demonstrated.

LBSCI 757. Digitization of Cultural Materials. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Introduces students to the theoretical and practical aspects of digitization, with an emphasis on evolving guidelines and lessons learned from existing digitization projects. Among the topics to be examined are: selection principles, project and workflow planning, digitization of cultural materials, file formats, quality control, rights management, metadata, access, funding issues, assessment and evaluation, digital asset management and preservation. Theoretical concepts will be reinforced through hands-on production experience in digitizing and managing digitized cultural materials.

LBSCI 761. Organization and Management: School Library Media Centers. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701. Roles, services, programs, organization and management of the school library media center including teaching, information access and delivery, and program administration. Emphasis on collaboration with the school community, integrating state and national standards in the school library curriculum, integrating the school library curriculum into the wider school curriculum and the importance of information literacy. Assistive technology and other relevant information technology are addressed. Twenty-five hours of fieldwork in a school library media center are required.

LBSCI 763. Nonbook Materials: Sources and Service. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Evaluation, selection, and utilization of nonbook materials and technology to serve the library/information needs of all students, including those with special needs, and faculty regardless of specialization; and to foster information literacy skills, including cooperative programs with teachers, school library media centers, and other types of library and information agencies. Twenty-five hours of fieldwork in a school library media center are required.

*Indicates a variable title.

LBSCI 764. Teaching Information Literacy in K-12. 3 hr.; 3 cr. Prereq.: LBSCI 700 or 706, 702, 703. Evaluation, selection, and utilization of appropriate instructional methods to serve the needs of all members of the K–12 school community. Emphasis is on teaching information literacy skills to K–12 children and youth as well as methods and formats supportive of diverse learners. Twenty-five hours of fieldwork in a school library media center are required.

LBSCI 765. Resources for the School Curriculum. 3 hr.; 3 cr. Prereq.: LBSCI 700, 702, 703. Collection development in the school library media center including selection, evaluation, and utilization of instructional materials to support the curriculum needs of all students. Selection policy, intellectual freedom, and challenged material are addressed. Special attention will be given to the growth of information literacy and to collaboration with the school community. Twenty-five hours of fieldwork in a school library media center are required.

LBSCI 767. Reading Motivation Techniques for Children and Adolescents. 3 hr.; 3 cr. Prereq.: LBSCI 700, 702, 737, or 739. Development of techniques that include collaboration with faculty in reading guidance; aspects covered include individual performance and collaborative evaluation of book talks, storytelling, and poetry reading. Strategies to work with faculty with responsibilities for literacy and students with special needs are components of the course. Twenty-five hours of fieldwork in a school library media center are required.

LBSCI 768. Storytelling. 3 hr.; 3 cr. Guides students through a range of stories from around the world, offering storytelling techniques that will accumulate through the term to provide them with the tools and confidence to use storytelling as part of their work. A major focus of the storytelling work will be on building an interactive experience for the children. Developing literacy-building activities from the stories will also be covered. Working with various story sources from

folktale collections to picture books will be part of the in-class work. Exploring folktale structures as a way to understand how stories are built and provide students with structural templates to create their own stories will also be examined. A variety of readings and discussions will tie all these elements together.

LBSCI 771. Organization and Management: Public Libraries. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Introduction to key elements of organization and management, including personnel, services, public relations, budgeting, and building construction/renovation.

LBSCI 773. Public Library Services for Children. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703, or permission of the instructor. Planning and applications of public library services for children. Topics include program planning, collection development, community networking, management issues, and training.

LBSCI 775. Librarianship in a Multicultural Society: Materials and Services. 3 hr.; 3 cr. Prereq.: 701. Evaluation, selection, and utilization of book and nonbook materials to serve minority and ethnic clientele; traditional and innovative approaches to programming.

LBSCI 777. Planning and Delivering Young Adult Services in the Public Library. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Overview of contemporary public library services for adolescents, with an emphasis on how to conceptualize or customize services that meet the development trends of this age group, while flourishing within organizational, political, and community cultures.

LBSCI 778. Informational Literacy Instructions for Adults. 3 hr.; 3 cr. Prereq.: LBSCI 700, 702. Provides students with both a theoretical and practical foundation for functioning as an instructor within a library or information center. It will cover both the basic knowledge and methods necessary for designing, implementing, delivering, and evaluating instructional programs in all types of library settings, with a focus on adult patrons.

LBSCI 779. Adult Reader's Advisory Services in the Public Library. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Introduces students to: (1) major categories and subcategories of genre fiction popular among adult readers; (2) theories underpinning reader's advisory services, such as theories of readers and reading, popular culture, cultural stratification, reader response, and audience uses and gratifications; and (3) current library practices that serve the needs of adults interested in these materials.

LBSCI 780. Organization and Management: Academic and Research Libraries. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Structure of academic and research libraries in relation to their functions and clientele; standards, personnel, finance, buildings, and equipment; services; networking and community relations; relevant information technologies; reporting; public relations.

LBSCI 781. Organization and Management: Special Libraries and Information Centers. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Organization and management of special libraries and information centers in corporate, governmental, institutional, and academic settings; effect of the environment on each library's functions.

LBSCI 786. Business Information Sources. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Survey, evaluation, and application of information sources in business and finance; techniques and procedures for serving the needs of various clientele; special issues in corporate information centers.

LBSCI 787. Strategic and Competitive Intelligence. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703, 786, or permission of the instructor. Introduces the student to the theories, concepts, processes, and practices of ethical competitive intelligence; covers the study and use of basic competitive intelligence concepts, practices, techniques, and tools, set within the context of ethical business practice and grounded in critical thinking approaches. Application of concepts, processes, and techniques within related business and information-intensive settings will also be explored.

LBSCI 788. Law Librarianship. 3 hr.; 3 cr. Prereq.: LBSCI 700, 701, 702, 703. Survey, evaluation, and application of legal research; special issues in law librarianship.

LBSCI 790.1. *VT: Seminar. 1 hr.; 1 cr. Prereq.: LBSCI 700, 701, 702, 703, and permission of the School. Topics vary from semester to semester, according to trends and developments in the profession; announcements to be made in advance.

LBSCI 790.2. *VT: Seminar. 2 hr.; 2 cr. Prereq.: LBSCI 700, 701, 702, 703, and permission of the School. Topics vary from semester to semester, according to trends and developments in the profession; announcements to be made in advance.

LBSCI 790.3. *VT: Seminar. 3 hr; 3 cr. Prereq.: LBSCI 700, 701, 702, 703, and permission of the School. Topics vary from semester to semester, according to trends and developments in the profession; announcements to be made in advance.

LBSCI 791. Independent Study. Hr. to be arranged; 3 cr. Prereq.: LBSCI 700, 701, 702, 703, and permission of the School. Pursuit of a particular research or investigatory project under the direction of a member of the school's faculty; admission by special application. This course may be repeated twice more for credit provided the topic is not the same.

LBSCI 795. Internship. Fieldwork. Hr. to be arranged; 3 cr. Prereq.: LBSCI 700, 701, 702, 703, and completion of at least 21 credits. Designed to provide students

with practical experience in a library, archive, school library media or other information center; students for whom this course is a required part of their program should check with program coordinators for specific requirements. No internship hours may be earned before the course begins.

COURSES IN RESERVE

LBSCI 723. Issues in the Organization of Materials

LBSCI 725. Bibliographic Control of Nonprint Material

LBSCI 727. Serials Librarianship

LBSCI 735. History of Children's Literature to the Twentieth Century

LBSCI 738. Mythology and Folklore for Children and Adolescents

LBSCI 740. The Information Environment in Contemporary Society

LBSCI 741. Information Systems Analysis and Design

LBSCI 743. Information Access Systems: Indexing, Abstracting, and Other Access Systems

LBSCI 745. Online Research

LBSCI 748. Web Programming

LBSCI 784. Health Sciences Librarianship

Linguistics & Communication Disorders

Chair: Michael Newman

Associate Chair: Sima Gerber

Interim Director of Graduate Programs in Speech-Language Pathology: Patricia McCaul

Interim Director of Graduate Programs in Applied Linguistics and TESOL: Lauren Heffernan

Program Advisor for MA in Applied Linguistics and Post-Baccalaureate Advanced Certificate in English Language Teaching: Robert M. Vago

Program Advisor for MS in Ed: TESOL, Post-Master's Advanced Certificate in TESOL, and Post-Master's Advanced Certificate in TESOL and Elementary Bilingual Education: Michelle Cassano-Repole

Program Advisor for Speech-Language Pathology: Patricia McCaul

Clinical Coordinator, Admissions Coordinator, and *Associate Director of Graduate Program in Speech-Language Pathology*: Patricia McCaul

Dept. Office: Queens Hall 300A, 997-2870

Secretary: Maria Cadme

Graduate Program in Speech-Language Pathology Office: Gertz Building, 997-2930

The Department of Linguistics and Communication Disorders offers degrees for the Master of Arts in Speech-Language Pathology; the Master of Arts in Applied Linguistics; and the Master of Science in Education in Teaching English to Speakers of Other Languages (TESOL). The department also offers an Advanced Certificate in English Language Teaching and a Post-Master's Advanced Certificate in TESOL. The parameters of these programs are described below.

FACULTY

Ball, Karen, *Lecturer,* MS 1982, Boston University, MPA 2002, New York University: adult acquired speech-language disorders and dysphagia

Brienza, Salvatore, *Lecturer,* MA 2003, Queens College, CUNY: child speech-language disorders and stuttering

Cairns, Charles E., *Professor Emeritus,* PhD 1968, Columbia University: phonology, psycholinguistics, and adult literacy

Cairns, Helen S., *Professor Emerita,* PhD 1970, University of Texas at Austin: adult psycholinguistics and language development in the child

Calvet, Dana, *Lecturer,* MA in Applied Linguistics 2013, Queens College, CUNY: ENL adult

Cassano-Repole, Michelle, *Lecturer,* MS in Ed: TESOL 2011, Queens College, CUNY

Fiengo, Robert W., *Professor Emeritus,* PhD 1974, Massachusetts Institute of Technology: syntax and the acquisition of syntax

Gelfand, Stanley A., *Professor,* PhD 1973, City University of New York: speech perception and acoustic immittance and reverberation

Gerber, Sima, *Professor,* PhD 1987, City University of New York: pragmatics and child language

Haddican, William F., *Associate Professor,* PhD 2005, New York University: language change and syntax

Halpern, Harvey, *Professor Emeritus,* PhD 1962, New York University: speech and language problems of brain-injured adults

Heffernan, Lauren E., *Lecturer,* PhD 2019, St. John's University: TESOL and literacy

Ijalba, Elizabeth, *Associate Professor,* PhD 2007, City University of New York: communication disorders and bilingual language learning disorders

Kaufman, Daniel, *Assistant Professor,* PhD 2010, Cornell University: morphology, syntax, phonology, endangered languages

Klein, Elaine C., *Associate Professor Emerita,* PhD 1990, City University of New York: TESOL and applied linguistics
Kraat, Arlene W., *Associate Professor,* MA 1970, Indiana University: augmentative communication and adult language disorders
Lowe, Mara Steinberg, *Assistant Professor,* PhD 2020, New York University: neurogenic communication disorders
Martohardjono, Gita, *Associate Professor*, PhD 1993, Cornell University: TESOL and applied linguistics
McCaul, Patricia, *Lecturer,* MA 1988, Hunter College, CUNY: childhood speech, language, and neuromotor disorders
Menken, Kate, *Professor,* EdD 2005, Teachers College, Columbia University: educational linguistics, TESOL, and applied linguistics
Navarra, Cecilia, *Lecturer*, MA 2002, Queens College, CUNY: language learning disorders and literacy
Neumann, Yael, *Associate Professor,* PhD 2007, City University of New York: adult and child speech-language disorders and aging
Newman, Michael, *Professor,* EdD 1993, Teachers College, Columbia University: TESOL and applied linguistics
Schneider, Phillip A., *Associate Professor Emeritus,* EdD 1980, Teachers College, Columbia University: stuttering and voice articulation
Stengel-Mohr, Jennifer, *Lecturer,* MS 2001, Queens College, CUNY: TESOL and applied linguistics
Stevens, Alan M., *Professor Emeritus,* PhD 1964, Yale University: phonology and Indonesian languages
Toueg, Renée, *Lecturer,* MS 1963, Pennsylvania State University: adult and child language disorders
Vago, Robert M., *Professor,* PhD 1974, Harvard University: phonology and language attrition
Viccaro Stitler, Elizabeth, *Clinical Professor,* PhD 2017, Adelphi University: adult speech-language disorders, dementias

In memoriam:
R.M. Hall, Herbert Seliger, Joel Stark

PROGRAM FOR THE ADVANCED CERTIFICATE IN ENGLISH LANGUAGE TEACHING (POST-BAC)

Advisor: Robert M. Vago

This program provides basic preparation for students to teach ESL at venues other than the public school system (e.g., private schools, adult education programs, English Language Institutes, colleges and universities, overseas programs); it does *not* lead to NYS teaching certification. It is a credit-bearing program: Students who wish to pursue the MA in Applied Linguistics program will have their credits transferred upon admission.

Admissions Requirements

Students are accepted into the program in the Fall semester (course study may commence in the Summer semester). Application deadline: April 1. The requirements noted here are in addition to the general requirements for admission to graduate programs at Queens College.

1. Completion of a bachelor's degree with a 3.0 GPA minimum (or its foreign university equivalent).
2. Applicants whose first language is not English and who do not hold an undergraduate or graduate degree from an accredited American institution of higher education must submit proof of either having achieved a score of 600 or higher on the written version of the Test of English as a Foreign Language (TOEFL) with the following minimum scores: 600 (paper-based test), 250 (computer-based test), 100 (Internet-based test).
3. Three letters of recommendation.
4. A personal essay of approximately 500 words.
5. The credentials of each applicant will be examined by the Linguistics Graduate Admissions Committee. An interview may be requested.
6. The number of applicants approved for matriculation is limited by available resources; therefore, applicants who otherwise meet minimum requirements for matriculation may not necessarily be admitted.

Maintenance Requirements

1. Minimum overall GPA of *B* (3.0).
2. All students must file a Program of Study form with the program director.

Certificate Requirements

1. Satisfactory completion of the following 21 credits: LCD 701, 702, 703, 720, 740, 741, and 750.
2. Completion of course requirements with a minimum overall GPA of *B* (3.0).

PROGRAM FOR THE POST-MASTER'S ADVANCED CERTIFICATE IN TESOL

Advisor: Michelle Cassano-Repole
This program leads to an Initial Certificate to teach ESL in the NYS public school system, all grades.

Admissions Requirements

Students are accepted into the program in the Fall semester (course study may commence in the Summer semester). Application deadline: April 1. The requirements noted here are in addition to the general requirements for admission to graduate programs at Queens College.

1. Applicants must hold a current, valid NYS initial or professional teaching certificate in any area; must have earned a master's degree; must have achieved a minimum cumulative GPA of 3.0 in their master's degree program.
2. Applicants whose first language is not English and who do not hold an undergraduate or graduate degree from an accredited American institution of higher education must submit proof of having passed the Test of English as a Foreign Language (TOEFL) with the following minimum scores: 600 (paper-based test), 250 (computer-based test), 100 (Internet-based

test).

3. Three letters of recommendation.
4. A personal essay of approximately 500 words.
5. The credentials of each applicant will be examined by the Linguistics Graduate Admissions Committee. An interview may be requested.
6. The number of applicants approved for matriculation is limited by available resources; therefore, applicants who otherwise meet minimum requirements for matriculation may not necessarily be admitted.

Maintenance Requirements

1. Minimum overall GPA of *B* (3.0).
2. All students must file a Program of Study form with the graduate advisor.

Certificate Requirements

1. Satisfactory completion of the following 21 credits: LCD 701, 702, 706, 712, 740, 741, 742.
2. Completion of course requirements with a minimum overall GPA of *B* (3.0).

SAMPLE PROGRAMS OF STUDY

1. Summer LCD 701, 706
   Fall LCD 702, 740
   Spring LCD 712, 741
   Summer LCD 742
2. Summer LCD 701
   Fall LCD 702, 740
   Spring LCD 712, 741
   Summer LCD 706
   Fall LCD 742
3. Fall LCD 701, 702, 740
   Spring LCD 712, 741
   Fall LCD 706, 742
4. Fall LCD 701, 702, 740
   Spring LCD 712, 741
   Summer LCD 706
   Fall LCD 742
5. Fall LCD 701, 702, 706, 740
   Spring LCD 712, 741
   Fall LCD 742

3. Candidates accepted into the program must also satisfy (if not satisfied by previous study) the following NYS certification requirements prior to graduation (course deficiencies must be made up in consultation with the graduate advisor):

- A broad liberal arts background that includes courses in English / comparative literature / literary criticism; American history; mathematics; natural sciences; social sciences; 12 semester hours or the equivalent of study of a language other than English.
- A course in both Child Development and Adolescent Development.
- Tests and seminars, as advised by the graduate advisor.

PROGRAM FOR THE MASTER OF ARTS DEGREE IN SPEECH-LANGUAGE PATHOLOGY

Interim Program Director: Patricia McCaul

Clinical Coordinator, Admissions Coordinator, and *Associate Director:* Patricia McCaul

The department's program in speech-language pathology is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association (ASHA), 2200 Research Boulevard, #310, Rockville, MD 20850; (800) 498-2071. The program provides the academic and practicum requirements for clinical certification by the American Speech-Language-Hearing Association and for professional licensure by the New York State Department of Education. It also provides the necessary academic and pedagogical preparation for certification by New York State as a Teacher of Students with Speech-Language Disabilities—SED Program (IRP) Code: 02710.

Admissions Requirements

Students are accepted into the program in the Fall semester. The requirements noted here are in addition to the general requirements for admission to graduate programs at Queens College.

1. A GPA of B (3.0) or better
2. Applicant must satisfy minimum requirements for admission as well as those required by the American Speech-Language-Hearing Association for admission to graduate study in Speech-Language Pathology. Applicants must have at least 3 semester credit hours in the biological sciences, 3 semester credit hours in the physical sciences, 3 semester credit hours in statistics and 6 semester credit hours in the behavioral or social sciences. They also must have completed the following courses with at least 3 semester credit hours in each:
   - Child Development
   - Phonetics
   - Anatomy & Physiology of Speech and Language
   - Speech and Hearing Sciences
   - Language Acquisition
   - Audiology
   - Two courses in communication disorders in children and adults
   - One course in linguistics/ language (e.g., syntax, psycholinguistics, school age language, bilingualism, introduction to language)
3. Three letters of recommendation, at least two of which come from faculty members. An interview may be required.
4. Results of the Graduate Record Examination
5. Proof of proficiency in the English language is required of all applicants whose first language is not English, and who were educated in a country where English is not the official language. Applicants must receive a score of at least 114 on the internet-based TOEFL, or equivalent.
6. A personal essay.
7. The credentials of each applicant will be examined

by the Graduate Admissions Committee, which may accept, accept with conditions, or reject candidates.

8. The number of applicants approved for matriculation is limited by the training facilities available: therefore, applicants who otherwise meet minimum requirements for matriculation may not necessarily be admitted.

The application deadline is February 1 for the year in which the prospective candidates apply. Because only a limited number of candidates are admitted each year, the process is competitive. Permission of the program director is required for enrollment in any of the courses in the program.

Degree Requirements

These requirements are in addition to the general Queens College requirements for the Master of Arts degree.

1. Candidates in Speech-Language Pathology must complete between 48 and 54 credits and be enrolled as full-time students for four consecutive semesters. In addition, students must take a course in Foundations of Education (SEYS 536), or its equivalent. Attendance during the summer semester of the year following their admission to the program may also be required.
2. In addition to coursework, candidates must complete at least 12–14 hours a week of supervised clinical practicum each semester.
3. Candidates must complete a minimum of 400 clock hours of supervised clinical experience. One of those placements must be in an elementary or secondary school setting.
4. Candidates must maintain a GPA of *B* (3.0) or better.
5. Students must consult with the program director for additional requirements (e.g., tests, seminars) to obtain certification from the NYS Department of Education to teach children with speech and language disabilities.

PROGRAM FOR THE MASTER OF ARTS DEGREE IN APPLIED LINGUISTICS

Program Advisor: Robert M. Vago

The goal of this program is to train graduate students to be effective teachers of adult learners of English as a second or foreign language.

Admissions Requirements

Students are accepted into the program in the Fall semester (course study may commence in the Summer semester). Application deadline: April 1. The requirements noted here are in addition to the general requirements for admission to graduate programs at Queens College.

1. Completion of a bachelor's degree with a minimum GPA of 3.0.
2. Applicants whose first language is not English and who do not hold an undergraduate or graduate degree from an accredited American institution of higher education must submit proof of having passed the Test of English as a Foreign Language (TOEFL) with the following minimum scores: 600 (paper-based test), 250 (computer-based test), 100 (Internet-based test).
3. Three letters of recommendation.
4. A personal essay of approximately 500 words.
5. The credentials of each applicant will be examined by the Linguistics Graduate Admissions Committee. An interview may be requested.
6. The number of applicants approved for matriculation is limited by available resources; therefore, applicants who otherwise meet minimum requirements for matriculation may not necessarily be admitted.

Maintenance Requirements

1. Minimum overall GPA of *B* (3.0).
2. All students must file a Program of Study form with the graduate advisor.

Degree Requirements

These requirements are in addition to the general Queens College requirements for the Master of Arts degree.

1. Satisfactory completion of the following 36 credits: LCD 701, 702, 703, 705, 706, 707, 720, 740.3, 741.3, 742, 750, 790.
2. Completion of course requirements with a minimum overall GPA of *B* (3.0).

PROGRAM FOR THE MASTER OF SCIENCE IN EDUCATION DEGREE: TESOL

Program Advisor: Michelle Cassano-Repole

This program prepares students for New York State certification to teach English to speakers of other languages (TESOL) in school settings (all grades). The curriculum is grounded in the study of the structure of human language in general and English in particular, and addresses issues of language acquisition, literacy, educational technology, sociolinguistics, and psycholinguistics. The program emphasizes involvement with both elementary and secondary schools: it provides a student teaching course and field experiences in two methods courses at both levels.

Admissions Requirements

Students are accepted into the program in the Fall semester (course study may commence in the Summer semester). Application deadline: April 1. The requirements noted here are in addition to the general requirements for admission to graduate programs at Queens College.

1. Completion of a bachelor's degree with a minimum GPA of 3.0.
2. Applicants whose first language is not English and who do not hold an undergraduate or graduate degree from an accredited American institution of higher education must submit proof of having passed the Test of English as a Foreign Language (TOEFL) with the following minimum scores: 600 (paper-based test), 250 (computer-based test), 100 (Internet-based test).

3. Three letters of recommendation.
4. A personal essay of approximately 500 words.
5. The credentials of each applicant will be examined by the Linguistics Graduate Admissions Committee. An interview may be requested.
6. The number of applicants approved for matriculation is limited by available resources; therefore, applicants who otherwise meet minimum requirements for matriculation may not necessarily be admitted.

Maintenance Requirements

1. Minimum overall GPA of *B* (3.0).
2. All students must file a Program of Study form with the graduate advisor.

Degree Requirements

These requirements are in addition to the general requirements for the Master of Science in Education degree.

1. For students who possess a NYS teaching certificate:
   - Satisfactory completion of the following 39 credits: LCD 701, 702, 703, 705, 706, 707, 712, 720, 740.3, 741.3, 742, 790, 796.
   - Students with K–6 certification must take Adolescent Development (SEYS 552).
   - Students with 7–12 certification must take Child Development (EECE 710, 711, or 712).
2. For students who do not possess a NYS teaching certificate:
   - Satisfactory completion of the following 44 credits: LCD 701, 702, 703, 705, 706, 707, 712, 720, 740.4, 741.4, 742, 790, 794, 795.
   - The following coursework in pedagogy: Foundations of Education (SEYS 536), Child Development (EECE 710, 711, or 712), Adolescent Development (SEYS 552), and Students with Disabilities (ECPSE 550).
3. Completion of course requirements with a minimum overall GPA of *B* (3.0).
4. Candidates accepted into the program must also satisfy (if not satisfied by previous study) the following NYS certification requirements prior to graduation (course deficiencies must be made up in consultation with the graduate advisor):
   - A broad liberal arts background that includes courses in English / comparative literature / literary criticism; American history; mathematics; natural sciences; social sciences; 12 semester hours or the equivalent of study of a language other than English
   - Tests and seminars, as advised by the graduate advisor.

PROGRAM IN ALTERNATIVE CERTIFICATION TRANSITIONAL B MASTER OF ARTS IN TEACHING (MAT) IN TESOL

Program Advisor: Michelle Cassano-Repole

The alternative Transitional B Teacher Certification program in TESOL is designed for candidates with an undergraduate degree in liberal arts (or the equivalent) who wish to enter into a clinical residency program to become certified TESOL teachers and gain their master's degree in teaching. Admission requirements include command of both written and spoken academic English, college-level foreign language coursework or a passing score on a proficiency exam in a language other than English, and an in-person interview.

Once accepted, candidates will engage in an intensive and scaffolded summer experience starting in the beginning of June through preparation for the start of the school year at the beginning of September. The goal of the summer experience is to ensure that residents acquire the foundational skills and knowledge to launch the school year successfully in September and meet the requirements for Transitional B Certification. While taking courses during the first fall and spring semesters, candidates will serve as employees of the NYCDOE under the guidance of a mentor teacher. Upon completion of the second semester of clinical residency in the first spring, candidates will make the transition to full-time teacher of record in a high-need NYCDOE school and receive induction support for the next full academic year. Upon successful completion of the MAT program, the edTPA, and a year of supervised, full-time teaching under the guidance of a mentor teacher (i.e., after the second spring semester), candidates will be cleared for graduation and recommended to NYSED for initial and professional certification.

For more detailed information, contact the program advisor.

POST-MASTER'S ADVANCED CERTIFICATE IN TESOL AND ELEMENTARY BILINGUAL EDUCATION

Program Advisors: Michelle Cassano-Repole and Patricia Velasco

The Bilingual Education Extension functions as a branch of the initial or professional certification granted by NYSED. This means that once certified elementary school teachers complete the courses leading to the extension, they can teach elementary school age students in bilingual contexts (English and one of the 23 languages in which NYS grants bilingual extensions).The TESOL Initial Certificate allows certified teachers to teach English as a Second Language (ESL) at all grade levels. For more detailed information, contact the program advisor.

Admission Requirements

1. Master's in Education (MAT or MSED).
2. Current NYSED Teacher Certification in elementary education.
3. Fluency in a language other than English in which Bilingual Extension is offered.
4. Personal interview, including evaluation of oral and written English language proficiency.

5. Applicants whose first language is not English and who do not hold a degree from an accredited institution of higher education in a country where English is an official language must submit proof of having passed the Test of English as a Foreign Language (TOEFL) with the following minimum scores: 600 (paper-based test); 250 (computer-based test); 100 (Internet-based test).

Coursework

This is a 24-credit program, consisting of 8 courses: 6 required and 2 disjunctively required between two courses. (Six transfer credits, approved by the program directors, are the maximum allowed.)

There are two sets of courses offered by the TESOL and Elementary Education Bilingual Extension programs that share similar content. EECE 761 and LCD 706 focus on the rationale for bilingual education, and its sociopolitical context in the United States. EECE 766 and LCD 701 target theoretical and structural approaches to the study of language and their implications for teaching. The other six courses cover specific topics that are relevant for future TESOL and bilingual teachers.

Required Courses

LCD 701. Introduction to Linguistics. 3 hr.; 3 cr. Structural aspects of language most relevant to the ESL and/or literacy teacher.

or

EECE 766. English Language Learning in the Bilingual Classroom: Theoretical Background. 3 hr.; 3 cr. Designed for bilingual teachers, this course concentrates on theoretical and structural approaches to the study of the second language learning process in a bilingual classroom. Students explore aspects of second language acquisition as well as those factors involved in individual variations in achievements of non-native speakers of English attending bilingual programs.

LCD 702. Teaching English Sentence Structure I. 3 hr.; 3 cr. Prereq. or coreq.: LCD 701. Introduction to the grammar of English and applications to teaching ESL, Part I.

LCD 706. Bilingualism. 3 hr.; 3 cr. Prereq. or coreq.: LCD 701. Sociolinguistic and psycholinguistic properties of bilingualism, legal history, and educational foundations of bilingual education. Bilingual education will be compared to other approaches. An emphasis is placed on the implications of bilingualism for ESL and/or literacy teachers.

or

EECE 761. Educating the Non-native Speaker of English: Theory and Research. 3 hr.; 3 cr. This course examines the philosophy, rationale, and historical background of bilingual education. By using information provided by research on the field, participants will discuss the programs and trends while exploring the sociological and political aspects of bilingual education. Special emphasis is placed on the analysis of the research in first and second-language acquisition as well as the study of strategies to develop the first language and acquire a second language through the content areas.

LCD 740. Second Language Acquisition and Teaching. 3 hr. plus 25 hr. of fieldwork; 3 cr. Prereq. or coreq.: LCD 701. Introduction to the linguistic and pedagogical theories and methods of teaching ESL. There is a field experience requirement at various school settings in conformity with New York State certification requirements. Classes may sometimes be held at these off-campus locations.

LCD 741. Methods and Materials of TESOL: Listening, Speaking, Reading, Writing. 3 hr. plus 25 hr. of fieldwork tutorial; 3 cr. Prereq.: LCD 702 and 740. This course is a comprehensive review of the methods and materials used in TESOL/ESL classes to teach the four language skills: listening, speaking, reading, and writing. The class covers how to adapt methods and materials to suit learner populations of different ages and at varying levels of English proficiency. The role of instructional technology (e.g., audiovisual, multimedia, computers in ESL instruction) will also be addressed. There is a field experience requirement at various school settings in conformity with New York State certification requirements. Classes may sometimes be held at these off-campus locations. There is a requirement for 10 full school days of supervised student teaching in ESL classes at either the elementary or secondary level.

LCD 742. Methods and Materials of TESOL: The Content Areas. 3 hr.; 3 cr. Prereq.: LCD 741. In this course students learn the principles and practices for TESOL/ESL through academic content areas such as mathematics, science, social studies, and language arts. Readings, model lessons, and authentic materials are used to examine the theoretical issues involved and apply them to teaching practices for ESL learners at the elementary and secondary levels. There is a requirement for 10 full school days of supervised student teaching in ESL classes at either the elementary or secondary level, complementing the level of student teaching in LCD 741.

EECE 763. Teaching of Reading and Language Arts in Bilingual Education. 3 hr.; 3 cr. This course is taught in Spanish. For students who speak a language other than Spanish, candidates take an independent course (EECE 791.3) with an instructor who is a native speaker of that language. The languages for which New York State grants certification are Arabic, Bengali, Cantonese, French, Haitian Creole, Hebrew, Korean, Mandarin, Polish, Russian, Spanish, Urdu, Vietnamese, and Yiddish.

EECE 764. Learning the Content Areas in Multilingual Settings: Teaching and Assessment. 3 hr.; 3 cr. This course focuses on the study, analysis, application, and creation of appropriate classroom instructional strategies to teach content areas to language minority students. Students practice different methodologies in teaching mathematics, science, social

studies, and other content areas in the first and second language, and consider the evaluation issues related to language and content in the bilingual-multicultural classroom. Participants develop skills to examine, evaluate, and create instructional materials to teach language to minority children in their mother tongue.

COURSES IN SPEECH-LANGUAGE PATHOLOGY

LCD 700. Research Methodology in Communication Sciences and Disorders. 2 hr. plus conf.; 3 cr. Methods of experimental and statistical control in the design of research for the speech, hearing, and language sciences. Issues addressed include research concerning developmental processes; speech and language acquisition and disabilities; diagnostic and intervention strategies in clinical and school environments; instructional and assistive technology; validation of instructional strategies; and program evaluation.

LCD 717. The Acquisition of Language. 2 hr. plus conf.; 3 cr. Development of language in the normal child; theoretical and empirical issues. The course involves the study of the processes and variations of speech, language, communication and preliteracy skills in typically developing mono- and bilingual children. Objectives include an exploration of the impact of cultural, ethnic, gender, socioeconomic, and individual variations on the child's acquisition of language; an understanding of the processes involved in language learning, language use, and the foundations of literacy from prelinguistic stages to complex language development.

LCD 721. Language and Learning Disorders of Children I. 2 hr. plus conf.; 3 cr. Application of studies in normal language acquisition to the study of pre-school language and learning disorders; emphasis on the assessment of, and intervention with pre-school children with language and learning disorders. Units include interdisciplinary views of the child with speech, language, and communication challenges; issues in speech, language, communication, social-emotional and cognitive development related to specific language impairment, pervasive developmental delay, autism, mental retardation, and developmental apraxia; challenges in learning and in the classroom for children with developmental language disorders.

LCD 722. Speech Disorders: Stuttering. 2 hr. plus conf.; 3 cr. Theoretical and empirical approaches to the symptoms, etiology, and management of fluency disorders from childhood to adolescence to adulthood. Topics include working with children as members of families and school environments; special considerations for pre-school and school-aged children; and interactions with children, parents, and teachers.

LCD 723. Alternative and Augmentative Communication Systems and Use for the Persons with Severe Communication Impairments. 2 hr. plus conf.; 3 cr. Nature of alternative and augmentative communication (AAC) technologies, sign systems, and strategies used with children and adults across a range of impairments; individualized assessment and assignment of assistive technologies; teaching language and communication skills to persons using AAC in home, school, and workplace settings; and the use of technology to communicate.

LCD 724. Neuromotor Communication Disorders. 2 hr. plus conf.; 3 cr. Emphasis on problems of children with various neuromuscular disorders. Topics include speech, oral motor, and respiratory/phonatory issues in normal and abnormal neuromotor development from 1–12 months; development of feeding skills, oral motor assessment of infants and young children, multidisciplinary assessment and treatment.

LCD 725. Diagnostic Methods in Speech-Language Pathology. 2 hr. plus conf.; 3 cr. Theoretical principles underlying the assessment of communication disorders; includes procedures for formal test selection and use, interviewing, and report writing. Units include assessment of language interactions in home, clinic, and school settings.

LCD 726. Language Disorders: Adolescents and Adults I. 2 hr. plus conf.; 3 cr. Symptoms, etiology, and management of adolescents and adults with language difficulties related to acquired aphasia.

LCD 727. Speech Disorders: Voice. 2 hr. plus conf.; 3 cr. Vocal pathologies in children and adults: etiology, symptoms, and treatment approaches. Topics include laryngeal histopathology, neurological vocal disorders; laryngectomy; and the impact and management of a variety of pediatric vocal disorders including working with children as members of family and school environments.

LCD 728. Speech-Language Pathology Services in the Schools. 2 hr. plus conf.; 3 cr. A study of the research findings and professional practices basic to decision-making. Units include models of service delivery; individualized educational programming; rights and responsibilities of teachers and other staff; instructional design and planning including case selection; collaborative assessment and teaching; computerized teaching programs; national and state legislation and regulations; multicultural differences and bilingual considerations.

LCD 729. Clinical and Classroom Practicum in Speech-Language Pathology. 1, 2, or 3 cr. The course requires 12–14 hours per week of supervised clinical and classroom practicum. It includes staffings; instructional planning; case conferences; analysis of clinical and classroom management and instruction; the critical appraisal of behavioral teaching objectives; outcomes assessment; and professional practice issues. The course is taken during each semester of matriculation. It is repeatable for one, two, or three credits. The course is graded on a Pass/Fail basis only.

LCD 730. Speech Disorders: Articulation and Phonology. 2 hr. plus conf.; 3 cr. Review of current literature on phonological disorders with a view toward assessment and management in the clinic and the classroom. Topics include theories of phonological development; various forms of phonological and articulatory assessment; development of phonological awareness and impact on speech, spelling, and reading; impact of culture and heritage on phonological patterns; and remedial techniques.

LCD 731. Language Disorders: Adolescents and Adults II. 2 hr. plus conf.; 3 cr. This course examines the language of dementia, traumatic brain injury, and right hemisphere brain damage, along with motor speech disorders. Each disorder, especially as it relates to the adult and adolescent population, is discussed according to its symptoms, etiology, diagnosis, and treatment.

LCD 732. Language and Learning Disorders of Children II. 2 hr. plus conf.; 3 cr. Application of research in normal oral and written language acquisition to the study of language and learning disorders in school-aged children and adolescents; emphasis on the assessment of, and intervention with school-age children with language and learning disorders in the clinic and the classroom. Units include the history of special education; perceptual disorders, linguistic diversity; narrative and discourse development; reading acquisition; medication, drug abuse, and language issues related to dyslexia, attention deficit disorder, oppositional behavior, and central auditory processing disorder.

LCD 733. Dysphagia. 2 hr. plus conf.; 3 cr. The anatomy and physiology of normal and disordered glutition. Emphasis is on medical issues related to the etiology, symptomatology, diagnosis, and treatment of swallowing disorders. Topics include various technological methods of assessment including modified barium swallow and fiberoptic endoscopic evaluation of swallowing; interdisciplinary concerns; and impact of ethical and cognitive issues.

LCD 734. Communication and Auditory Impairment. 2 hr. plus conf.; 3 cr. Communication problems of the hearing impaired; clinical strategies for intervention; production and comprehension of speech and language as well as psychological considerations. Topics include language, cognitive, educational, and psychosocial issues; hearing aids; classroom acoustics and group amplification systems; assistive technology; cochlear implants and tactile aids.

LCD 759. Studies in Communication Disorders. 3 hr.; 3 cr. May be repeated for credit if topic changes.
LCD 797. Special Problems. Prereq.: Approval of program director and department chair.

LCD 797.1. 1 hr.; 1 cr.

LCD 797.2. 2 hr.; 2 cr.

LCD 797.3. 3 hr.; 3 cr.

SPEECH-LANGUAGE PATHOLOGY COURSES IN RESERVE

LCD 704. The Psychology of Speech

LCD 708. Speech Science

LCD 710. Physiological Acoustics

LCD 714. Sociology of Speech: Sociolinguistics

LCD 715. Semantics

LCD 743. Advanced Audiology I

LCD 744. Hearing Aids

LCD 745. Audiological Assessment of the Young Child

LCD 746. Advanced Audiology II

LCD 747. Psychological Acoustics

LCD 748. Auditory Disorders in Children

LCD 749.1, 749.2, 749.3. Clinical Practicum in Audiology

COURSES IN LINGUISTICS/TESOL

LCD 701. Introduction to Linguistics. 3 hr.; 3 cr. Structural aspects of language most relevant to the ESL and/or literacy teacher.

LCD 702. Teaching English Sentence Structure I. 3 hr.; 3 cr. Prereq. or coreq.: LCD 701. Introduction to the grammar of English and applications to teaching ESL, Part I.

LCD 703. Teaching English Sentence Structure II. 3 hr.; 3 cr. Prereq.: LCD 702. Introduction to the grammar of English and applications to teaching ESL, Part II. Continuation of LCD 702.

LCD 705. Language and Cross-Cultural Communication. 3 hr.; 3 cr. Prereq. or coreq.: LCD 701. The acquisition and use of non-native languages from a cross-cultural perspective. Introduction to research on how non-native speakers learn the sociolinguistic and pragmatic rules of the target language and how inappropriate use of such rules often results in miscommunication between native and non-native speakers. Developing effective pedagogical techniques in teaching communicative competence to ESL learners.

LCD 706. Bilingualism. 3 hr.; 3 cr. Prereq. or coreq.: LCD 701. Sociolinguistic and psycholinguistic properties of bilingualism, legal history, and educational foundations of bilingual education. Bilingual education will be compared to other approaches. An emphasis is placed on the implications of bilingualism for ESL and/or literacy teachers.

LCD 707. Evaluation and Measurement in TESOL. 3 hr.; 3 cr. Prereq. or coreq.: LCD 703 and 741. Discussion of contemporary issues and problems in ESL testing. Construction and evaluation of tests and assessments in all areas of language skills. Analysis of published standardized ESL tests, such as LAB and TOEFL.

LCD 712. Multiple Literacies in TESOL. 3 hr.; 3 cr. Prereq. or coreq.: LCD 741. This course provides a strong background in the teaching of the multiple literacies that English language learners need to thrive in today's technologically changing society. The class explores the teaching of traditional alphabetic literacy skills involved in English Language Arts. It also prepares students for instruction in emerging forms of communication, including media literacy, information literacy, and information technology. Components include assessment, methods, and materials development.

LCD 720. Teaching English Sound Structure. 3 hr.; 3 cr. Prereq. or coreq.: LCD 701. Introduction to the sound structure of English and applications to teaching ESL.

LCD 740. Second Language Acquisition and Teaching. Prereq. or coreq.: LCD 701. Introduction to the linguistic and pedagogical theories and methods of teaching ESL. There is a field experience requirement at various school settings in conformity with New York State certification requirements. Classes may sometimes be held at these off-campus locations.

LCD 740.3. 3 hr. plus 25 hr. fieldwork observation; 3 cr. (For students who possess a New York State teaching certificate.)

LCD 740.4. 3 hr. plus 50 hr. fieldwork observation; 4 cr. (For students who do not possess a New York State teaching certificate.)

LCD 741. Methods and Materials in TESOL: Listening, Speaking, Reading, Writing. Prereq.: LCD 702 and 740. This course is a comprehensive review of the methods and materials used in TESOL/ESL classes to teach the four language skills: listening, speaking, reading, and writing. The class covers how to adapt methods and materials to suit learner populations of different ages and at varying levels of English proficiency. The role of instructional technology (e.g., audiovisual, multimedia, computers in ESL instruction) will also be addressed. There is a field experience requirement at various school settings in conformity with New York State certification requirements. Classes may sometimes be held at these off-campus locations.

LCD 741.3. 3 hr. plus 25 hr. fieldwork tutorial; 3 cr. (For students who possess a New York State teaching certificate.) For students in the Post Master's Advanced Certificate in TESOL program there is a requirement for 10 full school days of supervised student teaching in ESL classes at either the elementary or secondary level.

LCD 741.4. 3 hr. plus 50 hr. fieldwork tutorial; 4 cr. (For students who do not possess a New York State teaching certificate.)

LCD 742. Methods and Materials of TESOL: The Content Areas. 3 hr.; 3 cr. Prereq.: LCD 741. In this course students learn the principles and practices for TESOL/ESL through academic content areas such as mathematics, science, social studies, and language arts. Reading, model lessons, and authentic materials are used to examine the theoretical issues involved and to apply them to teaching practices for ESL learners at the elementary and secondary levels. For students in the Post-Master's Advanced Certificate in TESOL program there is a requirement for 10 full school days of supervised student teaching in ESL classes at either the elementary or secondary level, complementing the level of student teaching in LCD 741.

LCD 750. Practicum in Adult TESOL. 3 hr. plus 20 hr./wk of teaching experience; 3 cr. Prereq.: LCD 741. Supervised teaching experience plus a weekly two-hour seminar focused on classroom-related issues in second language acquisition and instruction. This course does *not* fulfill the State Education requirements for certification in elementary or secondary schools.

LCD 790. Seminar in Research in TESOL. 3 hr.; 3 cr. Prereq.: LCD 707 and 742. Analysis of selected research studies related to TESOL.

LCD 794. Student Teaching Internship in TESOL I. 3 hr. plus 20 hr./wk. student teaching; 3 cr. Prereq. or coreq.: LCD 742. Supervised student teaching in ESL classes, plus a weekly seminar at the college. (For students who do not possess a New York State teaching certificate.)

LCD 795. Student Teaching Internship in TESOL II. 3 hr. plus 20 hr./wk. student teaching; 3 cr. Prereq.: LCD 794. Supervised student teaching in ESL classes at either the elementary or secondary level, complementing the level of student teaching in LCD 794, plus a weekly seminar at the college. (For students who do not possess a New York State teaching certificate.)

LCD 796. Student Teaching Internship in TESOL for Certified Teachers. 3 hr. plus 20 hr./wk. student teaching; 3 cr. Prereq.: LCD 742. Supervised student teaching in ESL classes, plus a weekly seminar at the college. (For students who possess a New York State teaching certificate.)

LINGUISTICS COURSES IN RESERVE

LCD 709. Teaching Writing and Reading to the Adult ESL or Basic Education Student

LCD 781. Survey of Adult Literacy Practices and Theory

LCD 782. Language, Literacy, and Society

LCD 784. Practicum in Adult Literacy and Reading

LCD 791. Seminar in Research in Applied Linguistics

Master of Arts in Liberal Studies

Acting Director: Stephen Grover

MALS Advisory Committee: Alberto Cordero-Lecca (Philosophy), Kristin Celello (History)

Dept. Office: Powdermaker Hall 350A, 997-5270

The Master of Arts in Liberal Studies program makes possible a structured study of issues and problems outside the usual graduate school disciplines. Its interdisciplinary approach encourages students to see a specific problem, theme, or topic from a broad perspective by focusing on it through more than one methodology. The base of the 30-credit program is three team-taught core seminars that provide an intense examination of the sources and development of Western values.

While completing the core seminars (which comprise 9 credits), students, in consultation with a faculty advisor, select 18 credits of elective courses from existing college graduate offerings. This allows for a focused yet interdisciplinary approach at the master's level of study.

FACULTY

The core faculty is drawn primarily but not exclusively from the departments of History and Philosophy.

Admissions

Students must satisfy the general requirements for admission to the Graduate Division. The Graduate Record Exam is not required. The MALS Advisory Committee recommends candidates to the Dean.

Requirements for MALS Degree

These requirements are in addition to the general requirements for the Master of Arts degree.

1. Each student must complete the three core seminars.
2. The course of study must be approved by a faculty advisor.
3. Of the six elective courses, no more than three can be in the same department.
4. Thesis or project required (3 credits).

MALS CORE SEMINARS

LBLST 700. Western Values I. 2 hr. plus conf.; 3 cr. An intensive examination of the philosophical, religious, and political ideas of the ancient and Medieval world in their historical context.

LBLST 701. Western Values II. 2 hr. plus conf.; 3 cr. A continuation of LBLST 700 from the Renaissance to the middle of the twentieth century.

LBLST 702. Western Values III. 2 hr. plus conf.; 3 cr. Topics in twentieth-century philosophy, politics, and science.

Mathematics

Chair: Alan Sultan

Graduate Advisor: Scott Wilson

Dept. Office: Kiely Hall 243, 997-5800

Website: www.qc.cuny.edu/Math

Students in the master's program can choose a program of study to prepare them for PhD programs in mathematics, for teaching at a pre-university level, for a career in probability or statistics, or for actuarial work. For those students who are interested in computer science as well as mathematics, a program can be arranged so that students do approximately one-half of their work in mathematics and one-half in computer science, each area complementing the other.

FACULTY

Sultan, Alan, Chair, *Professor,* PhD 1974, Polytechnic Institute of New York: topological measure theory

Wilson, Scott, Graduate Advisor, *Professor,* PhD 2005, Stony Brook University: topology and geometry

Adrian, Moshe, *Assistant Professor,* PhD 2010, University of Maryland: representation theory, number theory

Braun, Martin, *Professor,* PhD 1968, New York University: qualitative theory of differential equations, mathematical models

Hanusa, Christopher, *Professor,* PhD 2005, University of Washington: combinatorics & graph theory

Jiang, Yunping, *Distinguished Professor*, PhD 1990, City University of New York: dynamical systems

Kapelner, Adam, *Assistant Professor*, PhD 2014, The Wharton School of the University of Pennsylvania: statistics

Klosin, Krzysztof, *Professor,* PhD 2006, University of Michigan: algebraic number theory

Kramer, Kenneth B., *Professor,* PhD 1973, Harvard University: algebraic number theory

Lee, Dan, *Associate Professor,* PhD 2005, Stanford University: differential geometry
Miller, Russell G., *Professor,* PhD 2000, University of Chicago: logic, computability theory
Mitra, Sudeb, *Professor,* PhD 1999, Cornell University: complex analysis, geometric function theory, Riemann surfaces, Teichmüller spaces
Ovchinnikov, Alexey, *Professor,* PhD 2007, North Carolina State University: differential algebra
Ralescu, Stefan S., *Professor,* PhD 1981, Indiana University at Bloomington: statistics, non-parametric inference, probability theory
Rothenberg, Ronald I., *Associate Professor*, PhD 1964, University of California at Davis: operations research, probability and statistics, applied mathematics
Sabitova, Maria, *Associate Professor,* PhD 2005, University of Pennsylvania: algebraic number theory
Saric, Dragomir, *Professor,* PhD 2001, City University of New York: Teichmüller theory
Sisser, Fern S., *Associate Professor,* PhD 1977, Columbia University: optimization
Terilla, John, *Professor,* PhD 2001, University of North Carolina at Chapel Hill: deformation theory, mathematical physics
Vlamis, Nicholas, *Assistant Professor,* PhD 2015, Boston College: geometry, group theory, complex analysis in the setting of low-dimensional topology
Zakeri, Saeed, *Professor*, PhD 1999, State University of New York at Stony Brook: dynamical systems
Zeng, Qiang, *Assistant Professor,* PhD 2014, University of Illinois at Urbana-Champaign: interfaces of probability theory, functional analysis, mathematical physics

Requirements for Matriculation in the Master of Arts Programs

These requirements are in addition to the general requirements for admission.

1. To be admitted to the program, a candidate must have at least 25 credits in advanced courses in mathematics and related fields (such as computer science and physics). At least 12 credits must be in mathematics, including advanced calculus and linear algebra, with an average of at least *B* in the mathematics courses. Applicants not meeting these requirements must secure special permission of the department, and may be required to take courses to remove the deficiencies without receiving graduate credit.
2. At least two of the written recommendations must be from the applicant's undergraduate instructors and must deal with the ability of the applicant to pursue graduate work in mathematics.
3. The applicant must have the approval of the department's Committee of the Graduate Program.
4. The applicant's plan of study must be approved by the department.

Requirements for the Master of Arts Degree

These requirements are in addition to the general requirements for the Master of Arts degree. The Department of Mathematics offers to the student the opportunity to obtain the Master of Arts degree either in Pure Mathematics or with a concentration in Applied Mathematics. Students pursuing a master's degree in Mathematics may use only use 600- and 700-level courses for the 30 credits required for graduation and to meet the 3.0 GPA requirement.

Master of Arts in Pure Mathematics

1. A candidate for this degree is required to complete MATH 621, 628, 701, 702, and 703. A total of 30 credits required for the degree must be in mathematics, except that, with the approval of the Mathematics Department, a limited number of appropriate courses in physics or computer science may be substituted for mathematics courses. It is required that the program be completed with an average of *B* or better.
2. Each candidate for the degree must pass an oral examination.

Master of Arts with a Concentration in Applied Mathematics

1. A candidate for this degree is required to complete 30 credits in an approved sequence of graduate-level courses in mathematics and related fields. All students must achieve a solid grounding in the three areas of probability and statistics, analytic methods, and numerical methods. This can be achieved by taking the following courses: MATH 621, 624, 625, 628, and 633; or by demonstrating competence in specific areas to the satisfaction of the department; or by taking an alternative program of courses selected with the advisement and approval of the Graduate Advisor. A list of current courses and suggested programs of study will be made available. Students may obtain permission to design programs tailored to their individual needs. It is required that the master's program be completed with an average of *B* or better.
2. Each candidate will be required to pass a written examination in an area of specialization to be approved by the Mathematics Department.

PROGRAM FOR THE MASTER OF SCIENCE IN EDUCATION DEGREE

Requirements for Matriculation

These requirements are in addition to the general requirements for admission. To be admitted to the program a candidate must have:

1. A cumulative index and Mathematics index of at least *B*, as well as a *B* index in education are required for matriculated status. Students who do not meet the above requirements may be permitted to enter as probationary matriculants. Probationary status will be removed when the first 12 credits of approved coursework have been completed with a minimum average of *B*.
2. At least 21 credits in college-level mathematics courses. These courses must include intermediate calculus and linear algebra, with an average of at

least *B*. Note that before taking the mathematics courses that go toward the master's degree, students must have a total of 36 credits in college-level mathematics.

3. Two letters of recommendation.

Requirements for the Degree

1. Candidates in this program have two advisors, one in the Department of Secondary Education & Youth Services and one in the Department of Mathematics. The Education Advisor should be consulted first to plan out the required coursework.
2. Students must take 15 credits in mathematics and 15 credits in Secondary Education. Note that the coursework in mathematics usually includes study in the History of Mathematics, Probability and Statistics, and Geometry. Students must consult their advisor to plan an appropriate course of study.
3. Students are required to pass an oral examination in mathematics. This exam is given by two of the student's professors and is based on the content of the two courses. The student may decide on the professors and submits a request to the Mathematics Advisor who then schedules the oral examination.

COURSES IN MATHEMATICS

MATH 503. Mathematics from an Algorithmic Standpoint. 3 hr.; 3 cr. Prereq.: One year of calculus. An algorithmic approach to a variety of problems in high school and college mathematics. Topics may include problems from number theory, geometry, calculus, combinatorics, probability, and games and puzzles. Students will learn to program in the powerful Mathematica language and use this capability to conduct research in the above areas. Prior experience in programming is not necessary. (Students may not receive credit for this course and MATH 213W.) This course may not be credited toward the degree of Master of Arts in Mathematics.

MATH 505. Mathematical Problem-Solving. 3 hr.; 3 cr. Prereq. or coreq.: One year of college mathematics. This course presents techniques and develops skills for analyzing and solving problems mathematically and for proving mathematical theorems. Students will learn to organize, extend, and apply the mathematics they know and, as necessary, will be exposed to new ideas in areas such as geometry, number theory, algebra, combinatorics, and graph theory. This course may not be credited toward the Master of Arts degree in Mathematics.

MATH 509. Set Theory and Logic. 3 hr.; 3 cr. Prereq.: One year of calculus or permission of the instructor. May not be credited toward the Master of Arts degree in Mathematics. Propositional logic and truth tables. Basic intuitive ideas of set theory: cardinals, order types, and ordinals. This course may not be credited toward the Master of Arts in Mathematics. Fall

MATH 518. College Geometry. 3 hr.; 3 cr. Prereq.: One course in linear algebra. Advanced topics in plane geometry, transformation geometry. This course may not be credited toward the Master of Arts in Mathematics. Fall

MATH 524. History of Mathematics. 3 hr.; 3 cr. Prereq. or coreq.: MATH 201 (Intermediate Calculus). This course may not be credited toward the Master of Arts in Mathematics. Fall

MATH 525. History of Modern Mathematics. 3 hr.; 3 cr. Prereq.: MATH 524 or permission of the instructor. May not be credited toward the Master of Arts degree in Mathematics. Selected topics from the history of nineteenth- and twentieth-century mathematics, e.g., topology, measure theory, paradoxes and mathematical logic, modern algebra, non-Euclidean geometries, foundations of analysis. This course may not be credited toward the Master of Arts degree in Mathematics.

MATH 550. Studies in Mathematics. Prereq.: Permission of the department. Topics will be announced in advance. May be repeated once for credit if topic is not the same. This course may not be credited toward the Master of Arts degree in Mathematics.

MATH 550.1. 1 hr.; 1 cr.

MATH 550.2. 2 hr.; 2 cr.

MATH 550.3. 3 hr.; 3 cr.

MATH 555. Mathematics of Games and Puzzles. 3 hr.; 3 cr. Prereq.: Two years of calculus or permission of the instructor. May not be credited toward the Master of Arts degree in Mathematics. Elements of game theory. Analysis of puzzles such as weighing problems, mazes, Instant Insanity, magic squares, paradoxes, etc. This course may not be credited toward the Master of Arts degree in Mathematics.

MATH 601. Discrete Mathematics for Computer Science. 4 hr.; 3 cr. An introduction to discrete mathematics for those incoming Computer Science master's degree students who do not have an undergraduate background in discrete mathematics. Topics include elementary set theory, elements of abstract algebra, propositional calculus, and Boolean algebra, proofs, mathematical induction, combinatorics, graphs, and discrete probability theory. (Students may not receive credit for both MATH 601 and either MATH 220 or CSCI 221, or an equivalent course in discrete mathematics. MATH 601 cannot be counted toward an undergraduate major in mathematics or a master's degree in mathematics.)

MATH 609. Introduction to Set Theory. 3 hr.; 3 cr. Prereq.: MATH 201 (Intermediate Calculus) or permission of the instructor. Axiomatic development of set theory; relations, functions, ordinal and cardinal numbers, axiom of choice. Zorn's lemma, continuum hypothesis. Spring

MATH 612. Projective Geometry. 3 hr.; 3 cr. Prereq.: A course in linear algebra. Study of the projective plane.

MATH 613. Algebraic Structures. 3 hr.; 3 cr. Prereq.: A course in linear algebra. Not open to students who have received undergraduate credit for MATH 333 at Queens College. Groups, rings, polynomials, fields, Galois theory. Spring

MATH 614. Functions of Real Variables. 3 hr.; 3 cr. Prereq.: Course in Elementary Real Analysis or Point Set Topology (equivalent of MATH 310 or 320), or permission of the instructor. Provides a foundation for further study in mathematical analysis. Topics include: basic topology in metric spaces, continuity, uniform convergence and equicontinuity, introduction to Lebesgue theory of integration. Fall

MATH 615. Algebraic Number Theory. 3 hr.; 3 cr. Prereq.: MATH 333, 613, or permission of the instructor. Modern theory of algebraic integers (generalization of integers), the problem of prime factorization, p-adic numbers, the Rieman zeta function, L-function, theorem on primes in arithmetic progression.

MATH 616. Ordinary Differential Equations. 3 hr.; 3 cr. Prereq.: MATH 614 or permission of the chair. Existence and uniqueness of solutions, linear systems, Liapunov stability theory, eigenvalue and boundary value problems.

MATH 617. Number Systems. 3 hr.; 3 cr. Prereq.: Three semesters of undergraduate analytic geometry and calculus including infinite series. Not open to students who have received undergraduate credit for MATH 317 at Queens College. Axiomatic development of the integers, rational numbers, real numbers, and complex numbers. Fall

MATH 618. Foundations of Geometry. 3 hr.; 3 cr. Prereq.: One year of calculus. Historical perspective. Axiomatics: models, consistency, and independence. Rigorous development of both Euclidean geometry and the non-Euclidean geometry of Bolyai and Lobachevski. Spring

MATH 619. Theory of Numbers. 3 hr.; 3 cr. Prereq.: MATH 231 or 237. Prime numbers, the unique factorization property of integers, linear and non-linear Diophantine equations, congruences, modular arithmetic, quadratic reciprocity, continued factions, contemporary applications in computing and cryptography.

MATH 621. Probability. 3 hr.; 3 cr. Prereq.: A semester of intermediate calculus (the equivalent of MATH 201) and an introductory course in probability, or permission of the chair. Binomial, Poisson, normal, and other distributions. Random variables. Laws of large numbers. Generating functions. Markov chains. Central limit theorem. Not open to students who are taking or who have received credit for MATH 368. Students may not receive credit for both MATH 368 and MATH 621. Fall

MATH 623. Operations Research (Probability Methods). 3 hr.; 3 cr. Prereq.: Course in probability theory (such as MATH 241). An introduction to probabilistic methods of operations research. Topics include the general problem of decision making under uncertainty, project scheduling, probabilistic dynamic programming, inventory models, queuing theory, simulation models, and Monte Carlo methods. The stress is on applications. Spring

MATH 624. Numerical Analysis I. 3 hr.; 3 cr. Prereq.: A course in linear algebra (MATH 231 or 237) and either MATH 171 or knowledge of a programming language; coreq.: MATH 201 (Calculus). Numerical solution of nonlinear equations by iteration. Interpolation and polynomial approximation. Numerical differentiation and integration. Fall

MATH 625. Numerical Analysis II. 3 hr.; 3 cr. Prereq.: MATH 624 or its equivalent, including knowledge of a programming language. Numerical solution of systems of linear equations. Iterative techniques in linear algebra. Numerical solution of systems of nonlinear equations. Orthogonal polynomials. Least square approximation. Gaussian quadrature. Numerical solution of differential equations. Spring

MATH 626. Mathematics and Logic. 3 hr.; 3 cr. Prereq.: Intermediate calculus or permission of the department. Propositional calculus, quantification theory, recursive functions, Gödel's incompleteness theorem. Spring

MATH 628. Functions of a Complex Variable. 3 hr.; 3 cr. Prereq.: One year of advanced calculus (MATH 202) or permission of the instructor. Topics covered include analytic functions, Cauchy's Integral Theorem, Taylor's theorem and Laurent series, the calculus of residues, Riemann surfaces, singularities, meromorphic functions. Spring

MATH 630. Differential Topology. 3 hr.; 3 cr. Prereq.: Advanced calculus. Differentiable manifolds and properties invariant under differentiable homeomorphisms; differential structures; maps; immersions, imbeddings, diffeomorphisms; implicit function theorem; partitions of unity; manifolds with boundary; smoothing of manifolds.

MATH 631. Differential Geometry. 3 hr.; 3 cr. Prereq.: Advanced calculus. Theory of curves and surfaces and an introduction to Riemannian geometry.

MATH 632. Differential Forms. 3 hr.; 3 cr. Prereq.: Advanced calculus. A study in a coordinate-free fashion of exterior differential forms: the types of integrands which appear in the advanced calculus.

MATH 633. Statistical Inference. 3 hr.; 3 cr. Prereq.: A semester of intermediate calculus (the equivalent of MATH 201) and either an undergraduate

probability course which includes mathematical derivations (the equivalent of MATH 241) or MATH 621. Basic concepts and procedures of statistical inference. Not open to students who are taking or who have received credit for MATH 369. Students may not receive credit for both MATH 369 and 633. Spring

MATH 634. Theory of Graphs. 3 hr.; 3 cr. Prereq.: One semester of advanced calculus. An introduction to the theory of directed and undirected graphs. The Four-Color Theorem. Applications to other fields. Fall

MATH 635. Stochastic Processes. 3 hr.; 3 cr. Prereq.: MATH 241 or 621. A study of families of random variables.

MATH 636. Combinatorial Theory. 3 hr.; 3 cr. Prereq.: A course in linear algebra. This course will be concerned with techniques of enumeration. Spring

MATH 650. Studies in Mathematics. Prereq. or coreq.: The topic will be announced in advance. This course may be repeated for credit provided the topic is not the same. Students on probation or with GPAs below 3.0 cannot take this class.

MATH 650.1. 1 hr.; 1 cr.

MATH 650.2. 2 hr.; 2 cr.

MATH 650.3. 3 hr.; 3 cr.

MATH 650.4. 4 hr.; 4 cr.

MATH 650.45. 3 hr.; 4.5 cr.

MATH 701. Theory of the Integral. 3 hr.; 4½ cr. Prereq.: MATH 614. The Lebesgue integral in one dimension and in *n* dimensions, the abstract case. Spring

MATH 702. Modern Abstract Algebra I. 3 hr.; 4½ cr. Prereq.: MATH 613. A course in the fundamental concepts, techniques, and results of modern abstract algebra. Concepts and topics studied are semi-groups, groups, rings, fields, modules, vector spaces, algebras, linear algebras, matrices, field extensions, and ideals. Spring

MATH 703. Point Set Topology. 3 hr.; 4½ cr. Prereq.: MATH 614 or 628 or an undergraduate course in topology equivalent to MATH 320. Topological spaces, mappings, connectedness, compactness, separation axioms, product spaces, function spaces. Fall

MATH 704. Functional Analysis. 3 hr.; 4½ cr. Prereq.: A course in linear algebra and MATH 614. Abstract linear spaces, normed linear spaces, continuous linear transformations, dual spaces. Hahn-Banach theorem, closed graph theorem, uniform boundedness principle, Hilbert spaces, the weak-star-topology, Alaoglu's theorem, topological linear spaces.

MATH 705. Theory of Functions of a Complex Variable. 3 hr.; 4½ cr. Prereq.: MATH 701.

MATH 706. Advanced Ordinary Differential Equations. 3 hr.; 4½ cr. Prereq.: MATH 616.

MATH 707. Partial Differential Equations. 3 hr.; 4½ cr. Prereq.: MATH 706.

MATH 708. Combinatorial Topology. 3 hr.; 4½ cr. Prereq.: MATH 703.

MATH 709. Set Theory. 3 hr.; 4½ cr.

MATH 710. Mathematics and Logic: Advanced Course. 3 hr.; 4½ cr. Prereq.: MATH 626.

MATH 711. The Mathematical Structure of Modern Statistics. 3 hr.; 4½ cr. Prereq.: A course in either probability or statistics.

MATH 712. Higher Geometry. 3 hr.; 4½ cr.

MATH 713. Modern Abstract Algebra II. 3 hr.; 4½ cr. Prereq.: MATH 702.

MATH 717. Theory of Approximation I. 3 hr.; 4½ cr. Prereq.: MATH 614 or permission of the department.

MATH 718. Theory of Approximation II. 3 hr.; 4½ cr. Prereq.: MATH 717.

MATH 790. Independent Research. May be repeated for credit if the topic is changed.

MATH 790.1. 1 hr.; 1 cr.

MATH 790.2. 2 hr.; 2 cr.

MATH 790.3 3 hr.; 3 cr.

MATH 790.4. 4 hr.; 4 cr.

MATH 790.45. 4 hr.; 4½ cr.

MATH 790.5. 5 hr.; 5 cr.

MATH 791. Tutorial. May be repeated for credit if the topic is changed.

MATH 791.1. 1 hr.; 1 cr.

MATH 791.2. 2 hr.; 2 cr.

MATH 791.3. 3 hr.; 3 cr.

MATH 791.4. 4 hr.; 4 cr.

MATH 791.45. 3 hr.; 4½ cr.

MATH 791.5. 5 hr.; 5 cr.

MATH 792. Seminar. May be repeated for credit if the topic is changed.

MATH 792.1. 1 hr.; 1 cr.

MATH 792.2. 2 hr.; 2 cr.

MATH 792.3. 3 hr.; 3 cr.

MATH 792.4. 4 hr.; 4 cr.

MATH 792.45. 3 hr.; 4½ cr.

MATH 792.5. 5 hr.; 5 cr.

Media Studies

Chair: Mara Einstein

Master's Program Director: Roopali Mukherjee

Dept. Office: G Building 100, 997-2950

The Media Studies program offers students a rigorous academic course of study and applied learning for scholars and practitioners looking to test their ideas, research critically, and engage social justice causes purposefully with and through media. The Media Studies community at Queens College works under the assumption that the media are no longer merely a particular vocation, but are an environment in which human society is developing. Its impact and effects are far-reaching, yet little understood—especially by those creating the content and building the platforms on which we all depend. This program is meant to restore human agency and intervention to the study and practice of media and digital cultures, for makers and users, with a particular focus on social advocacy related to race and gender issues, urban development, equal opportunity, economic justice, political activism, environmental responsibility, democratic participation, and cultural identity.

The program is designed for highly motivated students with a desire for understanding the relationship between media and the world, and who bring a passion for using the media as a conduit for social justice. Courses aim to challenge, inspire, and provoke fresh thinking about the realities of climate change, race and gender discrimination, economic inequality, and global capitalism within a rapidly evolving media environment around the world. The program's curriculum will be directed by the lines of inquiry and developing practice of its small cadre of students, selected on the basis of their demonstrated commitment to fostering social justice through media. Students will work with a faculty of world-renowned media scholars and practitioners, who will guide students' independent study and develop resources for courses and seminars around student pursuits. Students will also have full access to CUNY's Graduate Center, through which they can support their media studies with other disciplines.

A key component of this program is its focus on project-based learning, which will provide a stimulating opportunity for students to directly work with industry, government organizations, NGOs, or public interest groups, as well as to develop a portfolio of projects. Graduates of the program will be prepared for careers of the future, equipped with an understanding of how value is created and exchanged, how political, economic, and societal forces shape the current and emerging media environment, and how the media can be used in the furtherance of social justice.

Those students lacking academic background in Media and/or Communications may be asked to take selected undergraduate courses to provide the appropriate background. These courses may be taken concurrently with graduate courses but credit for these courses cannot be counted toward the graduate degree.

FACULTY

Einstein, Mara, Chair, *Professor*, PhD 2000, New York University; MBA 1988, Northwestern University: advertising and branding, media management, media institutions, consumer culture, media and religion

Mukherjee, Roopali, Master's Program Director, *Professor,* PhD 1994, Ohio State University: critical race theory, cultural studies, intersectional media criticism, racial capitalism

Beloff, Zoe, *Professor,* MFA 1983, Columbia University: media art, media making

Buchsbaum, Jonathan, *Professor,* PhD 1983, New York University: film history, film and politics, political economy and policy

Cornell, Julian, *Lecturer,* PhD 2011, New York University: film history, analysis and criticism; media criticism, children's media, ideologies and politics of American popular culture, cinemas of Scandinavia and Japan.

Fuqua, JV, *Associate Professor,* PhD 1997, University of Pittsburgh: media criticism, television theory, history and analysis; documentary film and video; queer media; cultural studies, digital and feminist media theory

Herzog, Amy, *Professor,* PhD 2004, University of Rochester: the music industry, popular culture, film philosophy, and gender studies

Hinojos, Sara, *Assistant Professor,* PhD 2016, University of California, Santa Barbara: representations of race and gender, language politics, popular culture, humor

Hunt-Ehrlich, Madeleine, *Assistant Professor,* MFA Temple University 2013: film and media production, documentary and narrative directing, television production, film editing

Maxwell, Richard, *Professor,* PhD 1990, University of Wisconsin at Madison: international media, political economy, media and environment

Rushkoff, Douglas, *Professor,* PhD 2012, Utrecht University: media theory, politics, economics, culture, digital humanism, media production, activism, and narrativity

Tsika, Noah, *Associate Professor,* PhD 2012, New York University: African screen media, West African media industries and access, globalism, cold war media, stardom, documentary history and theory, military media, queer theory, queer cybercultures

Yeo, Shinjoung, Assistant Professor, PhD 2015, University of Illinois, Urbana-Champaign: political economy of media, global internet industries, cultural and information policy, labor, geopolitics

MASTER'S DEGREE IN MEDIA STUDIES

Requirements for Matriculation

These requirements are in addition to the general requirements for admission.

1. A 3.0 grade-point average on a 4.0 scale in undergraduate degree work.
2. At least three letters of recommendation from past professors, work supervisors, or other people familiar with your personal potential and work ethic. In some instances an interview with a Master's Program Coordinator may be required.

3. Your TOEFL score, if you did not earn your undergraduate degree in residence at a university in an English-speaking country. Students whose TOEFL score is lacking (below 550) may have to take ESL courses before being formally admitted.
4. An 800–1000-word argument for what you want to accomplish with media or your media scholarship. What is the problem you want to research or address? How do you want to make a difference? What is your focus for social change? You are applying to a program where the faculty will be actively supporting your efforts, so convince us to join your cause, or make us understand your motivations, influences, and values.

   If possible, append the essay with examples or links to any of your writing, videos, artwork, websites, or other work you feel supports your case.

   This should not be a simple biography or general statement of interest in this field, but a supported argument for your research, art, political or social agenda.

   Consider answering such questions as:
   - How are you studying or practicing media, and why does it matter?
   - Has your work already made a difference? Tell us how.
   - What do you want for society or your own community, and how do media enable or undermine that goal?
   - If there are concrete projects or issues you hope to explore, how might a collaborative, interdisciplinary graduate program help you to pursue this work?
5. The GRE is not required, but can be submitted in support of your application.
6. The credentials of each applicant will be examined by the departmental Graduate Studies Committee, which will accept, accept with conditions, accept on probation, or reject the candidate.

Matriculation with Conditions

Under certain circumstances, students with an undergraduate average below *B* may be matriculated under the condition of "Probation." A student admitted on probation must achieve a *B* (3.0) average in the first 12 credits of graduate work. Students admitted on probation who fail to attain fully matriculated status after completing 12 graduate credits will not be permitted to continue.

Degree Requirements for the Master's Program

These requirements are in addition to the general College requirements for the Master of Arts degree.

1. When a candidate is admitted, the Graduate Program Coordinator will assist the candidate in developing a plan of study.
2. All candidates in Media Studies are required to complete two core courses with an overall grade-point average of *B* (3.0) or better. The courses are: MEDST 702, Capitalism and Media, and MEDST 703, Media and Social Justice.
3. In order to graduate, students must complete 27 credits of coursework and one 3-credit Thesis seminar. Students must complete 30 credits to graduate, but may take up to 36 credits. Subject to approval by the Graduate Media Studies Committee, students prepare a thesis based upon independent research and must pass a final oral examination on its content and method in the presence of their graduate committee. Subject to approval by the Graduate Media Studies Committee, students prepare a thesis based upon independent research and must pass a final oral presentation on its content and method, in the presence of their graduate committee consisting of chair and two additional faculty advisors.
4. Additional information on policies and standards can be found at the College website for Graduate Studies and Research.

Fellowships and Tuition Assistance

The Wilbur Gilman Fellowship Fund was established to foster advanced study and criticism of media. The Media Studies department offers to qualified students the opportunity to apply for the Gilman Fellowship. Number and level of awards will be determined through consideration of the following criteria:

1. Undergraduate grade-point average.
2. Two letters of recommendation.
3. A 500-word statement explaining why you believe you are qualified for the fellowship. Your statement should address items such as the quality and scope of your academic background, your specific areas of interest, and your experiences both in and out of school.

A student selected to receive the award must be matriculated in the Media Studies Master's program and must register for a minimum of 6 graduate credits in the semester(s) the award is granted. The statement and letters of recommendation must be submitted to a Master's Program Coordinator, Department of Media Studies, Queens College, CUNY, Flushing, NY 11367 no later than the closing date for graduate applications each year.

In extraordinary circumstances, a student may be selected to receive the award at the Graduate Committee's discretion.

Additional information on assistance programs and fellowships is available through the Queens College Office of Graduate Studies at 718-997-5190.

COURSES IN MEDIA STUDIES

MEDST 701. Media Archaeology. 2 hr. plus supervised lab. and/or conf. hr.; 3 cr. This introduction to media historiography surveys material approaches to media history, locating media artifacts within broader cultural contexts, and mapping established and emergent audiovisual archives. Designed with an international focus, this course engages a range of

historical strategies, from traditional chronologies to new theoretical and experimental methodologies, including ecological perspectives and alternative histories of obsolete technologies, abandoned sites, and neglected practices.

MEDST 702. Capitalism and Media. 2 hr. plus supervised lab, and/or conf. hr.; 3 cr. Seminar offers an intensive introduction to global capitalism and its relation to established and contemporary media systems. This is primarily a theory course that will teach graduate students to understand, analyze, and research the diverse forms of governance, cultural power, knowledge, public policy, and resistance associated with media as they shape, and are shaped by, race, class, and gender politics.

MEDST 703. **Media and Social Justice**. Seminar examines political, economic, and sociological approaches to media as agents of historical change and social transformation within struggles over race, class, and gender. Topics include the digitization of society and how information technology and networks work within digital capitalism, and the significance of contemporary media within abiding struggles over injustice, exploitation, and social change.

MEDST 704. Gender, Sexuality, and Media. 2 hr. plus supervised lab. and/or conf. hr.; 3 cr. An intensive introduction to the relationships between gender, sexuality, and the media. Recognizing the power of media representations, technologies, and industries to shape and enforce dominant ideas about gender and sexuality, students learn about various forms of media activism addressing gendered injustice, exploitation, and inequality.

MEDST 707. Methodology in Media Research. 3 hr.; 3 cr. An introduction to basic scientific research methods used within the field of communications and the philosophical arguments behind the various approaches. Students learn to read and access statistical information as presented in communications research studies.

MEDST 740. Media Management. 2 hr. plus supervised lab. and/or conf. hr; 3 cr. Survey of media management for broadcast and cable television, film, and print media. Topics include economic structure of the industries, organization and staffing, financial management, marketing and PR, programming and production, industry practices and techniques, technology and regulation. Emphasis will be on practical understanding of how these industries manage the communication process.

MEDST 745. Advertising & Marketing. 2 hr. plus supervised lab. and/or conf. hr; 3 cr. An examination of the complex dynamic among business, technology, and consumers. Learn the objectives, strategies, and tactics that are used to brand and sell across a variety of products and services from consumer packaged goods (CPG) to personal branding. Topics include consumer behavior, industry analysis, media planning and buying, and the development of creative communication. Case studies will be used to put theory into practice.

MEDST 752. Media Theory. 3 hr.; 3 cr. Analysis of theoretical models; examination of relationships among interpersonal, organizational, mass, and societal communication systems.

MEDST 754. Survey of Media Research. 3 hr.; 3 cr. An examination and evaluation of media research. Emphasis on behavioral and experimental research.

MEDST 757. Political Economy of Media. 2 hr., plus supervised lab. and/or conf. hr.; 3 cr. The study of the interaction of media upon politics with special attention to topics such as rhetorical strategies used in presidential campaigns and elections, social movements, and Marxist theories of media. May be repeated for credit if topic changes.

MEDST 758. Form and Genre. 2 hr. plus supervised lab. and/or conf. hr.; 3 cr. Analysis of selected topics in media trends, forms, and styles. Social and political impact of film and ethnic and cultural minorities in film.

MEDST 759. Studies in Communication. 3 hr.; 3 cr. May be repeated for credit if topic changes.

MEDST 760. Rhetorical Theory and Media. 3 hr.; 3 cr. Study of rhetorical theories of communication from Aristotle to the present applied to a contemporary media context.

MEDST 764. International Media Systems. 3 hr.; 3 cr. International, transnational, cross-cultural, and comparative analyses of media systems.

MEDST 769. Digital Lab (VT). 3 hr.; 3 cr. Hands-on seminar in digital production and technology, related specifically to context of movements, politics, and social advocacy. Topics vary depending on current uses of technology, and may include web design, podcasting, physical computing, app development, video, and 3D printing. May be repeated for credit providing there is a change in the topic.

MEDST 788. Cooperative Education Placement. Experiential learning through job placements developed by the Queens College Cooperative Education Program. Opportunities to test, apply, demonstrate, and expand on academic learning in an organizational setting. Prerequisites: at least three Media Studies courses. Students will develop a detailed learning and project contract to be approved by an on-site supervisor, a departmental faculty advisor, and the Media Studies Coordinator. At the completion of the project, the student shall submit a written report of the experience to the faculty advisor for evaluation and a grade. Students receiving life-experience credit may not receive Cooperative Education credit.

MEDST 788.1. 1 hr.; 1 cr.

MEDST 788.2. 2 hr.; 2 cr.

MEDST 788.3. 3 hr.; 3 cr.

MEDST 790. Thesis. Hr. to be arranged; 3 cr. Prereq.: Approval of program coordinator and department chair.

MEDST 791. Thesis Research. Hr. to be arranged; 3 cr. Prereq.: Approval of program coordinator and department chair. Guided independent research for students preparing the master's thesis.

MEDST 797. Special Problems. Prereq.: Approval of program coordinator and department chair. Media Studies graduate students may receive up to three credits of life-experience credit under the conditions specified by the department; consult the coordinator of the Media Studies Program for details.

MEDST 797.1. 1 hr.; 1 cr.

MEDST 797.2. 2 hr.; 2 cr.

MEDST 797.3. 3 hr.; 3 cr.

The Aaron Copland School of Music

Director and *Chair:* Michael Lipsey
Director of Administration: Jane Cho
Academic Program Coordinator: Thomas Lee
Jazz Program Assistant: Xavier Deshields
Education Program Assistant: Hannah Skoney
Administrative Assistant: Janice Raskin

Office: Music Building 203
997-3800 (phone), 997-3849 (fax)
www.qc.cuny.edu/music

The Aaron Copland School of Music offers conservatory-level training in classical performance, jazz performance, and jazz composition, leading to the Master of Music (MM) degree. It offers university curricula in musical composition, theory, and musicology, leading to the Master of Arts (MA) degree. In conjunction with the Division of Education, the School of Music offers a music education program leading to the Master of Science (MS) degree in Music Education and a post-baccalaureate program that leads to New York State Initial Teacher Certification. In addition, the School of Music offers Certificate and Diploma programs in classical performance. A graduate certificate in recording technology and music production is also offered.

The MM in Classical Performance includes private instruction in the major instrument or voice, ensembles, studies in historical performance practice, and other courses geared to the needs of classical performers. A student may major in a standard orchestral, keyboard, or early-music instrument, in classical guitar, voice, or conducting (orchestral or choral).

The MM in Jazz Studies includes private instruction, jazz ensembles, studies in jazz harmony, improvisation, arranging, recording techniques, and other courses suited to the needs of today's jazz musician. Students may major in either jazz performance or jazz composition.

The MA in Music provides necessary training for classical composers, for those who wish to pursue doctoral studies in musicology or theory, and for students who plan to enter other music-related fields. Students may major in composition, theory, or music history (musicology).

The MS in Education (Music) includes methods, conducting, and rehearsal techniques, as well as research courses in music education. It is designed to provide professional training for those who are teaching or expect to teach general music or vocal, choral, and/or instrumental music in elementary and secondary schools. Electives are planned for the needs of the school music teacher or are drawn from other graduate music offerings. Concentrations in instrumental music, choral music, general music, jazz music education, composition pedagogy, and conducting are offered. Further information about the music education programs begins on page 224.

The School of Music Building includes the LeFrak Concert Hall with tracker organ, a smaller recital hall, choral and orchestral rehearsal spaces, classrooms surrounding a central skylit atrium, practice rooms and teaching studios, an expanded music library to house the extensive music collections, an expanded electronic music studio, music education workshop facilities, two recording studios, faculty offices, and student and faculty lounges. The building is acoustically isolated and is one of the most advanced music facilities in the area.

The School of Music offers a BA/MA degree (in Music Theory, Musicology, or Composition) for advanced undergraduates who have completed the majority of their BA requirements by the beginning of their junior year. Students in this program begin taking graduate courses toward the MA in their junior year, and normally complete the combined degree in 5 years. Students interested in considering this program should seek guidance from the Music Office as early as the

end of the sophomore year. Specific details about the program and courses can be provided by the department.

MASTER OF MUSIC IN CLASSICAL PERFORMANCE

(Full-time faculty are indicated in bold.)

Advisors: **Marcy Rosen** (instrumental majors), **James John** (vocal majors)
Violin: **Daniel Phillips**, Burton Kaplan, Chin Kim, Byung-Kook Kwak, Nurit Pacht
Viola: **Daniel Phillips**, Brett Deubner
Cello: **Marcy Rosen**, Alexander Kouguell
Double Bass: Yoshio Aomori, Marji Danilow, Daniel Krekeler
Flute: Judith Mendenhall, Susan Rotholz, Keith Underwood
Oboe: Christa Robinson
Bassoon: Frank Morelli
Saxophone: Timothy Ruedeman
French Horn: **David Jolley**
Trumpet: Mary Hastings, Thomas Hoyt, Frank Huber, Brad Siroky
Trombone: Haim Avitsur
Tuba: Morris Kainuma, Kyle Turner
Percussion: **Michael Lipsey**, Andrew Blanco, Matthew Ward
Voice: **Sherry Overholt**, Maria Argyros, Rose Marie Crouse, Deepak Marwah, Sidney Outlaw
Vocal Diction: Donna Gill
Piano: **Morey Ritt**, Zelma Bodzin, Konstantza Chernov, Yuri Kim, Nina Lelchuk, Fang Luo, Donald Pirone
Organ: Masayuki Maki
Harpsichord: Raymond Erickson *(Emeritus),* Arthur Haas, Masayuki Maki
Harp: Susan Jolles
Collaborative Piano: Max Midroit, Youn Ju Namkoong, Gerald Robbins
Guitar: William Anderson, William Zito
Orchestral Conducting: Mark Powell
Choral Conducting: **James John**
Opera Studio: Elizabeth Hastings
Vocal Ensemble: **James John**
QC UnSemble Contemporary Music Ensemble: **Mark Powell**
Gamelan Yowana Sari: **Fred Trumpy**
Chamber Music and Ensembles: **David Jolley**, **Michael Lipsey, Daniel Phillips**, **Morey Ritt**, **Marcy Rosen**, William Anderson, Tim Ruedeman, Haim Avitsur

MASTER OF MUSIC IN JAZZ STUDIES

(Full-time faculty are indicated in bold.)

Director of Jazz Studies: Antonio Hart
Trumpet and Jazz Composition: **Michael P. Mossman**
Saxophones and Flute: **Antonio Hart**, Tim Armacost, John Ellis
Trombone: Luis Bonilla
Piano: **David Berkman**, Jeb Patton, Luis Perdomo
Bass: Yoshio Aomori, Gregg August, Joe Martin, Lonnie Plaxico, Johannes Weidenmueller, David Wong
Percussion: **Dennis Mackrel**, Rogério Boccato, Vince Cherico, Donald Edwards, Ian Froman, William Hart, Gene Jackson
Guitar: Paul Bollenback, Tom Guarna, Mike Moreno
Voice: Theo Bleckmann, Aubrey Johnson, Jeanette LoVetri, Charenee Wade
Jazz History: Tim Armacost, Ted Panken, Ricky Riccardi
Jazz Composition: Darcy James Argue

MASTER OF ARTS IN MUSIC (Composition, Theory, or Musicology)

Advisor: William Rothstein
Anson-Cartwright, Mark, *Associate Professor*, PhD 1998, City University of New York: music theory, Schenkerian analysis
Henson, Karen, *Associate Professor,* PhD 2000, Oxford University: musicology, nineteenth-century opera
Nichols, Jeff W., *Associate Professor*, PhD 1990, Harvard University: composer
Nitzberg, Roy, *Lecturer,* PhD 1999, City University of New York: music theory
Orenstein, Arbie, *Professor*, PhD 1968, Columbia University: musicologist, pianist, French music, 1870–1940
Rothstein, William N., Advisor, *Professor*, PhD 1981, Yale University: music theory, Schenkerian analysis, analysis of rhythm
Saylor, Bruce S., *Professor*, PhD 1978, City University of New York: composer, composers' workshop
Schober, David, *Associate Professor*, PhD 2004, University of Michigan–Ann Arbor: music theory, composition
Smaldone, Edward, *Professor*, PhD 1986, City University of New York: composer
Wilbourne, Emily, *Associate Professor*, PhD 2008, New York University: musicology, early 17th-century Italian theatrical music, gender and sexuality

Admission Requirements for the Master of Music in Classical Performance (MM)

These requirements are in addition to the general requirements for admission, listed elsewhere in this *Bulletin*.

1. An undergraduate degree with a major in music (or its equivalent)
2. An audition on the major instrument or voice. Auditions are held at the college each semester.
3. A short (30-minute) examination in basic music theory is administered on the day of the audition.
4. International students are required to take the Test of English as a Foreign Language (TOEFL) or the International English Test System (IELTS); the TOEFL is preferred. The minimum TOEFL score for admission is 79. Provisional acceptance is available if the TOEFL score is between 75 and 78.

Admission Requirements for the Master of Music in Jazz Studies (MM)

These requirements are in addition to the general requirements for admission, listed elsewhere in this *Bulletin*.

1. An undergraduate degree (not necessarily in jazz)
2. For jazz performers, an audition on the major instrument or voice. Jazz auditions are held at the college throughout the academic year.
3. Jazz composition applicants must submit scores and recordings of their work. These works must include compositions and arrangements for large (10 or more piece) ensembles.

Admission Requirements for the Master of Arts in Music (MA)

These requirements are in addition to the general requirements for admission, listed elsewhere in this *Bulletin*.

1. An undergraduate degree with a major in music (or its equivalent)
2. Applicants apply in one of three areas of study: composition, theory, or musicology. Applicants should submit copies of recent work to Professor William Rothstein, Graduate Advisor, Music Building, as stipulated below:
   - Composition: two or three recent works
   - Theory: a recent paper and one or two examples of composition in eighteenth- or nineteenth-century style
   - Musicology: one or more recent papers
3. International students are required to take the Test of English as a Foreign Language (TOEFL) or the International English Test System (IELTS); the TOEFL is preferred. The minimum TOEFL score for admission is 79. Provisional acceptance is available if the TOEFL score is between 75 and 78.
4. Applicants in theory and musicology are required to take the Graduate Record Examination (GRE).

Degree Requirements for the Master of Music in Classical Performance (MM)

These requirements are in addition to the general requirements for Master's degrees, listed elsewhere in this *Bulletin*.

1. A student normally majors in one of four areas: an orchestral instrument, a keyboard instrument, voice, or conducting (orchestral or choral).
2. Students complete 36 credits, perform a public recital, and write program notes on their recital repertoire. The degree requires 4 semesters. Classical performers normally enroll as full-time students. Required classes and ensembles are held both during the day and in the evening.
3. Orchestral instrumentalists play in Orchestra during each semester of residence. Singers participate in Opera Workshop, Vocal Ensemble, or chamber music during each semester of residence. Keyboard majors participate in chamber music during each semester of residence. Conductors attend rehearsals of appropriate ensembles (orchestra or chorus) and participate in regularly scheduled workshops during each semester of residence.
4. Courses required in all degree tracks are MUSIC 701, 707, 708, 709, 779, and 789, plus two semesters chosen from 7771, 7772, 7773, or 7774. Other requirements vary according to the student's major (orchestral instrument, keyboard, voice, or conducting).
5. The following examinations must be passed during the course of study:
   (a) Students take the Theory Qualifying Exam in *music theory and musicianship* before registering for their first semester. Each of the examination's four parts (harmonization, sight singing, dictation, and keyboard harmony) must be passed before graduation. Those students who fail in any part of the exam will consult the Graduate Advisor for coursework or other recommended study.
   (b) Students are tested in the *history of music* before registering for their first semester. Those who need further work in this area will consult the Graduate Advisor for coursework or other recommended study.
   (c) Students take an examination in foreign-language musical terms.

Degree Requirements for the Master of Music in Jazz Studies (MM)

These requirements are in addition to the general requirements for Master's degrees, listed elsewhere in this *Bulletin*.

1. A student majors in either jazz performance or jazz composition.
2. Students complete 36 credits and perform a public recital. The degree can be completed in three semesters, but is commonly finished in four semesters.
3. Before graduation, students must pass competency tests in improvisation, sight reading, style recognition, and other musical skills.
4. Majors in jazz performance are required to take JAZZ 701, 703, 705, 724, 725, 726, and MUSIC 756; three semesters of Jazz Ensemble (JAZZ 794); plus electives to total 36 credits. (All jazz course numbers are in the process of being changed from MUSIC prefixes to JAZZ prefixes.)
5. Majors in jazz composition are required to take JAZZ 701, 705, 707, 714, 721, 722, 723, MUSIC 756, and MUSIC 757; plus electives to total 36 credits. (All jazz course numbers are in the process of being changed from MUSIC prefixes to JAZZ prefixes.)

For jazz students, the schedule of courses is determined individually in consultation with the Graduate Advisor. Students who demonstrate advanced skills may be placed directly into advanced courses.

Degree Requirements for the Master of Arts (MA)

These requirements are in addition to the general requirements for the Master of Arts degree, listed elsewhere in this *Bulletin*.

The MA in Music comprises three tracks, or majors: composition; theory; and musicology. All MA students must complete 36 credits, including a culminating project (thesis) in the major area. The thesis is completed under the supervision of an advisor approved by the Graduate Advisor.

In addition to the required coursework (including the thesis), each candidate for the MA degree must pass all of the following exams prior to receiving the degree:

(a) The Theory Qualifying Exam, covering skills in music theory and general musicianship, is taken before a student registers for the first semester of study. Each of the examination's four parts (harmonization, sight singing, dictation, and keyboard harmony) must be passed before graduation. Those students who fail in any part of the exam will consult the Graduate Advisor for coursework or other recommended study.

(b) The History Qualifying Exam tests the student's knowledge of the history of Western music. This exam is also taken before a student registers for the first semester of study. Students who fail this exam will consult the Graduate Advisor for coursework or other recommended study.

(c) A reading proficiency examination in French, German, or Italian is required of all students majoring in theory or musicology. Composition majors may substitute an examination in foreign-language musical terms for the language examination.

Majors in composition are required to take MUSIC 729, 730, 731, 742, 784, 785, 789 (one semester), and three semesters of MUSIC 725.

Majors in music theory are required to take MUSIC 700, 702, 745, 746, 762 or 763 (two semesters), and 789 (one or two semesters).

Majors in musicology are required to take MUSIC 700, 702, 742, 789 (one or two semesters), plus two semesters chosen from MUSIC 710, 711, 760, or 761.

CERTIFICATE AND DIPLOMA PROGRAMS IN CLASSICAL PERFORMANCE

Requirements for Admission

These requirements are in addition to the general requirements for admission, listed elsewhere in this *Bulletin.*

1. For the Advanced Certificate in Performance: An undergraduate degree with a major in music (or its equivalent)

- **For the Professional Studies Certificate in Performance:** An MA or MM degree in music performance (or its equivalent)
- **For the Advanced Diploma in Performance:** An MA or MM degree in music performance (or its equivalent) and an additional 19 credits in a post-Master's program in music performance
- **For the Advanced Diploma in Chamber Music:** An MA or MM degree in music performance (or its equivalent). Admission is restricted to pre-formed chamber ensembles.

2. An audition on the major instrument or voice. Auditions are held at the college each semester.
3. International students are required to take the Test of English as a Foreign Language (TOEFL) or the International English Test System (IELTS); the TOEFL is preferred. The minimum TOEFL score for admission is 63. Provisional acceptance is available if the TOEFL score is between 53 and 62.

A minimum of 19 credits is required in all Certificate and Diploma programs.

Required courses:

MUSIC 707, 708; 747,748,749,750,751, or 752 for two semesters; MUSIC 774, 775; 792 or 796 or other performance course as assigned by the graduate advisor. All students are required to register for 9 credits per semester.

Additional requirement: Students in each Certificate or Diploma program perform a recital during *each* semester of enrollment.

Chamber Music Diploma only: Two recitals (fall *and* spring), with off-campus repeats of each program.

ADVANCED CERTIFICATE PROGRAM IN MUSIC AND PRODUCTION (MAP)

Faculty

Peter Calandra, James McElwaine, Justin Tricarico

This program consists of six three-credit courses, with equivalencies allowed to accommodate two-credit courses. Completion of the prescribed course of study will yield a Certificate of Advanced Study.

The MAP program establishes a consistent and flexible curricular path in several aspects of music technology and content creation for graduate students at Queens College. Topics will include, but are not limited to, digital recording, MIDI sequencing, composition, and film scoring.

Admission Requirements

Admission into the program requires an initial interview. During this interview, faculty will assess the applicant's current level of technical skill and experience. Qualified applicants will enroll in Digital Recording 1, in the fall semester, or Audio and MIDI 1, in the spring semester to begin the program. In certain cases less qualified applicants will be required to complete the Recording Studio Fundamentals course in order to qualify for full admission.

Curriculum

All courses in the MAP program are existing courses. There are no new courses

	credits
MUSIC 737 Recording Studio Fundamentals, as required by faculty based on interview	3*
MUSIC 740 & 741 Digital Recording and Composition 1 & 2	6
MUSIC 735 & 736 Audio and MIDI Sequencing 1 & 2	6
See below Additional Professional Studies, as offered from list below	3 to 6 minimum
	Total: 18 minimum
	**If required.*

Required Courses

Professional studies in music production (choose at least two courses)

	credits
MUSIC 717 Digital Recording	3
MUSIC 720 Advanced Orchestration	3
MUSIC 721 Music Business	3
MUSIC 727 Electronic Music Composition	3
JAZZ 705, 706 Jazz Arranging and Composition I and II	3, 3
MUSIC 7902 Film Scoring Practicum (may be repeated for credit with different instructor)	2
MUSIC 702 Critical and Theoretical Approaches to Scholarship	3
MUSIC 7902 Studio Practica: in technology, production, music business, composition, music technology history, as offered	credits vary

Note: Other courses in Media Studies, Computer Science, Physics, Visual Arts, and Film may be allowable at the discretion of the faculty.

COURSES IN MUSIC

JAZZ 701. Jazz Harmony I. 3 hr.; 3 cr. Prereq.: Acceptance into the Jazz MM program or permission of the instructor. The study of harmonization techniques used in tonal jazz compositions and standards from the American songbook. Functional harmonic principles are practiced through writing assignments and studied through transcription.

JAZZ 702. Jazz Harmony II. 3 hr.; 3 cr. Prereq.: JAZZ 701 or permission of the instructor. This course is a continuation of Jazz Harmony 701. It covers more advanced jazz harmony topics, particularly focusing on non-functional ways of creating chord progressions in modern jazz compositions and arrangements. This study will help students refine their skills in composing, arranging, and improvising.

JAZZ 703. Jazz Improvisation I. 3 hr.; 3 cr. Prereq.: Admission to the Jazz MM program or permission of the instructor. This class is designed to give the student knowledge of improvisational techniques used in the jazz idiom, including the interpretation, ornamentation, and phrasing of melodies, and a wide variety of approaches to creating lines over chord changes.

JAZZ 704. Jazz Improvisation II. 3 hr.; 3 cr. Prereq.: JAZZ 703 or permission of the instructor. Prereq.: JAZZ 703 or permission of the instructor. Part 2 of the Jazz Improvisation sequence focuses on advanced concepts that professional musicians encounter in the contemporary music scene. Topics include: odd- and mixed-meter playing; complex harmonic forms; free improvisation; and further studies in the modern and contemporary jazz repertoires.

JAZZ 705. Jazz Arranging and Composition I. 3 hr.; 3 cr. Prereq.: Permission of the instructor. The development of skills and techniques in the use of various jazz idioms and their application to individual creative expression.

JAZZ 706. Jazz Arranging and Composition II. 3 hr.; 3 cr. Prereq.: Advanced Jazz Composition is a follow-up to JAZZ 705, Jazz Arranging and Composition. This course allows serious students of Jazz Composition the opportunity to write for the jazz ensemble and have their works rehearsed and performed. The course addresses topics not covered in JAZZ 705, such as arranging for mixed woodwinds, strings, horn, and tuba. The course also explores Afro-Cuban and Brazilian styles as well as other jazz/rock/ethnic fusions.

JAZZ 707. Counterpoint for Composers and Arrangers I. 3 hr.; 3 cr. Prereq.: Acceptance into the Jazz MM program in composition or permission of the instructor. The purpose of this course is threefold: to give the student, through close analysis of selected works, an awareness of the role of counterpoint in Western European musical composition from the Middle Ages to the present time; to develop the student's ability to shape melodic lines, combining them in contrapuntal textures within a modal/tonal framework ("species" counterpoint); and to demonstrate how these contrapuntal textures can become the basis for compositional elaboration in various styles. Composers studied include: Leonin, Josquin, Monteverdi, Purcell, Bach, Mozart, Schumann, Brahms, Schoenberg, Pärt. This course is required of majors in jazz composition; it is elective for other graduate students in jazz and classical programs..

JAZZ 709. Jazz Piano Workshop I. 1 hr.; 1 cr. Prereq. or coreq.: Acceptance into the Jazz MM program and permission of the instructor. An interactive, drill-oriented course for non-pianists to obtain the jazz piano skills necessary for arranging, composition, and harmonic literacy.

JAZZ 710. Jazz Piano Workshop II. 1 hr.; 1 cr. Prereq. or coreq.: JAZZ 709 or permission of the instructor. A continuation of JAZZ 709, covering more advanced pianistic concepts and more complex harmonic material.

JAZZ 711. Jazz Rhythm Section Workshop. 2 hr.; 2 cr. Prereq.:or coreq.: Acceptance into the Jazz MM program and permission of the instructor. Students must play a rhythm section instrument (piano, bass, drums, or guitar). A mixed performance and analysis course designed for guitarists, pianists, bassists, and drummers to improve their understanding of, and ability to perform in, jazz rhythm sections on a professional level.

JAZZ 712. Jazz Vocalist Scatting Workshop. 2 hr.; 2 cr. Prereq.: Open to all vocalists accepted into the Jazz MM program or permission of the instructor. This course is a skills-based class focusing on the problems peculiar to vocalists studying jazz improvisation. Topics include: melodic ornamentation, lead sheet basics, piano skills, and progressive steps and exercises to improve hearing chord progressions, creating melodies from scales, chromatic approach, note patterns and transcription. This course helps singers acquire the practice skills to develop as jazz composers, arrangers, and improvisers. Repeatable for credit.

JAZZ 713. Jazz Transcription and Ear Training. 1 hr.; 1 cr. Prereq.: Permission of the instructor. An interactive, drill-oriented course in the accurate hearing and transcription of recorded jazz performances. Students will also improve their aural recognition of chord qualities, tensions, and piano voicings in live jazz performances.

JAZZ 714. Jazz Style and Analysis. 3 hr.; 3 cr. Prereq.: JAZZ 701 or permission of the instructor. This course entails in-depth analysis of masterworks by a variety of jazz composers and arrangers. The class will study issues of form and harmonic language, stylistic markers, and the development of musical ideas.

JAZZ 717. Jazz History Survey. 3 hr.; 3 cr. Prereq.: Acceptance into the Jazz MM program or permission of the instructor. A historical survey of the major performers and composers in jazz, from ragtime to the present. The course employs musical analysis, but it also delves into jazz's social context, highlighting the unique role that jazz has played in cultural history.

JAZZ 718. Topics in Jazz History. 3 hr.; 3 cr. Prereq.: Acceptance into the Jazz MM program or permission of the instructor. Special topics in jazz history focusing on a specific era, key players, composers or arrangers of central importance to the jazz tradition, and their relevance to the jazz musical world of the present.

JAZZ 721, 722, 723. Jazz Lessons in Composition. 1 hr.; 4 cr. each. Prereq.: Admission to the jazz composition major. Weekly lessons in jazz composition. With the permission of the chair of the School of Music, JAZZ 723 may be repeated for credit.

JAZZ 724, 725, 726. Private Instruction in Jazz Performance. 1 hr.; 4 cr. Prereq.: Permission of Director of Jazz Studies. Weekly private lesson in major applied instrument. With the permission of the chair of the School of Music, JAZZ 726 may be repeated for credit.

JAZZ 786. Combo Workshop. 3 hr.; 3 cr. Prereq.: Permission of the instructor. Jazz Studies majors prepare and perform their own small-group arrangements.

JAZZ 790.VT: Special Topics. 3 hr.; 1 cr. Prereq.: Permission of the instructor. Intensive study and a definite project in a field chosen by the student under the direction of a member of the School. May be repeated for credit if the topic changes.

JAZZ 794. Jazz Ensemble. 3 hr.; 1 cr. Prereq.: Permission of the instructor. The study and performance of selected repertoire, published and unpublished, including student work. May be repeated for credit.

MUSIC 700. Bibliography and Research Techniques. 3 hr.; 3 cr. Fall

MUSIC 701.Writing about Music. 2 hr.; 2 cr. Prereq.: Acceptance into the MA program in classical performance, or permission of instructor. The course is designed for MA students in classical performance. It should be taken during the first or second semester of residence. Students will acquire the skills needed to research and write about topics in music. The use of library resources, both paper and online, will be emphasized.

MUSIC 702. Critical and Theoretical Approaches to Scholarship. 3 hr.; 3 cr. MUSIC 700 or permission of the department. The course is intended for MA students in their second semester of residence. Students will gain familiarity with critical and interdisciplinary literature in musicology and music theory focusing on scholarship since 1980. Assessment will be based on research, readings, and written assignments. May be repeated for credit if the topic changes.

MUSIC 703. Music Career Development. 3 hr.; 3 cr. Prereq.: Acceptance into an MA or MM program in the Aaron Copland School of Music, or permission of the instructor. An introduction to the music industry in all its many facets. Students learn to prepare themselves for multiple career possibilities. They develop entrepreneurial skills and learn how to navigate a career.

MUSIC 705. Medieval Notation. 3 hr.; 3 cr.

MUSIC 706. Renaissance Notation. 3 hr.; 3 cr.

MUSIC 707. Individual Musical Performance I. 1 hr.; 3 cr. Prereq.: For instrumentalists and singers: advanced level of performance on the student's instrument or voice and permission of the School. For conductors: Advanced level of performance as a conductor and permission of the school. Coreq.: MUSIC 747, 748, 749, 750, 751, 752, or 778. Private study in an instrument or voice or conducting. Fall, Spring

MUSIC 708. Individual Musical Performance II. 1 hr.; 3 cr. Prereq.: MUSIC 707; coreq.: MUSIC 747, 748, 749, 750, 751, 752, or 778 . Continuation of private study in an instrument, or voice, or conducting. Fall, Spring

MUSIC 709. Individual Musical Performance III. 1 hr.; 3 cr. Prereq.: MUSIC 708; coreq.: MUSIC 747, 748, 749, 750, 751, 752, or 778. Continuation of private study in an instrument, or voice, or conducting. With the permission of the chair of the School of Music, MUSIC 709 may be repeated for credit. Fall, Spring

MUSIC 710, 711. Ethnomusicology Seminar. 3 hr. plus conf.; 3 cr. Prereq.: For MUSIC 710, 700 and 742; for MUSIC 711, MUSIC 710. Ethnomusicological research of a special culture area or particular group.

MUSIC 712. Ethnomusicology. 3 hr.; 3 cr. An introduction to the current theories and methodology of ethnomusicology. The study will include approaches to library research, fieldwork, notation, analysis, instrument classification, and contextual description of music as an integral part of culture. Recorded sound examples from the principal cultures of the world outside the area of Western classical music will be studied.

MUSIC 713. Topical Course in Ethnomusicology. 3 hr.; 3 cr. Survey of a particular aspect of ethno–musicology or of the music of a particular area or group. Offerings have included Asian Music, Music of Japan, and Japanese Chamber Music. May be repeated for credit if the topic changes.

MUSIC 715. Audio/MIDI Sequencing I. 3 hr.; 3 cr. Through weekly assignments, students learn the ProTools MIDI work environment. Students will learn to input and edit notes as well as continuous controller automation to create expressive music. Students will master file import, quantizing, and time stretching of audio files. They will then learn to integrate those tracks with virtual instruments as an introduction recording live audio. This class will emphasize content creation.

MUSIC 716. Audio/MIDI Sequencing II. 3 hr.; 3 cr. This course picks up where Audio MIDI Sequencing I left off. Each week, students learn different sequencing techniques to improve their musical compositions. Topics include recording simple audio for creating sampled instruments; rendering virtual instrument tracks to audio; equalization and audio compression; time-based effects; and audio routing within ProTools. By recording together on collaborative projects, students learn the basics of recording live audio, including gain structure, room acoustics, microphone placements, types, and polar patterns.

MUSIC 720. Advanced Orchestration. 3 hr.; 3 cr. Prereq.: Permission of the instructor. Late nineteenth- and twentieth-century orchestral techniques are studied through the works of Brahms and Wagner, Mahler and Strauss to Britten, Stravinsky, Boulez, and Lutoslawski. Students examine notation innovations, orchestrate twentieth-century piano music, and occasionally hear their exercises read by the School of Music orchestra.

MUSIC 721. Music Business. 3 hr.; 3 cr. This course is designed to teach music students the economic basis of the music business; i.e. financial planning, contracts, dealing with managers and agents, etc. Students will be guided in assessing their own attitudes toward money and business and in creating compelling personal goals and planning the attainment of these goals.

MUSIC 725. Composers' Workshop. 1 hr.; 1 cr. A practicum for composers including performance and discussion of student works and discussion of other new music. Required of composition majors during each semester of residence for a maximum of four credits. Open to other graduate students with permission of the instructor. Graded on Pass/Fail basis only.

MUSIC 7261. Electronic Music Studio I. 3 hr.; 3 cr. Introduction to electronic music studio synthesis through lectures and studio work. Emphasizes the operation of analog, digital, and sampling synthesizers and recording techniques.

MUSIC 7262. Electronic Music Studio II. 3 hr.; 3 cr. Prereq.: MUSIC 7261 and permission of the instructor. A continuation of Electronic Music Studio I, emphasizing the Musical Instrument Digital Interface and the use of personal computers for sequencing and music publishing.

MUSIC 727. Electronic Music Composition. 3 lec. hr. plus lab.; 3 cr. Prereq.: MUSIC 726 or 733.1, or permission of the instructor. Composition of electronic music using analog or digital methods.

MUSIC 728. Musical Systems and Speculative Theory. 3 hr.; 3 cr. Analysis of the syntactical systems of two musical languages which have produced important work: tonality and the 12-tone system; construction by analogy of new musical systems which might be used as the foundations for new music. Use of electronic media and the computer.

MUSIC 729. Private Lessons in Composition I. 1 hr.; 3 cr. Prereq.: Admission to the MA composition major or permission of the department; coreq.: MUSIC 725. Private study in composition. May not be taken in the same semester as MUSIC 789. Fall, Spring

MUSIC 730. Private Lessons in Composition II. 1 hr.; 3 cr. Prereq.: MUSIC 729; coreq.: MUSIC 725. Continuation of private study in composition. May not be taken in the same semester as MUSIC 789. Fall, Spring

MUSIC 731. Private Lessons in Composition III. 1 hr. ; 3 cr. Prereq.: MUSIC 730: coreq.: MUSIC 725. Continuation of private study in composition. May not be taken in the same semester as MUSIC 789. With the permission of the chair of the School of Music. MUSIC 732 may be repeated for credit. Fall, Spring

MUSIC 7331. Computer Music I. 3 hr.; 3 cr. Prereq.: MUSIC 7261 or 7262, or permission of the instructor. Introduction to computer music synthesis emphasizing the basic concepts of synthesis, score preparation, and the study of computer music.

MUSIC 7332. Computer Music II. 3 hr.; 3 cr. Prereq.: MUSIC 7331 or permission of the instructor. A continuation of Computer Music I. Survey of computer music synthesis methods and computer composition.

MUSIC 734. Computer Techniques for Music Research. 3 hr.; 3 cr. Applications of digital computers in the fields of music theory and music history. No technical background in the use of the computer is required.

MUSIC 735. Audio and MIDI Sequencing I. 3 hr.; 3 cr. Prereq.: MUSIC 737 or permission of the instructor. This course covers the basics of digital sequencing using Virtual Instruments/MIDI and Audio files inside a modern digital audio workstation to establish a strong foundation for further studies in composition and production. Through weekly assignments, students learn to work in a digital audio workstation (DAW) environment. Students will learn to input and edit notes as well as continuous controller automation to create expressive music. Students will master file import, quantizing, and time stretching of audio files. They will then learn the integration of those tracks with virtual instruments as an introduction to recording live audio. This class will emphasize content creation.

MUSIC 736. Audio and MIDI Sequencing II. 3 hr.; 3 cr. Prereq. or coreq.: MUSIC 737 or permission of the instructor. An advanced class where students learn extended sequencing techniques to improve their musical compositions. Topics include recording simple audio for creating sampled instruments; rendering virtual instrument tracks to audio; equalization and audio compression; time-based effects; and audio routing within professional DAW software.

MUSIC 737. Recording Studio Fundamentals. 3 hr.; 3 cr.. An introductory survey of modern music production and recording techniques. Students will learn basic techniques for creating digital audio content, including simple MIDI and virtual instrument techniques, stereo recording techniques, digital audio editing, and session file techniques. Students will complete a series of individual and group projects to understand the various aspects of the production process.

MUSIC 738. Musical Iconography. 3 hr.; 3 cr. Critical and historical interpretation of the representation of musical subjects from the arts of Ancient Egypt to the nineteenth century.

MUSIC 739. Film Scoring. 3 hr.; 3 cr. Prereq. or coreq.: Orchestration, equivalent study, prior experience, or permission of the instructor. This course is a practical study in the composition of music to accompany image in film, television, commercials, and Internet streams. Each of the related crafts of film scoring is studied: scene change, vignette, underscore, over-score, characterization, genre scoring and counter scoring, in both dramatic and documentary domains. Commercial and industrial scores are covered, as are preliminary game styles. Students create weekly assignments to selected excerpts. Students also learn analytical skills that allow more intuitive writing.

MUSIC 740. Digital Recording and Composition I. 3 hr.; 3 cr. Prereq. or coreq.: MUSIC 737 or permission of the instructor. This course is an advanced level study of the craft of digital audio recording, including acoustic theory, musical proportion, digital theory, signal flow, and other studio considerations. Every student completes short weekly creative projects in digital audio, simultaneously learning different styles of composition and different technological configurations, including the tools to create and mix musical content in a modern digital audio workstation. Students also learn strategies for success in an increasingly technological environment.

MUSIC 741. Digital Recording and Composition II. 3 hr.; 3 cr. Prereq. or coreq.: MUSIC 740 or permission of the instructor. This course is a detailed and advanced study of digital audio recording, including file management, frequency estimation, audio streaming, track compilation, sub-mastering and complex mixing, digital mastering, and data compression. Every student completes several collaborative projects in digital audio, as well as several recreations of extant work.

MUSIC 742. Proseminar in Analysis and Style Criticism. 3 hr.; 3 cr. Prereq.: A passing grade on the harmonization portion of the Theory Qualifying Examination, or a grade of *B–* or higher in MUSIC 759. Analysis of style and structure of works of various periods. Fall

MUSIC 745. Introduction to Schenkerian Analysis. 3 hr.; 3 cr. Prereq.: Passing of Theory Qualifying Exam. An introduction to the theories of Heinrich Schenker, their relevance and practical application to musical analysis. (Required for all theory majors.)

MUSIC 746. Introduction to Post-Tonal Theory. 3 hr.; 3 cr. An introduction to current analytical approaches to 20th-century music. Required of theory majors.

MUSIC 747. String Repertory. 2 hr.; 1 cr. Prereq.: Permission of the instructor. A study of orchestral, chamber, and solo repertoire for string instruments. May be repeated for credit.

MUSIC 748. Woodwind Repertory. 2 hr.; 1 cr. Prereq.: Permission of the instructor. A study of orchestral, chamber, and solo repertoire for woodwind instruments. May be repeated for credit.

MUSIC 749. Brass Repertory. 2 hr.; 1 cr. Prereq.: Permission of the instructor. A study of orchestral, chamber, and solo repertoire for brass instruments. May be repeated for credit.

MUSIC 750. Piano Repertory. 2 hr.; 1 cr. Prereq.: Permission of the instructor. A study of chamber and solo repertoire for piano. May be repeated for credit.

MUSIC 751. Vocal Repertory. 2 hr.; 1 cr. Prereq.: Permission of the instructor. A study of aspects of vocal repertory including art song, aria, and other vocal forms. May be repeated for credit.

MUSIC 752. Percussion Repertory. 2 hr.; 1 cr. Prereq.: Permission of the instructor. This course is designed to increase the student's ability in three major areas of performance: orchestral repertoire, solo repertoire and world percussion music. Students are expected to prepare excerpts, listen to recordings, study scores and attend concerts. Grades are based on weekly performances in class. The workload will change depending on the repertoire performed in the Queens College Orchestra. May be repeated for credit.

MUSIC 753. Style Criticism: Topical Lecture Courses in Analysis and Criticism. 3 hr.; 3 cr. Prereq.: Matriculation for the Master of Arts degree in Music, or permission of the school. Analysis and criticism of selected works. May be repeated for credit if the topic changes.

MUSIC 756. Problems in Jazz History and Analysis. 3 hr.; 3 cr. Prereq.: Permission of the instructor. The first part of the semester will introduce students to the methods and problems of research in jazz history; the second half will focus on a specific era or on the work of a single jazz improviser or composer.

MUSIC 757. Advanced Jazz Composition. 3 hr.; 3 cr. Advanced students write for the jazz ensemble and have their works rehearsed and performed. Arranging for mixed woodwinds, strings, horn, and tuba. Afro-Cuban and Brazilian styles explored.

MUSIC 758. Musicianship for Graduate Students. 3 hr.; 2 cr. Prereq.: Acceptance into the MA program in music; students must also have taken the Theory Qualifying Examination (all four parts); the course is designed for students who have not passed one or more of the following parts of the examination: sight singing, dictation, or keyboard harmony.

An intensive course in sight singing, dictation, and keyboard harmony for graduate students. Students may place out of MUSIC 758 by passing these three parts of the Theory Qualifying Examination. This course is not available to students in Music Education.

A grade of *B–* or higher in MUSIC 758 will be regarded as equivalent to a passing grade in the sight-singing, dictation, and keyboard parts of the Theory Qualifying Examination, provided that the student also achieves a passing grade in *each* of these areas.

MUSIC 759. Studies in Tonal Harmony and Counterpoint. 3 hr.; 2 cr. An intensive study of tonal harmony and counterpoint, including chord prolongation and long-range structure. Practical applications. Open to interested students, but required of those who fail the Theory Qualifying Examination.

MUSIC 760, 761. Musicology Seminar. 3 hr.; 3 cr. Prereq.: MUSIC 700 and 742, or permission of the instructor. Consideration of special historical problems in which techniques of research and independent evaluation are stressed. Recent offerings have included Josquin, The Early Symphony, Mozart Operas, Beethoven (the Origins of his Style), and Verdi. May be repeated for credit with permission of the school. MUSIC 760–Fall; MUSIC 761–Spring

MUSIC 762, 763. Seminar in Music Theory. 3 hr.; 3 cr. Prereq.: MUSIC 700 and 742, or permission of the instructor. Consideration of special issues in theory or analysis, with emphasis on independent research and critical thinking. May be repeated with permission of the school. 762–Fall; 763–Spring

MUSIC 764. Topical Course in Applied Music Theory. 3 hr.; 3 cr. Prereq.: Permission of the instructor. Recent topics have included tonal composition and fugue, and advanced keyboard skills. May be repeated for credit if the topic changes.

MUSIC 765. Theory: Topical Lecture Courses. 3 hr.; 3 cr. Study of special topics in music theory such as chromaticism, form, structural analysis, comparative musical systems, etc. May be repeated for credit if the topic changes.

MUSIC 766. Topics in Chamber Music Research. 2 hr.; 2 cr. Prereq.: Acceptance into the MA in Music Performance, or one of the Music Certificate Programs.

MUSIC 7672, 7673. Topical Course in Performance. MUSIC 7672, 2 hr.; 2 cr., 7673, 3 hr.; 3 cr. Prereq.: Permission of the instructor. This course will be offered on an occasional basis. Topics will vary, but may include conducting for composers, Baroque continuo realization, etc. May be repeated for credit if the topic changes.

MUSIC 768. Western Music History Survey. 3 hr.; 2 cr. A survey of Western music covering the major periods through the 20th century. Assigned readings and listening, plus one individualized research project. Final exam on: (1) historical information, and (2) style recognition.

MUSIC 769. Piano Pedagogy. 2 hr.; 2 cr. Prereq.: Permission of the instructor. Piano Pedagogy addresses the applicative needs of aspiring piano teachers. It is a hands-on workshop designed to teach students how to recognize different learning styles, introduce and discuss various and contrasting method books and materials for the beginner to early intermediate levels, and to choose materials according to the needs of their students. It also provides students with the opportunity to teach in class and learn from the feedback of the class and instructor. Piano Pedagogy also focuses on the practical aspects of maintaining and sustaining an independent teaching studio.

Non-Piano Majors: Advanced Piano Pedagogy is also open to pianists who are graduate education majors, and to students who may need help with piano skills. Beginner pianists will be assigned to work with a graduate performance major. Permission of the instructor required.

MUSIC 770. Advanced Piano Pedagogy. 2 hr.; 2 cr. Prereq.: Permission of the instructor. Advanced course in Piano Pedagogy offers more intensive training in order to teach and play the intermediate through advanced levels of repertory which follow the beginner method books and preliminary materials presented in Pedagogy 774.1. Students will explore more advanced and diverse styles of music, piano technique, practice skills, and performance. Class teaching.

Non-Piano Majors: Advanced Piano Pedagogy is also open to pianists who are graduate education majors, and to students who may need help with piano skills. Beginner pianists will be assigned to work with a graduate performance major. MUSIC 769 is not a prerequisite. Permission of the instructor required.

MUSIC 771. Performance Literature Seminar. 3 hr.; 3 cr. Prereq.: Permission of department. A study of the repertoire for (1) chorus, (2) orchestra, or (3) wind ensemble. These topics will be offered on a rotating basis. This course is required of MM students in conducting. Conductors should take the version of the course that corresponds to their area of concentration. The course is available as an elective to other graduate students in music.

MUSIC 772. The Art of Keyboard Collaboration. 2 hr.; 2 cr. Prereq.: Permission of the instructor. A course for advanced keyboard players in the accompanist's role in the performance of the vocal and instrumental repertory. Coaching in selected literature.

MUSIC 773. Topics in the History of Music. 3 hr.; 3 cr. Prereq.: Matriculation for either the MA in Music or the MS in Education (Music) degree, or permission of the school. Lecture courses in the history of music. Recent topics have included Bach, Chopin, Debussy, and Ravel, Dvorák to Ellington, nineteenth-century opera, and twentieth-century opera. May be repeated for credit if the topic changes.

MUSIC 774. Chamber Music I. 1 hr.; 1 cr. The study of music literature through participation in a performance group. Fall, Spring

MUSIC 775. Chamber Music II. 1 hr.; 1 cr. Fall, Spring

MUSIC 776. Chamber Music III. 1 hr.; 1 cr. May be repeated for credit once. Fall, Spring

MUSIC 777. Seminars in Performance Practice. 3 hr.; 3 cr. Study of the performance practices of a particular historical period. Musical analysis and examination of contemporaneous writings will serve as the basis for live performance in class. The course normally rotates over a three-semester series as follows:

MUSIC 7771. Renaissance Performance Practice.

MUSIC 7772. Baroque

MUSIC 7773. Classical and Romantic

MUSIC 7774. Twentieth Century

MUSIC 778. Performance Workshop for Conductors. 2 hr.; 2 cr. Prereq.: Permission of the instructor. This course consists of assistantships to the directors of the Orchestra, Opera Workshop, Wind Ensemble, and Choir and leads to public performances with one or more of these large performing groups. May be repeated for credit. (Required for all conducting majors.)

MUSIC 7784. Performance of Non-Western Instruments of Music. 1 hr.; 2 cr. Prereq.: Limited to students of ethnomusicology, or permission of the school. Instruction in playing non-Western instruments. Fall, Spring

MUSIC 779. Musical Analysis for Performers. 3 hr.; 3 cr. Prereq.: A passing grade on the harmonization portion of the Theory Qualifying Examination, or a grade of *B–* or higher in MUSIC 759. Required of all students with a major in classical performance. Analysis of structure, texture, and form in tonal music as it relates to performance.

MUSIC 784. Music Since 1900 I. 3 hr.; 3 cr. A detailed study of changing styles and concepts of music in the first half of the twentieth century. Fall

MUSIC 785. Music Since 1900 II. 3 hr.; 3 cr. A detailed study of music from 1945 to the present. Spring

MUSIC 786. Combo Workshop. 3 hr.; 3 cr. Prereq: Permission of the instructor. Jazz Studies majors prepare and perform their own small-group arrangements.

MUSIC 788. Recital Preparation. 1 hr.; 3 cr. Prereq.: MUSIC 709 and permission of the instructor and the chair. Continuation of private study in an instrument, voice or conducting culminating in a Master's Level Recital. Fall, Spring

MUSIC 789. Thesis. Hours to be arranged; 3 cr. Prereq.: Approval of a thesis advisor and the Graduate MA Advisor. Required of all candidates for the MA in Music. Supervised thesis writing. May be repeated to a maximum of 6 credits.

MUSIC 790, 791. Special Topics. Prereq.: Permission of the school. Intensive study and a definite project in a field chosen by the student under the direction of a member of the School. May be repeated for credit if the topic changes.

MUSIC 7901, 7911. 1 hr.; 1 cr.

MUSIC 7902, 7912. 2 hr.; 2 cr.

MUSIC 7903, 7913. 3 hr.; 3 cr.

MUSIC 792. Orchestra. 5 hr.; 1 cr. Prereq.: Permission of the instructor. May be repeated for credit.

MUSIC 793. Symphonic Wind Ensemble. 4 hr.; 1 cr. Prereq.: Permission of the instructor. A specialized performance organization for wind and percussion players which is designed for the study and performance of the symphonic band/wind ensemble repertoire from a variety of periods. May be elected by MA or MS students subject to the requirements of the various programs. May be repeated for credit.

MUSIC 7941. Vocal Ensemble. 3 hr.; 1 cr. Prereq.: Permission of the instructor. A small, select chamber choir which performs music from the Middle Ages to the present. May be repeated for credit.

MUSIC 7942. Collegium Musicum (Renaissance and Baroque Instrumental Ensemble). 3 hr.; 1 cr. Prereq.: Permission of the instructor. May be repeated for credit. Group performs on modern copies of period instruments.

MUSIC 7943. Baroque Ensemble. 3 hr.; 1 cr. Prereq.: Permission of the instructor. A small, select ensemble which performs Baroque chamber music. May be repeated for credit.

MUSIC 7944. Nota Bene (Contemporary Instrumental Ensemble). 2 hr.; 1 cr. Prereq.: Permission of the instructor. May be repeated for credit.

MUSIC 7945. Brass Ensemble. 2 hr.; 1 cr. Prereq.: Permission of the instructor. A small, select group for the performance of literature for brass instruments. May be repeated for credit. Fulfills the chamber music requirement for brass players.

MUSIC 7946. Percussion Ensemble. 2 hr.; 1 cr. Prereq.: Permission of the instructor. A small, select ensemble for the performance of literature for percussion. Fulfills the chamber music requirement for percussionists. May be repeated for credit.

MUSIC 7948. Concert Choir. 4 hr.; 1 cr. Prereq.: Admission is by audition. A mixed chorus devoted to the study and performance of music from the Renaissance to the present. May be repeated for credit. Fall, Spring.

MUSIC 795. Chamber Orchestra. MUSIC 7950, 2 hr.; 0 cr., MUSIC 7951, 2 hr.; 1 cr. Prereq. or coreq.: Admission is by audition and permission of the instructor. The Queens College Chamber Orchestra performs three concerts a year, specializing in classical and modern large-ensemble repertoire. Weekly rehearsals involve in-depth study of musical scores in preparation for performances, combining practical rehearsal techniques with musical analysis and study of different musical styles. Special emphasis is placed on incorporating knowledge of classical style and period-instrument practice, adapted to modern instruments. The final Spring-semester concert is a concerto marathon featuring members of the ensemble. May be repeated for credit.

MUSIC 796. Opera Studio. Prereq.: Permission of the instructor. Individual coaching and group rehearsals culminating in recitals and staged performance. May be repeated for credit.

MUSIC 7961. 1 hr.; 1 cr.

MUSIC 7962. 2 hr.; 2 cr.

MUSIC 7963. 3 hr.; 3 cr.

MUSIC 797. Balinese Gamelan. 2 hr.; 1 cr. Prereq.: Permission of instructor. An introduction to traditional and contemporary Balinese music through practice and performance on traditional instruments. Weekly rehearsals lead to one or more concerts. Instruments and practice space are provided. May be repeated for credit to a maximum of 4 times. Fall, Spring

MUSIC 798. Advanced Solfège and Score Reading. Prereq.: Permission of the instructor. An elective for students needing high-level proficiency in score reading and related skills. May be repeated for credit for further study.

MUSIC 7981. 2 hr.; 2 cr. Fall

MUSIC 7982. 2 hr.; 2 cr. Spring

MASTER OF SCIENCE IN EDUCATION (MUSIC) AND POST-BACCALAUREATE ADVANCED CERTIFICATE MUSIC EDUCATION PROGRAMS

Advisor: Susan A. Davis

FACULTY

Davis, Susan A., Advisor, *Associate Professor,* PhD 2011, New York University: music education foundations, string pedagogy, curriculum and assessment, teacher preparation, research

Mozeiko, Kristin, *Lecturer,* PhD 2011, Boston University: instrumental pedagogy, conducting, Alexander technique

Rubinstein, Eric, *Assistant Professor,* DMA 2019, Louisiana State University: development of student learning environments, gender identity, choral performance and conducting

Smith, Janice P., *Professor*, PhD 2004, Northwestern University: music education foundations, general music, teacher preparation, composition pedagogy

Admission

There are two graduate programs in Music Education. The first is a post-baccalaureate Advanced Certificate Program leading to Initial Teacher Certification. Admission is open to applicants with a bachelor's degree in music with minimum *B* (3.0 of 4.0) cumulative undergraduate average, or a master's degree in another area of music. The Graduate Record Exam is required. A personal interview with the Music Education faculty is also required.

The second is the standard Master of Science in Education degree which is a New York State Education Department approved program that leads to Professional Certification for students already holding Initial Certification. Concentrations in instrumental music, choral music, general music, jazz music education, composition pedagogy and conducting are offered. A minimum *B* (3.0 of 4.0) cumulative undergraduate average and the Graduate Record Exam are required for admission.

Students must maintain a *B* average throughout either program for completion/graduation. Students must meet with the Graduate Advisor for registration prior to the start of each semester they are enrolled.

Program Requirements—Post-Baccalaureate Advanced Certificate Program Preparing for Initial Teacher Certification

The Post-Baccalaureate Advanced Certificate Program is a non-degree program comprised of pedagogical courses mandated by the New York State Education Department for Initial Certification. Students will be guided through the pedagogical coursework and student teaching.

The completion of this program takes two years and is typically 32–37 credits (depending on vocal or instrumental emphasis), but may be lower depending on the courses the individual student may have had at the undergraduate level (or another graduate program).

Students in the Initial Certification track are required to demonstrate a competent understanding of Western Classical Music. A music history qualifying examination will be administered during the student's first fall semester. Passing the exam meets this requirement.

Failing the exam means that the student must take MUSIC 768, Western Music History Survey (3 hr.; 2 cr.) or the equivalent in order to be recommended for certification.

Below are the required courses. (Course descriptions follow the Master of Science in Music Education requirements.)

MUSIC 690. Foundations of Music Education, 3 cr.

or

SEYS 536. Educational Foundations, 3 cr.

MUSIC 691. Psychology of Music, 3 cr.

or

SEYS 552. Educational Psychology, 3 cr.

EECE 711. Ecological Perspectives on Development: The Childhood Years, 3 cr.

ECPSE 550. Foundations of Special Education, 3 cr.

EECE 525. Language and Literacy Learning in the Elementary Years, 3 cr.

or

SEYS 700. Language, Literacy, and Culture in Education, 3 cr.

MUSIC 644. Student Teaching in Music, 6 cr.

MUSIC 645. Seminar in Teaching Music: Elementary, 3 cr.

MUSIC 646. Seminar in Teaching Music: Secondary, 3 cr.

MUSIC 669. Conducting II, 2 cr.

Students choose either:

Choral track

MUSIC 666. Vocal Pedagogy, 2 cr.

MUSIC 642. Teaching of Choral Music, 3 cr.

or

Instrumental Track

MUSIC 661. Group Instruction in Upper Strings, 1 cr.

MUSIC 662. Group Instruction in Lower Strings, 1 cr.

MUSIC 663. Group Instruction in Woodwinds, 1 cr.

MUSIC 667. Group Instruction in Brass, 1 cr.

MUSIC 668. Group Instruction in Percussion, 1 cr.

MUSIC 641. Teaching of Instrumental Music, 3 cr.

Program Requirements—Master of Science in Music Education

The program for the MSEd stresses the foundations and psychology of music and education, the teaching of elementary and/or secondary classroom music, vocal and/or instrumental music pedagogy, conducting, and research. Students' programs are rounded out with music and/or education electives based on individual interests and abilities.

MSED students are required to take one music history/literature course. A music history qualifying examination will be administered during the student's first fall semester. Passing the exam will allow the student to take a music history course of his or her choosing.

Failing the exam means the student must take MUSIC 768, Western Music History Survey (3 hr.; 2 cr.) or the equivalent, as a prerequisite to taking a required history course.

The completion of this program takes 2–3 years and is typically 36–38 credits (depending on whether a remedial history class is required).

Some credits earned in other graduate programs may be accepted for transfer. This is a highly flexible program based on the interests and needs of the individual student.

All students in the MSED program must take the following courses (27 credits):

Foundations of Education, typically MUSIC 690, 3 cr.
Educational Psychology, typically MUSIC 691, 3 cr.
General Music, typically MUSIC 659 or 660, 3 cr.
Two research seminars MUSIC 678, 3 cr. and MUSIC 688, 3 cr.
Advanced Conducting, MUSIC 670, 3 cr.
Either Music 642, Teaching Choral Music, 3 cr.
or
MUSIC 641, Teaching Instrumental Music, 3 cr.
MUSIC 692 or MUSIC 693, 3 cr.
MUSIC 773, Topics in Music History, 3 cr.

The remaining 9 credits are electives and will vary depending on the student's chosen area of concentration.

GRADUATE-LEVEL COURSES IN MUSIC EDUCATION

MUSIC 606. Queens College Choral Society. 3 hr.; 1 cr. Prereq.: Permission of the instructor. A mixed college-community chorus devoted to the study and performance of large choral masterpieces such as Messiah, Creation, and Elijah. Meets together with MUSIC 156 (Queens College Choral Society). May be repeated for credit to a maximum of 4 times. Fall, Spring

MUSIC 617. Introduction to the Alexander Technique. 3 hr.; 1 cr.; Prereq.: Permission of the instructor. The principles and concepts of the Alexander Technique and their relation to playing an instrument and to singing. Students will learn how to reduce and prevent neck, back, and shoulder pain, tendonitis, and repetitive strain injuries that are all common injuries for musicians. Students will also become aware of physical habits of misuse and anxiety that impede performance and will be shown how to transform those habits into improved breathing, moving with greater ease, and allowing for fuller emotional availability and expression.

MUSIC 641. Teaching of Instrumental Music. 3 hr.; 3 cr. Prereq.: MUSIC 661, 662, 663, 667, and 668, or undergraduate equivalents. An advanced course in current instrumental music pedagogy working from the philosophical to the practical, and touching base with rehearsal techniques, materials and literature, the National and State Standards, assessment, multicultural musics, technology in the music classroom, and working with the special learner.

MUSIC 642. Teaching of Choral Music. 3 hr.; 3 cr. Prereq.: MUSIC 666 or undergraduate equivalent. An advanced course in current choral music pedagogy working from the philosophical to the practical, and touching base with rehearsal techniques, materials and literature, the National and State Standards, assessment, multicultural musics, technology in the music classroom, and working with the special learner.

MUSIC 644. Student Teaching in Music. 16 hr.; 6 cr. Prereq.: MUSIC 646 with at least a *B,* MUSIC 669, MUSIC 666 (for vocal majors), and at least three of the following (for instrumental majors): MUSIC 661, 662, 663, 667, 668. Students will be assigned the equivalent of 25 six-hour days (150 hours) at the elementary (Pre-K–6) level, and 25 six-hour days (125 hours) at the secondary (7–12) level. Students will, to the extent possible, be assigned to both urban and non-urban settings. Students are expected to prepare daily lesson plans, and will develop and maintain student teaching portfolios.

MUSIC 645. Seminar in Teaching Music: Elementary. 3 hr.; 3 cr. Coreq.: EECE 711. Students will focus on curriculum, instruction and assessment for teaching elementary classroom music. Students will learn about children's musical thinking from a developmental point of view. Students will learn and practice teaching strategies and technologies for supporting student learning as defined by city, state and national standards for music education. Strategies for adapting instruction to students with specific types of exceptionalities will be explored. There is an intensive field component to this class that allows students the opportunity to teach and then reflect on their experiences with children. Biweekly observations are also required. Students must pass this course with a *B* or higher to continue on to MUSIC 646.

MUSIC 646. Seminar in Teaching Music: Secondary. 3 hr.; 3 cr. Prereq.: MUSIC 645 with a minimum grade of *B*; coreq.: SEYS 552 and ECPSE 550. Students will focus on curriculum, instruction and assessment for teaching secondary general music including music in middle schools. Students will learn about children's musical thinking from a developmental point of view. Students will learn and practice teaching strategies for supporting student learning as defined by city, state and national standards for music education. Students will learn and practice strategies for teaching music from a multicultural perspective. There is an

intensive field component to this class that allows students the opportunity to teach and then reflect on their experiences with children. Weekly observations are also required. Students must pass this course with a *B* or higher to be allowed to student teach.

MUSIC 659. General Music in the Elementary Schools. 3 hr.; 3 cr. Prereq.: MUSIC 644. An advanced course in current elementary classroom pedagogy working from the philosophical to the practical, and touching base with the National and State Standards, assessment, multicultural musics, technology in the music classroom, and working with the special learner.

MUSIC 660. General Music in the Secondary Schools. 3 hr.; 3 cr. Prereq.: MUSIC 644. An advanced course in current elementary classroom music pedagogy working from the philosophical to the practical, and touching base with the National and State Standards, assessment, multicultural musics, technology in the music classroom, and working with the special learner.

MUSIC 661. Group Instruction in Upper Strings. 3 hr.; 1 cr. Prereq.: Permission of the department. Meets with MUSIC 161 with additional coursework for graduate students. For instrumental majors and Initial Certificate Track students only. Development of skill in performing and pedagogical techniques for (but not limited to) violin.

MUSIC 662. Group Instruction in Lower Strings. 3 hr.; 1 cr. Prereq.: Permission of the department. Meets with MUSIC 162 with additional coursework for graduate students. For instrumental majors and Initial Certificate Track students only. Development of skill in performing and pedagogical techniques for (but not limited to) cello.

MUSIC 663. Group Instruction in Woodwinds. 3 hr.; 1 cr. Prereq.: Permission of the department. Meets with MUSIC 163 with additional coursework for graduate students. For instrumental majors and Initial Certificate Track students only. Development of skill in performing and pedagogical techniques for (but not limited to) flute, oboe, and clarinet.

MUSIC 666. Vocal Pedagogy. 3 hr.; 2 cr. Prereq.: Permission of the department. Meets with MUSIC 266 with additional coursework for graduate students. For Vocal/General majors and Initial Certificate Track students only. The physiology of the vocal mechanism and techniques for teaching voice production. The development of individual skill in singing is stressed. Spring

MUSIC 667. Group Instruction in Brass. 3 hr.; 1 cr. Prereq.: Permission of the department. Meets with MUSIC 167 with additional coursework for graduate students. For instrumental majors and Initial Certificate Track students only. Development of skill in performing and pedagogical techniques for (but not limited to) trumpet and trombone.

MUSIC 668. Group Instruction in Percussion. 3 hr.; 1 cr. Prereq.: Permission of the department. Meets with MUSIC 168 with additional coursework for graduate students. For instrumental majors and Initial Certificate Track students only. Development of skill in performing and pedagogical techniques.

MUSIC 669. Conducting II. 3 hr.; 2 cr. Prereq.: Permission of the department. Meets with MUSIC 370 with additional coursework for graduate students. For Initial Certificate Track students only. Includes consideration of repertoire, problems of interpretation, organization of choral and instrumental groups.

MUSIC 670. Advanced Conducting. 3 hr.; 3 cr. Prereq.: MUSIC 669 or undergraduate course in conducting (MUSIC 370 or equivalent). Focus is on advanced conducting problems, techniques, and literature (both choral and instrumental).

MUSIC 678. Introduction to Research in Music Education. 3 hr.; 3 cr. Prereq.: Permission of the Graduate Music Education Advisor. An introduction to basic research designs used in educational settings with an emphasis on interpreting research results for improving classroom instruction.

MUSIC 688. Seminar in Research in Music Education. 3 hr.; 3 cr. Prereq.: MUSIC 678 within 12 months of completing graduate study. A brief review of research methods and designs. An overview of statistics used in educational research. Students will complete a research project.

MUSIC 689. Topics in Music Education. 3 hr.; 3 cr. Prereq.: Permission of coordinator of music education or instructor The topic of the course changes each time it is offered. For announcement of the current topic, contact the School of Music or see supplementary listing for registration. May be repeated for credit if the topic is different.

MUSIC 690. Foundations of Music Education. 3 hr.; 3 cr. Prereq.: Permission of the graduate advisor. (This course may be used in lieu of the SEYS or EECE 700-level elective course requirement in Historical, Philosophical, or Social Foundations.) Focus is on the historical, philosophical, social, and psychological foundations of music education and the practical applications of these foundations in teaching.

MUSIC 691. Psychology of Music. 3 hr.; 3 cr. Prereq.: Permission of the graduate advisor. Focus is on the psychological, social-psychological, and sociological foundations of music education and the practical applications of these areas to teaching and performing music. The course may be elected by MS or MA students in music.

MUSIC 692. Thesis in Music Education. 3 hr.; 3 cr. The student will develop, design, carry out and report on an original research study aimed at solving a relevant problem in music education. Studies may be historical, philosophical, descriptive, correlation or experimental in nature, and may be qualitative or quantitative in analysis.

MUSIC 693. Inquiry in Music Education. 3 hr.; 3 cr. This course is an alternative option to MUSIC 692 (thesis). It is designed as a summative major project to complete the degree. One recommended project is that of a summative teacher portfolio. Other major projects will be considered by approval of the Graduate Advisor.

Philosophy

Chair: Stephen Grover

Graduate Advisor: Alberto Cordero-Lecca

Dept. Office: Powdermaker Hall 350, 997-5270

Four-Year BA/MA Program

The Philosophy Department offers to strongly qualified undergraduate students the opportunity to receive both master's and bachelor's degrees within four years: that is, within the 120 credits normally required for the bachelor's degree alone. Application to this program should be made in the upper sophomore or lower junior semester; admission is granted only in the junior year.

Seminars and research tutorials are given on both the leading contemporary movements of philosophy and the chief historical periods and figures. Students with diverse philosophical interests are accommodated by a faculty representing a broad spectrum of specializations. The acceleration and intensiveness of the BA/MA program make for an exceptionally solid grounding in philosophy that will be of value in all fields in which the tradition of liberal arts is prized. Full details and application forms are available from the Chair or Graduate Advisor.

FACULTY

Grover, Stephen, Chair, *Associate Professor,* DPhil 1993, University of Oxford: philosophy of religion, modern philosophy

Cordero-Lecca, Alberto, Graduate Advisor, *Professor,* PhD 1992, University of Maryland: history and philosophy of science

Donato, Antonio, *Associate Professor,* PhD 2004, University of Padua, Italy; DPhil 2007, Oxford University: medieval and renaissance philosophy

Doukhan, Abigail, *Associate Professor*, PhD 2008, University of Paris X: post-Kantian European philosophy, Jewish philosophy

Kisilevsky, Sari, *Associate Professor,* PhD 2008, University of Toronto: ethics, philosophy of law

O'Connor, Patricia J., *Associate Professor,* PhD 1990, University of Exeter: philosophy of religion, ethics

Twomey, Rosemary, *Assistant Professor,* PhD 2013, City University of New York: ancient philosophy, epistemology

PROGRAM FOR THE MASTER OF ARTS DEGREE

Requirements for the MA Degree (Offered in Conjunction with the Four-Year BA/MA Program)

These requirements are in addition to the general requirements for the Master of Arts degree.

1. Required Courses: Twenty-four credits in philosophy; six of these shall be in the history of philosophy, unless the student presents six undergraduate credits in the history of philosophy or passes an exemption examination. Approval of the program of study must be obtained from the Graduate Advisor.
2. The student's program must include courses chosen from at least three of the five groups of graduate philosophy courses: history of philosophy; logic and philosophy of science; metaphysics, epistemology, and contemporary schools of philosophy; theory of values; and philosophies of special disciplines.
3. Six credits may be taken in approved graduate courses offered outside the program of philosophy. Approval of such coursework must be secured in advance from the Graduate Committee in Philosophy.
4. The student must give evidence of proficiency in one of the following languages: French, German, Latin, or Greek. Another language may be substituted for one of these only with the approval of the Graduate Committee.
5. A thesis satisfactory to the department, written under supervision.
6. A Comprehensive Examination in Philosophy.

COURSES IN PHILOSOPHY

Note: Detailed descriptions of current course offerings are available from the secretary of the Department of Philosophy, in Powdermaker 350.

History of Philosophy

PHIL 710. Ancient Philosophy: Plato. 2 hr. plus conf.; 3 cr.

PHIL 711. Ancient Philosophy: Aristotle. 2 hr. plus conf.; 3 cr.

PHIL 712. Studies in Medieval Philosophy: Early Medieval Philosophy. 2 hr. plus conf.; 3 cr.

PHIL 713. Studies in Medieval Philosophy: Late Medieval Philosophy. 2 hr. plus conf.; 3 cr.

PHIL 714. Studies in Early Modern Philosophy: Rationalism. 2 hr. plus conf.; 3 cr.

PHIL 715. Studies in Early Modern Philosophy: Empiricism. 2 hr. plus conf.; 3 cr.

PHIL 716. Studies in Late Modern Philosophy: Kant. 2 hr. plus conf.; 3 cr.

PHIL 717. Studies in Late Modern Philosophy: Middle and Late Nineteenth Century. 2 hr. plus conf.; 3 cr.

Logic and Philosophy of Science

PHIL 620. Advanced Logic. 2 hr. plus conf.; 3 cr. Prereq.: An introductory course in symbolic logic or its equivalent.

PHIL 621. Logic and Language. 2 hr. plus conf.; 3 cr.

PHIL 721. Philosophy of Mathematics. 2 hr. plus conf.; 3 cr. Prereq.: A knowledge of symbolic logic.

PHIL 722. Methodology of Empirical Sciences. 2 hr. plus conf.; 3 cr. Prereq.: A course in logic or philosophy of science.

PHIL 723. Probability and Induction. 2 hr. plus conf.; 3 cr. Prereq.: An introductory course in logic or its equivalent.

Metaphysics and Epistemology

PHIL 730. Metaphysics. 2 hr. plus conf.; 3 cr.

PHIL 731. Philosophy of Mind. 2 hr. plus conf.; 3 cr.

PHIL 732. Epistemology. 2 hr. plus conf.; 3 cr.

Contemporary Problems and Schools of Philosophy

PHIL 740. Phenomenology. 2 hr. plus conf.; 3 cr.

PHIL 741. Existentialism. 2 hr. plus conf.; 3 cr.

PHIL 742. Pragmatism. 2 hr. plus conf.; 3 cr.

PHIL 743. Philosophical Analysis. 2 hr. plus conf.; 3 cr.

Ethics, Aesthetics, Social Philosophy, and Philosophy of Religion

PHIL 651. Philosophy of Law. 2 hr. plus conf.; 3 cr.

PHIL 652. Philosophy of History. 2 hr. plus conf.; 3 cr.

PHIL 653. Philosophy of the State. 2 hr. plus conf.; 3 cr.

PHIL 654. Philosophy of Religion. 2 hr. plus conf.; 3 cr.

PHIL 750. Ethical Systems. 2 hr. plus conf.; 3 cr. Prereq.: A course in ethics or theory of value.

PHIL 751. Ethical Analyses. 2 hr. plus conf.; 3 cr. Prereq.: A course in ethics or theory of value.

PHIL 752. Aesthetics. 2 hr. plus conf.; 3 cr.

PHIL 760. Business Ethics. 2 hr. plus conf.; 3 cr.

Special Studies, Seminars, and Tutorials

PHIL 778. Special Studies in Philosophy. 2 hr. plus conf.; 3 cr. May be repeated for credit provided topic is different.

PHIL 779. Seminar in Philosophy. 2 hr. plus conf.; 3 cr. May be repeated for credit provided topic is different.

PHIL 780. Tutorial: Special Problems. The completion of a project under the direction of a member of the department.

PHIL 780.1. 1 hr.; 1 cr.

PHIL 780.2. 2 hr.; 2 cr.

PHIL 780.3. 3 hr.; 3 cr.

PHIL 791. Thesis Research. Hr. to be arranged; 3 cr. Preparation of an acceptable master's degree thesis under faculty supervision. (Required of all candidates for the MA in Philosophy. Candidates will register for the course once; credit will not be granted until the thesis is accepted.)

Physics

Chair: Steven Schwarz

Deputy Chair: Alexander Lisyansky

Graduate Advisor: Lev Deych

Dept. Office: Science Building B334, 997-3350

Website: www.qc.cuny.edu/Physics

The Physics Department offers two master's-level programs of study leading to the Master of Arts degree in physics and the Master of Science degree in photonics. The former is a traditional master's-level program covering a full spectrum of courses in theoretical and experimental physics and is designed to serve students interested in teaching physics at the high school level, filling gaps in their undergraduate education before applying to a doctoral program in physics, as well as students interested in other career opportunities such as technical writing, finance, and patent law. The program leading to the Master of Science degree in photonics is an innovative program certified by the Council of Graduate Studies as a Professional Science Master's (PSM) program. Its thrust is to prepare students for immediate employment in the optics, photonics, and semiconductor industries. This program emphasizes hands-on experience in laboratories enhanced by industrial internships and combines rigorous studies of fundamental modern physics with developing critical communication skills and strategic business learning.

The department also participates in the doctoral program in physics via the CUNY Graduate Center and offers doctoral and master's students a range of research activities in cutting-edge areas of modern physics.

Members of the department are engaged in experimental and theoretical research in such fields as light propagation, localization and emission in photonic periodic, quasiperiodic, and disordered materials, including random lasers; optical microresonators and their applications in sensing optical logic elements, and new types of lasers, optics, and magneto-optics of semiconductor nanostructures such as quantum dots, quantum wires, and quantum wells; photonic nanostructures for biosensing and solar cell applications; application of methods of condensed matter physics to biophysical problems, and nanoelectromechanical systems; metamaterials and nonlinear optics.

The research activity of the department is supported by funding from the National Science Foundation, the Department of Energy, and the Department of Defense among other agencies.

FACULTY

Schwarz, Steven A., Chair, *Professor,* PhD 1980, Stanford University: secondary ion mass spectrometry, polymer physics.

Lisyansky, Alexander A., Deputy Chair, *Professor,* DSc 1987, Highest Attestation Commission, Moscow, Russia, PhD 1977, Donetsk National University, Ukraine: condensed matter theory, optics, nanoplasmonics

Deych, Lev I., Graduate Advisor, *Professor,* PhD 1991, Kirensky Institute of Physics, Russia: condensed matter theory, optics

Almeida, Euclides, *Assistant Professor,* DSc 2012, Universidade Federal de Pernambuco, Brazil: nonlinear optics, nanophotonics, metamaterials, and ultrafast science

Benseman, Timothy M., *Assistant Professor*, PhD 2007, Cavendish Laboratory, University of Cambridge: condensed matter experiment; superconducting terahertz laser sources and signal processing

Genack, Azriel Z., *Distinguished Professor,* PhD 1973, Columbia University: experimental solid state physics, light scattering and nonlinear optics

Kuskovsky, Igor L., *Professor,* PhD 1998, Applied Physics, Columbia University: experimental solid state physics, optoelectronic materials

Liebovitch, Larry S., *Professor,* PhD 1978, Harvard University: astrophysics, biophysics, modeling psychological and social systems.

Mohammad-Ali Miri, Assistant Professor, PhD 2014, CREOL, University of Central Florida: optics and photonics, light-matter interaction and non-linear optics

Murokh, Lev, *Associate Professor,* PhD 1996, Lobachevsky State University, Russia: quantum theory of nanostructures

Takei, So, *Assistant Professor*, PhD 2008, University of Toronto: theory of spin transport through insulators, macroscopic quantum phenomena in magnetic systems

PROGRAM FOR THE MASTER OF ARTS DEGREE

Requirements for Matriculation

These requirements are in addition to the general requirements for admission.

1. Candidate must have a minimum of 16 credits in physics beyond the introductory college course and six credits in mathematics beyond elementary calculus.
2. Letters of recommendation must be written by individuals who are qualified to attest to the applicant's character and capacity to do graduate work in physics.

Requirements for the Master of Arts Degree

1. All MA degree candidates must have at least 30 credits drawn from 600- and 700-level courses approved by the department.
2. All candidates must complete the following courses or their equivalents as determined by the Graduate Physics Committee:

	credits
PHYS 625. Fundamentals of Quantum Mechanics	4
PHYS 641. Statistical Physics	4
PHYS 611. Analytical Mechanics	4
PHYS 615.1, 2. Electromagnetic Theory	4
PHYS 671. Modern Physics Laboratory	2

3. Remaining credits can be earned by taking elective 600- or 700-level courses offered by the department or the CUNY Graduate Center or graduate-level courses in mathematics, chemistry, and computer science approved by the Graduate Physics Committee.
4. A minimum grade of *B–* is required in any course taken to fulfill the requirements for the MA degree.

The Master of Arts is the first 30 credits of doctoral work in physics. The CUNY doctoral program is described in the *Bulletin* of the Graduate Center.

PROGRAM FOR THE MASTER OF SCIENCE DEGREE IN PHOTONICS

Requirements for Matriculation

These requirements are in addition to the general requirements for admission.

1. BA or BS degrees in physics or their equivalents. Consideration for admission will also be given to individuals with bachelor degrees in mathematics, chemistry, electrical engineering, material science, and computer science at the discretion of the Admissions Committee.
2. At least two letters of recommendation attesting to the student's academic abilities, motivation, and work ethics.
3. A short (250 words) statement of career goals.

Requirements for the Master of Science Degree in Photonics

1. Total minimum number of credits required to complete the program: 43.
2. The following courses are required of all candidates for the MS in Photonics:

	credits
PHYS 626 Applied Quantum Mechanics*	4
PHYS 616 Applied Electrodynamics	4
PHYS 637 Modern Optics	4
PHYS 672 Photonics Laboratory	2
PHYS 661 Computational Methods in Physics	4
PHYS 621 Optoelectronics	3
PHYS 646 Physics of Semiconductors	4
PHYS 620 Research and Writing in the Sciences	3
ECON 630 Engineering Economics	3
Total required credits	31

*Students with sufficient undergraduate background in quantum mechanics can test out of this course and instead take one of the elective courses bearing the same (4) number of credits. The proficiency exam in Quantum Mechanics will be given during the week before the start of the fall semester. The exact date and place of the exam will be posted on the department's website.

3. Students must select one of the elective laboratory courses:

	credits
PHYS 671 Modern Physics Laboratory	2
PHYS 673 Microwave Instrumentation Laboratory*	2
PHYS 771, 772, 773 Grad. Lab.	2 cr. each, up to 6 cr.

*Approval for new course PHYS 673 is pending.

Minimum number of elective laboratory credits	2

4. MS in Photonics candidates must select one of the elective technology courses:

PHYS 675 Intro to Nano and Microfabrication	4
PHYS 676 Foundation of Growth Techniques	4
PHYS 623 Principles of Telecommunications	4
PHYS 622 Physics of Lasers	4
Minimum number of technology credits	4

5. Candidates for MS in Photonics who do not have a prior or current experience in relevant industries must take at least one industrial internship course for a minimum of 2 credits. Candidates who do have relevant industrial experience might substitute industrial internship for a different elective laboratory course. The relevance of the work experience is determined by the department.

Minimum number of internship credits	2

6. Candidates for MS in Photonics must complete and defend a final project, which can be done working individually or in groups up to 3 students by registering in their final semester for PHYS 798, Thesis, a course bearing 4 credits.

COURSES IN PHYSICS

PHYS 501. Modern Aspects of Physics. 4 hr.; 4 cr. A course for teachers providing discussion of selected topics in mechanics, electronics, atomic and nuclear physics. Not open to candidates for the MA degree in physics.

PHYS 503. Selected Topics in General Physics. 4 hr.; 4 cr. Prereq.: Matriculation for the MS in Education and an undergraduate major in biology, chemistry, or geology. Selected topics in the current high school physics curriculum are studied, with special emphasis on understanding of concepts, including recent

developments and research; on lecture demonstrations; and on laboratory experiments.

PHYS 507. Physics of Music and Sound. 3 hr.; 3 cr. Prereq. or coreq.: None. This course is designed for liberal arts majors with an interest in understanding the principles behind the production of music and sound. Topics include origins and the nature of sound waves, hearing, harmonics, temperament, musical instruments, and emphasizes other selected topics. Demonstrations are used extensively to illustrate pertinent concepts. This course offers conceptual understanding rather than computation or problem-solving. No knowledge of physics or music theory is required.

ECON 630. Engineering Economics. 3 hr.; 3 cr. Prereq. or coreq.: MATH 201 or permission of the department. This course deals with the application of economic models to the evaluation of engineering projects from a financial perspective. The students are exposed to the fundamentals of investment decision-making using the theory of corporate finance. The course is designed for students in STEM disciplines interested in understanding the process of financial decision-making as it relates to engineering projects. This course is open to graduate and qualified undergraduate students majoring in STEM fields with the permission of the instructor.

PHYS 601. Introduction to Mathematical Physics. 3 hr.; 3 cr. Prereq.: A course in mechanics and an approved mathematics background. Selected topics in mechanics, thermodynamics, electrostatics, magnetostatics, the electromagnetic field, and the restricted theory of relativity. The mathematical methods developed include such topics as linear and partial differential equations, the calculus of variations, normal and curvilinear coordinates, expansion of a function as a series of orthogonal functions, vector, tensor, and matrix analysis.

PHYS 611. Analytical Mechanics. 4 hr.; 4 cr. Prereq.: An undergraduate course in mechanics and an approved mathematics background. Analytical mechanics of particles and rigid bodies. Free and forced oscillations; coupled systems; vibrating strings and membranes; the top. Use of numerical integration and power series, vector and tensor analysis, Lagrange's and Hamilton's equation. Fourier series and Bessel functions.

PHYS 612. Fluid Dynamics. 3 hr.; 3 cr. Prereq.: PHYS 233, 234, or MATH 223 or 224, and PHYS 122 or 146. A macroscopic description of the physical properties of fluids. Topics include fluid equations for inviscid compressible and incompressible flow, wave propagation, shock waves and related discontinuities, stability and turbulence, and other topics.

PHYS 615.1. Electromagnetic Theory I. 4 hr.; 4 cr. Prereq.: An undergraduate course in electromagnetism and mathematics approved by the department. Topics will include: electrostatics, Poisson and Laplace equations, special techniques: method of images, separation of variables, and multipole expansion, electric fields in matter, magnetostatics, magnetic fields in matter.

PHYS 615.2. Electromagnetic Theory II. 4 hr.; 4 cr. Prereq.: PHYS 615.1. Topics will include: electromagnetic waves in vacuum, electromagnetic waves in media, wave guides, Lienard-Wiechert potentials, dipole radiation, special theory of relativity, relativistic electrodynamics.

PHYS 616. Applied Electrodynamics. 4 hr.; 4 cr. Prereq.: Graduate standing and/or permission of department. Topics will include: electrostatic properties of conductors and dielectrics, multipole expansion, plasmons and plasmonic resonance, magnetostatics and magnetic polarization, Maxwell's equations, theory of ac circuits, electromagnetic waves, radiation, antennas and antenna arrays.

PHYS 620. Research and Writing in the Sciences. 3 hr.; 3 cr. Prereq. or coreq.: Graduate standing and permission of department. Topics include preparation of abstracts, technical publications, conference presentations, and curriculum vitae. Ethical issues in scientific research will be addressed through case studies and examination of relevant technical and popular literature. Students will explore literature pertaining to their research interests, and present reviews to the class in written and oral formats.

PHYS 621. Optoelectronics. 3 hr.; 3 cr. This course will cover the physics of optoelectronic devices addressing both theoretical and experimental aspects. Topics to be covered include: historical survey of optical communication, electromagnetic waves, waveguides, photonic crystals, microcavities, mechanism of light emission and absorption in semiconductors, lasers, photodetectors, solar cells, and nonlinear optics.

PHYS 622. Physics of Lasers. 4 hr.; 4 cr. Prereq.: PHYS 355 or 312. Principles of operation of solid, liquid, and gas lasers and application of lasers to research.

PHYS 623. Principles of Telecommunications. 4 hr.; 4 cr. Prereq.: PHYS 616. The course will cover fundamental concepts in analog and digital communication systems, with application to radio, television, telephony, and computer networks.

PHYS 625. Fundamentals of Quantum Mechanics. Prereq.: Graduate standing and/or an undergraduate course in modern physics and mathematics approved by the department. Topics will include formalism of quantum mechanics (operators, state vectors, probabilistic interpretation), quantum-mechanical effects in potential wells and barriers (tunneling, resonant transmission, bound states), quantum harmonic oscillator, quantum angular momentums (orbital and spin), hydrogen atom, identical particles in quantum mechanics.

PHYS 626. Applied Quantum Mechanics. 4 hr.; 4 cr., Prereq.: Graduate standing and/or permission of department. The course will cover mathematical formulation of quantum mechanics; one-dimensional problems: quantum wells and barriers with applications

to semiconductor heterostructures, Kronig-Penney model, harmonic oscillator; angular momentum and spin, indistinguishable particles, stationary and time-dependent perturbation theory, application of density matrix to analysis of light-matter interaction, quantization of electromagnetic field and photons.

PHYS 635. Condensed Matter Physics. 4 hr.; 4 cr. Prereq.: PHYS 260 or an equivalent course in modern physics; coreq.: PHYS 625. An introduction to molecular and solid state phenomena. Molecular structure and spectra of diatomic molecules, quantum theory of chemical bonding and dipole moments, crystal structure, lattice dynamics, free electron theory of metals, band model of metals, insulators, and semiconductors, amorphous solids, polymers, liquid crystals, and phase transition phenomena.

PHYS 636. Nuclear and Elementary Particle Physics. 4 hr.; 4 cr. Prereq.: PHYS 260 or an equivalent course in modern physics; coreq.: PHYS 625. The experimental facts and elements of the quantum theories pertaining to: natural and artificial radioactivity; interaction of charged particles and gamma rays with matter; nuclear structure; emission of alpha, beta, and gamma rays; nuclear reactions and models; the weak and strong nuclear forces; muons; pions; strange particles, quarks.

PHYS 637. Modern Optics. 4 hr.; 4 cr. Prereq.: PHYS 260 or an equivalent course in modern physics; coreq.: PHYS 625. Electromagnetic wave propagation in vacuum and in linear media including Fresnel's equations for reflection and transmission at interfaces, absorption and dispersion, guided waves in waveguides, transmission lines and optical fibers, geometric optics and imaging, matrix methods for complex optical systems, interference, diffraction, coherence, principles of laser operation, Gaussian beams, nonlinear optics, quantum theory of emission and absorption of radiation.

PHYS 641. Statistical Physics. 4 hr.; 4 cr. Prereq.: Undergraduate courses in advanced mechanics and advanced thermodynamics. Maxwellian distribution of velocities, molecular motion, and temperature; elementary theory of the transport of momentum (viscosity), energy (heat), and matter (diffusion). Entropy and probability; Maxwell-Boltzmann statistics, equipartition of energy and classical theory of heat capacity of gases and solids. Bose-Einstein and Fermi-Dirac statistics; quantum theory of paramagnetism.

PHYS 646. Physics of Semiconductors. 4 hr.; 4 cr., Prereq.: Undergraduate courses in quantum mechanics and mathematics approved by the Department. Topics will include: Crystal structures; thermal and electric properties of crystals; semiconductors and semiconductor devices; low-dimensional systems; excitons in semiconductors and semiconductor nanostructures.

PHYS 657. Introduction to Astrophysics. 3 hr.; 3 cr. Prereq.: Undergraduate courses in mechanics, electromagnetism, and modern physics. An introductory study of the spatial positions, movements, and constitutions of the stars, star clusters, and nebulae.

PHYS 661. Computational Methods in Physics. 4 hr.; 4 cr. A course in numerical methods of analysis and modeling of physical phenomena with focus on problems arising in electromagnetism, optics, and semiconductor physics. The topics include solving Maxwell equations using finite difference and the finite element methods, stochastic (Monte-Carlo) methods, the matrix eigenvalue problems. Students will be introduced to scientific and engineering computing based on Matlab and/or other similar platforms.

PHYS 671. Modern Physics Laboratory. 4 hr.; 2 cr. Experiments are selected from among the areas of atomic, nuclear, solid state, and molecular physics. Students will learn basic experimental techniques used in modern university and industrial research laboratories, including how to use computers to interface with and control modern scientific instruments. Special attention will be paid to proper ways of collecting and analyzing experimental data. Students will compare the results of experiments with theoretical predictions and learn how to write scientific and technical reports.

PHYS 672. Photonics Laboratory. 4 hr.; 2 cr. In this lab students will design and carry out experiments related to the fields of optics and photonics. They will learn basic experimental skills required to work with various optical instruments and components (lasers, optical fibers, filters, spectrometers, etc.) Special attention will be paid to proper ways of collecting and analyzing experimental data. Students will compare the results of experiments with theoretical predictions and learn how to write scientific and technical reports, and to safety procedures.

PHYS 673. Microwave Instrumentation Laboratory. 4 hr.; 2 cr. Prereq.: Graduate standing and/or permission of department. The course will cover principles of operation of microwave antennae, waveguides, amplifiers, and couplers. Measurements of propagation will be made in homogeneous and disordered single mode and overmoded waveguides. These experiments will be carried out with use of a microwave vector network analyzer. Measurements will be controlled, collected, and analyzed with use of the MATLAB programming language.

PHYS 675. Introduction to Nano and Microfabrication. 4 hr.; 4 cr. Prereq.: Graduate standing and permission of department. This hands-on course will introduce the students to the basic techniques and concepts related to nano and microfabrication. The course will discuss topics such as lithography, chemical vapor deposition, dry and wet etching of semiconductors, growth of semiconductor nanostructures and structural and optical characterization. The students will gain in-depth understanding of the techniques and obtain hands-on training on the various tools needed for nano and microfabrication.

PHYS 676. Foundation of Growth Techniques. 4 hr.; 4 cr. Prereq.: Graduate standing and permission of department. Topics include: basics of vacuum science and technology, thermodynamics and kinetics of growth, introduction to phase diagrams, bulk growth and think film growth, including physical vapor deposition (PVE), hydride PVE, chemical vapor deposition (CVD), pulsed laser deposition (PLD), molecular beam epitaxy (MBE), and atomic layer deposition (ALD). Students will learn basics of materials science, physics, and instrumentation required to "grow" various materials with the emphasis on semiconductor thin films.

PHYS 680. Internship I. No less than 300 hours of industrial site work during first summer of Photonics MS program plus 1 hour every two weeks seminar on campus or online; 2 cr. Grading will be on the Pass/Fail basis and will be based on the provided records of daily activities and final report. Prereq.: Successful completion of at least 16 credits toward MS in Photonics degree and permission of department. The goal of this course is to provide students with practical experience at an industrial company specializing in providing photonics-related services or fabricating photonic-related products. A student works at the site of the company (or approved research lab) during the summer months after the completion of the first year of the program under supervision of a company's representative and in coordination with an assigned faculty member. The work is carried out according to a plan approved by both faculty and industry supervisor. Students taking this course are expected to keep records of their daily activities and present a final report approved by the company's representative.

PHYS 681. Internship II. No less than 300 hours of work at an industrial site or external research lab approved by department plus 1 hour every two weeks seminar on campus or online; 2 cr. Grading will be on the Pass/Fail basis and will be based on the provided records of daily activities and final report. Prereq.: Successful completion of PHYS 680 and permission of department. This course is the continuation of PHYS 680 and can only be taken in conjunction with the latter and at the same internship site. Permission to take this course will be granted only to those students who declare their intention to take it at the time of registration for PHYS 680. Students taking this course will work three days a week during the fall semester of the 2nd year of the program. This course can be taken instead of PHYS 672. The student works under supervision of a company's representative and in coordination with an assigned faculty member. The work is carried out according to a plan approved by both faculty and an industry supervisor. Students taking this course are expected to keep records of their daily activities and present a final report approved by the company's representative.

PHYS 699. Introduction to Management of Scientific and Engineering Projects. 3 hr.; 3 cr. Prereq.: Permission of the department. In this course students become familiar with formal approaches to management of scientific, R&D, and engineering projects. They learn how to formulate clear objectives for the project, organize communication between the project's participants, formulate requirements, design implementation of the project, establish quality control, and identify and weigh risks. They will also be introduced to financial aspects of project management such as investment decision rules, fundamentals of capital budgeting, and cash flow analysis.

PHYS 701, 702. Mathematical Methods in Physics. 3 hr. plus conf.; 4 cr. each sem. Prereq.: For PHYS 701, PHYS 601; for PHYS 702, PHYS 701. Topics in complex variables; perturbation and variational methods of solution of differential equations; Green's functions; eigenfunction expansions; integral transforms; integral equations; difference equations, linear algebra; Hilbert space; tensor analysis; group theory; higher algebra; numerical methods for solving equations.

PHYS 711. Analytical Dynamics. 3 hr. plus conf.; 4 cr. Prereq.: PHYS 601 or coreq.: PHYS 701. The Lagrangian formulation including Hamilton's principle; Lagrange equations; central force motion; Kepler problems, scattering; rigid body motion; transformation matrices, Eulerian angles, inertia tensor. The Hamiltonian formulation including canonical equations; canonical transformations; Hamilton-Jacobi theory. Small oscillations. Continuous systems and fields. Relativistic dynamics. Fall

PHYS 715, 716. Electromagnetic Theory. 3 hr. plus conf.; 4 cr. each sem. Prereq.: For PHYS 715, PHYS 601 or coreq.: PHYS 701; for PHYS 716, PHYS 715. Electrostatics, magnetostatics, and boundary value problems; Maxwell's equations; multipole radiation; radiation from accelerated charges; scattering theory; special theory of relativity.

PHYS 725, 726. Quantum Mechanics. 3 hr. plus conf.; 4 cr. each sem. Prereq.: For PHYS 725, PHYS 625, 601 or 701, and 711; for PHYS 726, PHYS 725. Historical foundations. The Schrödinger formulation. Wave packets and uncertainty principle. Harmonic oscillator and potential barrier problems. W.K.B. approximation. Operators and eigenfunction. 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.

PHYS 730. Atomic Physics. 3 hr. plus conf.; 4 cr. Prereq.: PHYS 716 and 725. Spin systems, angular momentum, spectra. Atomic beam resonance, nuclear magnetic resonance (NMR), electronic paramagnetic resonance (EPR), optical pumping, scattering, lasers.

PHYS 731. X-ray Diffraction. 2 hr. plus conf.; 3 cr. Prereq.: PHYS 636 and an approved mathematics background. The theory of X-ray diffraction and its application to the study of the structure of matter. Topics to be considered will include the physics of X-rays, the geometry of crystals and of X-ray reflections, the theory of X-ray diffraction, techniques for the production and interpretation of X-ray diffraction data, and crystal structure determination.

PHYS 734. Introduction to Relativity. 3 hr. plus conf.; 4 cr. Prereq.: PHYS 711. A short exposition on the foundation of the special and general theories of relativity. Topics include foundation of special relativity; relativistic particle dynamics in flat space-time; differential geometry; the physical and mathematical foundations of Einstein's theory of gravitation; the Cauchy problem of field equations; the spherically symmetric field and its topology; the classical experimental tests; variational principle and conservation laws; equation of motion; gravitational waves; cosmology and gravitational collapse.

PHYS 735. Nuclear Physics. 3 hr. plus conf.; 4 cr. Prereq.: PHYS 725. Properties of stable nuclei; isotopes; mass formula; interactions with matter; methods of detection; nuclear moments. Alpha decay; gamma emission; level structure; nuclear models. Low-energy nucleon-nucleon scattering, the deuteron, photodisintegration, tensor and exchange forces, isotopic spin.

PHYS 736. Particle Physics. 3 hr. plus conf.; 4 cr. Prereq.: PHYS 735. Pi mesons, pion nucleon scattering, resonance. Hadron level systematics and decays, effective Hamiltonians, electromagnetic interactions and form factors, higher symmetries. Scattering at very high energies. Weak interactions, beta decay, discrete symmetries, T.C.P. Weak interactions of pions and Kaons. Coherent regeneration, conserved vector current. Leptonic decays of baryons, nonleptonic decays.

PHYS 741. Statistical Mechanics. 3 hr. plus conf.; 4 cr. Prereq.: PHYS 641, 725. Probability theory, ensembles, approach to equilibrium, quantum and classical ideal and non-ideal gases, cooperative phenomena, density matrices, averages and fluctuations, and other selected topics, such as time-temperature, Green's functions, non-zero temperature variational and perturbation methods. Spring

PHYS 745. Solid State Physics. 3 hr. plus conf.; 4 cr. Prereq.: PHYS 725. Principles of crystallography; crystal structure; lattice vibrations, band theory, and defects; study of ionic crystals, dielectrics, magnetism, and free electron theory of metals and semiconductors.

PHYS 748, 749. Theory of Relativity and Gravitation. 3 hr. plus conf.; 4 cr. each sem. Prereq.: PHYS 711 and 716. An exposition of the fundamentals of the special and general theories of relativity and their applications to cosmology. Topics include foundations of special relativity; formulation of physical theories in flat space-time; relativistic particle and continuum mechanics, electrodynamics and classical field theory, an introduction to differential geometry and topology; foundations of Einstein's theory of gravity; exact and approximate solutions; observational tests; variational principle; conservation laws; initial-value data and stability; ponderomotive equations; gravitational radiation; introduction to relativistic stars, cosmological models, gravitational collapse, and black holes; other theories of gravity.

PHYS 750, 751. Plasma Physics. 3 hr. plus conf.; 4 cr. each sem. Prereq.: PHYS 641 or 741; 711, 715, 716. The first semester will cover such topics as the motion of charged particles in electromagnetic fields via the guiding center approximation; a discussion of adiabatic invariance and particle motion in fields with spatial symmetry; the Liouville equation and the BBGKY hierarchy in the plasma limit; the Balescu-Lenard equation; the derivation of the Vlasov equation; the plasma moment equations; and plasma transport

phenomena. The second semester will deal with waves in cold, uniform plasmas; the application of the Vlasov equation to waves in warm plasmas; Landau damping; instabilities; waves in spatially non-uniform plasmas; and the description of turbulent plasmas and associated transport processes (anomalous diffusion, collisionless dissipation, etc.). The topics of both semesters will be discussed in relation to the problems of achieving controlled thermonuclear fusions and the understanding of geophysical and astrophysical plasma phenomena.

PHYS 760. Cosmology. 3 hr. plus conf.; 4 cr. Prereq.: PHYS 641, 711, and 715.

PHYS 771, 772, 773. Graduate Physics Laboratory. 3 hr.; 2 cr. each course. Prereq.: Permission of the Graduate Physics Committee. Advanced experimental work in one or more fields of physics, including the planning of experiments, the design and construction of apparatus, and the evaluation of experimental results in the fields of optics, X-rays, electronics, and atomic and nuclear physics. A student may obtain from 2 to 6 credits starting with PHYS 771. Two courses of the group may be taken concurrently.

PHYS 781. Theory of Quantum Liquids. 3 hr. plus conf.; 4 cr. Prereq.: PHYS 716 and 741. The theory of liquids covering such topics as neutral Fermi liquids; response and correlation in neutral systems; charged Fermi liquids; response and correlation in homogeneous electron systems, microscopic theory of electron liquid; second quantization, Green's functions.

PHYS 782. Cryophysics. 2 hr. plus conf.; 3 cr. Prereq.: PHYS 741. A course designed to present and to interpret the quantum effects occurring near the absolute zero of temperature. Topics to be considered include principles and methods of attaining and measuring very low temperatures, thermal and magnetic properties of matter at these temperatures, nuclear paramagnetism, superconductivity, and the phenomena and theories of liquid Helium Four and Three.

PHYS 788. Cooperative Education Placement. Prereq.: Approval by the Physics Department's master's advisor of a detailed project description. Experiential learning through a job placement developed by the Queens College Cooperative Education Program.

PHYS 788.1. 1 hr.; 1 cr.

PHYS 788.2. 2 hr.; 2 cr.

PHYS 788.3. 3 hr.; 3 cr.

PHYS 788.4. 4 hr.; 4 cr.

PHYS 788.5. 5 hr.; 5 cr.

PHYS 791. Colloquium. 1 hr.; 1 cr. Prereq.: Permission of the department. Attendance at all of the physics colloquia for one semester is required. A report, discussing the topics selected by the supervisor, must be submitted. This course may be taken in 2 different semesters for credit.

PHYS 798. Thesis. 4 hr.; 4 cr. Prereq.: 20 credits at the master's level. Preparation and oral defense of a thesis under the guidance of a faculty mentor.

PHYS 799. Graduate Research. Prereq.: Permission of the Graduate Physics Committee. A course requiring investigation in depth of a field approved by the Graduate Physics Committee. Units of this course may be repeated to a maximum of 12 credits.

PHYS 799.1. 1 hr.; 1 cr.

PHYS 799.2. 2 hr.; 2 cr.

PHYS 799.3. 3 hr.; 3 cr.

PHYS 799.4. 4 hr.; 4 cr.

PHYS 799.5. 5 hr.; 5 cr.

PHYS 799.6. 6 hr.; 6 cr.

COURSE IN ASTRONOMY

ASTR 501. Modern Aspects of Astronomy. 4 hr.; 4 cr. Prereq.: Permission of the department. A course for teachers providing an introduction to general astronomy with emphasis on the structure and evolution of the universe. Not open to candidates for the MA in Physics.

Psychology

Chair: Jeff Beeler

Director, Master of Arts in General Psychology: Patricia D'Ateno

Director, Master of Arts in Behavioral Neuroscience: Kerstin Unger

Director, Applied Behavioral Analysis Programs: Joshua Jessel

Dept. Office: Science Building E318, 997-3203; QC_Psychology@qc.cuny.edu

The Department of Psychology has three programs of study, each leading to the Master of Arts degree in psychology: General Psychology, Behavioral Neuroscience, and Applied Behavior Analysis. It also has a graduate Advanced Certificate Program in Applied Behavior Analysis. The department is home to a doctoral program in Clinical Psychology and participates in the CUNY Neuroscience Collaborative doctoral program in neuroscience. For more information, visit http://psychology.qc.cuny.edu/graduate/.

FACULTY

Beeler, Jeff, Chair, *Professor,* PhD 2003, University of Chicago: neurophysiological and behavioral analysis of the roles of dopamine and the basal ganglia in learning, motivation, and energy management, emphasis on Parkinson's disease, obesity, addiction

Ackerman, Tsippa, *Lecturer,* PhD 2007, City University of New York: growth factors and neurodegeneration

Alvero, Alicia M., *Professor,* PhD 2003, Western Michigan University: organizational behavior management, leadership development, performance feedback, training

Barahmand, Usha, *Lecturer,* PhD 2003, Allameh Tabataba'i University: obsessive compulsive disorders

Bodnar, Richard J., *Professor,* PhD 1976, City University of New York: physiological, pharmacological, neurochemical, neuroanatomical, and behavioral mechanisms of pain inhibition and ingestive behavior

Brumbaugh, Claudia, *Associate Professor,* PhD 2007, University of Illinois: social attachment

Brumberg, Joshua C., *Professor,* PhD 1997, University of Pittsburgh: neurophysiological analysis of rat somatosensory system and barrel receptors

Byrd, Desiree, *Associate Professor*, PhD 2001, San Diego State University/UCSD Joint Program: neuropsychology, aging

D'Ateno, Patricia, *Lecturer*, PhD 2008, City University of New York: experimental analysis of behavior, human time perception, applied behavior analysis, developmental disabilities

Fan, Jin, *Professor,* PhD 2000, New York University: cognitive neuroscience, developmental cognitive neuroscience

Foldi, Nancy, *Professor,* PhD 1983, Clark University: Alzheimer's disease, attention, neuropsychology, geriatric diseases

Hinton, Veronica, *Associate Professor*, PhD 1994, City University of New York: developmental neuropsychology

Jessel, Joshua, *Assistant Professor,* PhD 2015, Western New England University: applied behavior analysis, intellectual and developmental disabilities

Johnson, Ray E., Jr., *Professor,* PhD 1979, University of Illinois: electrophysiological measures of normal and abnormal cognitive brain function, short- and long-term memory, event-related brain potentials, psychophysiology

Jones, Emily A., *Associate Professor,* PhD 2002, State University of New York, Stony Brook: applied behavior analysis, autism, Down syndrome, siblings

Mangiapanello, Kathleen, *Lecturer,* PhD 2010, City University of New York: performance feedback, human time perception, behavior analysis, developmental disabilities

Nikulina, Valentina, *Assistant Professor,* PhD 2009, St. John's University: developmental outcomes of childhood maltreatment and poverty

Nomura, Yoko, *Professor,* PhD 1999, Columbia University: child development, critical period for the CNS development, developmental psychopathology

Pagano, Concettina, *Lecturer*, PhD 1998, City University of New York: behavior analysis, child learning, fitness and exercise

Pytte, Carolyn, *Associate Professor,* PhD 2000, Indiana University: bird-song learning, neurogenesis

Ranaldi, Robert, *Associate Professor,* PhD 1994, Queens University, Kingston, Canada: neurobiology of learning, motivation, and addiction

Sneed, Joel R., *Associate Professor,* PhD 2002, University of Massachusetts: vascular depression, psychometrics

Storbeck, Justin, *Assistant Professor,* PhD 2007, University of Virginia: the emotional influence on perception, learning, and memory, affective neuroscience

Sturmey, Peter, *Professor,* PhD 1983, University of Liverpool, UK: developmental disabilities, autism, mental retardation, behavior analysis

Unger, Kerstin, *Assistant Professor*, PhD 2013, Saarland University, Saarbrucken, Germany: developmental cognitive neuroscience, development of attention and memory

PROGRAMS LEADING TO THE MASTER OF ARTS DEGREE IN PSYCHOLOGY

Either full-time or part-time attendance is possible. Students may be admitted in the Fall or Spring for General Psychology. Applications for the Behavioral Neuroscience and Applied Behavior Analysis programs are accepted in the Spring only, for matriculation in the Fall.

Requirements for Matriculation

These requirements are in addition to the general requirements for admission.

1. Fifteen credits in undergraduate psychology courses, which should include an undergraduate laboratory course in experimental psychology and a course in psychological statistical methods or their equivalents. A student who has not had at least a one- semester laboratory course in experimental psychology and a one-semester course in statistical methods or their equivalents, but whose record of achievement is otherwise high, will be asked to make up the deficiency through taking a comparable course without credit in an undergraduate college. For Applied Behavior Analysis, one undergraduate class broadly related to ABA (learning, behavioral modification, developmental disabilities, or behavior analysis) is required.
2. A minimum grade average index of *B* (3.0) in undergraduate courses.
3. A minimum grade average index of *B* (3.0) or the equivalent in the undergraduate field of concentration or, with permission of the department, in related fields.
4. Three letters of recommendation, at least two of which should be from instructors who are in a position to attest to the applicant's capacity to complete successfully a program of graduate studies. In some cases a personal interview with the Graduate Advisor or with some other members of the department may be required.
5. For Behavioral Neuroscience, the general Graduate Record Examination is required. Applicants should apply directly to the Educational Testing Service, Princeton, New Jersey 08541, or Box 27896, Los Angeles, California 90027, for full information and arrangements to take the test. Students are advised to take the Graduate Record Examination no later than February for September admission. No final consideration may be given to any application unless the Admissions Office receives the results of the examination by the date applications are due.
6. Applicants whose first language was not English and who were educated in a country where English is not the official language must present a minimum score of 100 (online version) on the Test of English as a Foreign Language (TOEFL) to be eligible for admission to the MA programs in Psychology.

Note that possession of the requirements listed above does not automatically insure admission to the programs. Each record, including grades, letters of recommendation, Graduate Record Examination scores, and information from present and former instructors, research mentors, and/or employers, will be carefully examined by a Graduate Committee on Admissions. Departmental interviews may be required prior to a decision.

Specific requirements may be waived by the Graduate Committee on Admissions for students of special promise.

Requirements for the Master of Arts Degree

These requirements are in addition to general requirements for the Master of Arts degree.

GENERAL PSYCHOLOGY PROGRAM

(30 credits plus thesis or 36 credits without thesis)
This program is intended for students who:

- want to explore their interests further or expand their backgrounds in psychology;
- want to learn more about the area of mental health (but without seeking the field placements and special coursework offered in the Clinical Behavioral Applications program); and/or
- see themselves en route to doctoral study, with the goal of pursuing a career as independent researchers, particularly in the areas of neuropsychology, learning processes, or experimental psychology.

Degree Requirements for the Master's in General Psychology

1. A 3.0 GPA over all courses.
2. Ten semester courses in psychology (30 credits), which must be distributed as follows:
   a) History (PSYCH 700)
   b) Advanced Experimental Psychology I (PSYCH 701) or Design of Psychological Research (PSYCH 703.1 with permission only)
   c) Statistical Methods I (PSYCH 705)
   d) At least one course from topic areas in **Group A** and at least one course from topic areas in **Group B**.
   e) The remaining credits may include courses listed below or any additional graduate-level course offered by the Psychology Department not listed below, subject to approval by the MA advisor.

Group A	**Courses**
1. Cognition	PSYCH 738
2. Learning	PSYCH 730, 730.07, 731, 732, 737.03
3. Motivation	PSYCH 745
4. Perception	PSYCH 735
5. Behavioral Neuroscience	PSYCH 708.04, 710, 711

Group B	**Courses**
6. Behavioral Science and Business	PSYCH 754
7. Developmental	PSYCH 720, 720.1, 720.04
8. Developmental Disabilities	PSYCH 720.01, 720.02, 720.03, 720.05
9. Personality	PSYCH 740, 741, 743
10. Psychometrics	PSYCH 760
11. Psychopathology	PSYCH 755
12. Clinical Psychopharmacology	PSYCH 756

3. Students may complete the program in 30 or 36 credits, as follows:
   a) Students who elect to complete the program in 30 credits must take and pass a comprehensive examination and submit an approved thesis, which may be either a literature review or an empirical investigation.
   b) Students whose grade-point average is 3.7 or better may elect to complete the program in 30 credits and do an empirical thesis. The comprehensive examination will be waived.
   c) Students who elect to complete the program in 36 credits are required to take and pass a comprehensive examination.

BEHAVIORAL NEUROSCIENCE PROGRAM

(32 credits plus thesis)

The purpose of this program is to allow promising master's graduate students to engage in intensive, research-based study within the field of Behavioral Neuroscience. The goals of the program are as follows:

- To provide graduates of the program with rigorous training and research experience to increase their competitiveness for admission to doctoral programs in neuroscience and related fields.
- To prepare graduates of the program for competitive employment in the private sector as research associates and technicians.
- To facilitate the development and pursuit of non-traditional careers that involve neuroscience knowledge and research experience.

Degree Requirements for the Master's in Behavioral Neuroscience (MABN)

1. A 3.0 GPA over all courses
2. 32 credits plus thesis, distributed as follows:

Required Behavioral Neuroscience Courses (23 credits)

	credits
PSYCH 709.1. Basic Neuroscience: Molecular Neuroscience	3
PSYCH 709.2. Basic Neuroscience: Systems Neuroscience	3
PSYCH 709.3. Basic Neuroscience: Cognitive Neuroscience	3
PSYCH 709.4. Basic Neuroscience: Behavioral Neuroscience	3
PSYCH 704.1. Neuroscience Methods I: Statistics and Research Design	3
PSYCH 704.2. Neuroscience Methods II: Quantitative Tools in Neuroscience	3
PSYCH 772.1. Ethics	1
PSYCH 772.2. Colloquium (may be repeated for credit; maximum 2 cr. hr.)	1
PSYCH 772.3. Thesis Seminar	2

Behavioral Neuroscience Elective Courses (choose 9 credits from the list below):

	credits
PSYCH 735. Psychology of Perception	3
PSYCH 738. Cognition	3
PSYCH 755. Psychopathology	3
PSYCH 760. Psychometric Methods	3
PSYCH 791. Seminar in Selected Topics in Psychology (not to include research credit)	3
PSYCH 817. Survey of Clinical Neuropsychology (Taken as PSYCH 791 for MA students)	3
BIOL 700. Genetics	4
BIOL 710. Molecular Biology	5
BIOL 714. Cell Biology	4

In addition, other electives, if preapproved by the director of the MA program, to allow students to (*a*) take nontraditional neuroscience paths (e.g., computer science/computational modeling) and/or (*b*) enroll in graduate seminars that arise ad hoc (e.g., course on neural substrates of language processing).

Behavioral Neuroscience Research Thesis Guidelines:

In addition to the course requirements above, all students are required to:

1) submit a research thesis
2) give an oral defense of this thesis, and
3) receive a "satisfactory" grade on all the above.

The student and research mentor must identify and recruit two faculty readers in addition to the research mentor to form a thesis committee. The MABN Program Director must approve the committee. To ensure that the thesis and oral defense merit a satisfactory grade, students are strongly encouraged to obtain feedback from their thesis committee during all stages of preparing their thesis.

Research Mentor

The research mentor is typically a full-time faculty member at Queens College who has agreed to oversee the thesis research and who has been approved by the MABN Program Director. Outside mentors may be allowed with the approval of the program director, but require a Queens College faculty member as a co-mentor.

Research Thesis

The thesis itself should thoroughly but concisely summarize the research project, and should make an effort to contribute to the area(s) of research of the mentor's laboratory. It should include all the sections found in a standard neuroscience manuscript submitted to peer-reviewed journals (for example, the journal to which the work is being submitted, where applicable). Although publication of the work is not required, a document of quality that is acceptable for submission to a peer-reviewed journal is strongly encouraged. If the work is published, the student should be listed as one of the co-authors (if not the primary author), and the published manuscript itself can be submitted to fulfill the written thesis requirement, but an oral defense still is required. The thesis committee should be formed no later than

eight weeks before the end of the semester in which the student plans to defend. The defense must be scheduled two weeks prior to the last teaching day of the semester in order to allow time for the student to make requested revisions from the committee. The final thesis and committee approval form should be submitted to the MABN Program Director no later than one week prior to the degree conferral date in order for the completed thesis to be processed and applied to transcripts for graduation.

Oral Presentation of Thesis
Additionally, the student must schedule an oral presentation of the thesis to the research mentor and the assigned readers before the end of the semester in which the student plans to graduate. The presentation should be approximately 20-30 minutes in length, and should summarize the work in the thesis using a PowerPoint presentation. If the student wishes, this can be a public presentation with other faculty, students and significant others attending.

MASTER'S IN APPLIED BEHAVIOR ANALYSIS
(36 credits)

The goals of the Master's Program in Applied Behavior Analysis are to provide students with training:

- to work in a variety of fields with a variety of populations in need of behaviorally based interventions.
- that meets the educational competence requirements necessary to pursue professional certification (through the Behavior Analyst Certification Board) and state licensure as a behavior analyst.
- that helps students contribute to and advance the field through conduct and participation in research as well as presentations.
- that supports the possibility of continuing their education at the doctoral level.

Degree Requirements for the Master's in Applied Behavior Analysis
36 credits distributed as follows:

Required courses (27 credits)	*credits*
PSYCH 705. Statistics	3
PSYCH 720.05 Autism *or* PSYCH 791.3 Special Topics: Autism Treatment	3
PSYCH 730. Psychology of Learning	3
PSYCH 730.01. Theory and Method in Applied Behavior Analysis I	3
PSYCH 730.02. Theory and Method in Applied Behavior Analysis II	3
PSYCH 730.05. Applied Behavior Analysis: Measurement and Applied Project I	3
PSYCH 730.06. Applied Behavior Analysis: Measurement and Applied Project II	3
PSYCH 771.03. Ethical Issues in Psychology	3
PSYCH 791.3. Special Topics: Record Keeping	3
PSYCH 795.00. Fieldwork Project in Applied Behavior Analysis	3

Comprehensive Exams and 9 Credits of Elective Courses
Students must pass the Applied Behavior Analysis comprehensive exam and complete 9 credits of elective courses. The majority of elective courses must be Applied Behavior Analysis courses, and up to 6 credits of the 9 total can come from non-Applied Behavior Analysis courses.

The Applied Behavior Analysis comprehensive exam is a four-hour exam that examines one's responses to applied behavior analysis questions in an essay format. The questions come from the Behavior Analysis Certification Board's task list. The exam includes five questions; a passing score is an average score of 2.0 or greater, with a score of 1.3 or greater on each question (all scored on a 0- to 3-point scale by at least two faculty members). Students are allowed to take comprehensive exams a maximum of two times. If the exam is taken a second time, the second administration must be within one year of the first attempt. The student will be withdrawn from the program if they are unable to pass the exam on the second attempt.

Qualifying students may have the option to complete a thesis to substitute for a portion of the elective courses.

1) 3 credits of electives and 6 credits of independent thesis work with a faculty mentor. The 6-credit thesis must receive approval by a committee of two faculty members (faculty mentor and reader) prior to beginning research and must be defended upon completion to the same committee.

2) 6 credits of electives and 3 credits of thesis work with a faculty mentor that is an elaboration of 730.05–730.06 practicum courses with a faculty advisor and 6 credits of elective courses.

A Master's Thesis is a written document describing a research study conducted by a student. All thesis research must be approved by the IRB prior to data collection.

Qualifications for completing a thesis: high GPA (3.5 or higher), active engagement in research prior to thesis (e.g., attendance at lab meetings), formal research relationship with ABA mentor, ABA mentor agrees to supervise thesis, completion of 730.05 and 730.06 prior to planning a thesis.

Applied Behavior Analysis Elective Courses	*credits*
PSYCH 720.01. Developmental Disabilities I	3
PSYCH 720.02. Developmental Disabilities II, Functional Assessment	3
PSYCH 720.03. Behavioral Intervention in Developmental Disabilities	3
PSYCH 720.04. Behavioral Analysis of Child Development	3
PSYCH 730.04. Supervised Practicum in Applied Behavior Analysis	3
PSYCH 730.07. Theories of Association	3
PSYCH 731.00. Stimulus Control of Behavior	4
PSYCH 732.00. Motivation and Reinforcement	4
PSYCH 780. Quantitative Methods in Psychology	3
PSYCH 791.3/754.00. Behavioral Science and Business	3

Other Elective Courses (maximum of 6 credits allowed from this list):

PSYCH 700.00. History of Psychology	3
PSYCH 703.1. Design of Psychological Research	3
PSYCH 708.1. Basic Neuroscience: Neuroanatomy	3
PSYCH 708.4. Behavioral Neuroscience	3
PSYCH 720. Developmental Psychology	3
PSYCH 746. Social Psychology	3
PSYCH 755. Psychopathology I	3
PSYCH 760. Psychometric Methods	3
PSYCH 791/757.00. Organizational Diagnosis and Intervention	3
PSYCH 791.3. Special Topics	3

Appeals Process

Students who disagree with the outcomes of the Applied Behavior Analysis comprehensive exams may appeal such a decision. Appeals will only be granted following a second failed comprehensive exam, as this outcome is grounds for dismissal from the program.

Students who disagree with an unsatisfactory thesis judgment may appeal such a decision. Appeals will only be granted for decisions following the completion and defense of thesis research.

For all appeals, a student must write a letter to the Applied Behavior Analysis (ABA) committee, which governs both the ABA Master's and Certificate programs. Each letter received will be examined and discussed by the ABA committee. Additionally, the ABA committee will examine the student's academic record at Queens College. After considering the evidence, the ABA committee will vote on whether to uphold the decision or grant the appeal.

In all cases, students developing an appeal letter should consider what to say in the letter and what evidence to provide to justify one's appeal. The letter should include any and all relevant information regarding reasons why an appeal should be granted (including medical documentation, if relevant).

If an appeal is granted, the ABA committee will provide this ruling in writing and specify the contingencies under which the requirement must be completed.

Any other academic appeals relevant to disputing grades, dismissal from the program on academic grounds, and/or removal from the program on student disciplinary grounds are governed by the Queens College *Graduate Bulletin*, and should be exercised through the mechanisms described in the *Bulletin.*

Requirements for Continuance in the Psychology MA Programs

All students enrolled in any of the Master's programs who, after taking 12 graduate credits, have not achieved an academic index of 3.0, will be placed on probation or dropped from the Master's program in Psychology.

Non-Matriculated Studies

Certain graduate courses are open to qualified professionals and career specialists in psychology or other fields. These courses may fulfill a particular need for skill acquisition or credential maintenance for teachers, social workers, et al. Students who believe that a course or course sequence is relevant should contact the Head of the Master of Arts program regarding suitability for enrollment. *Applicants for non-matriculated status must receive approval of the Head of the MA program on their applications before submitting them to the Graduate Admissions Office.* A lifetime cumulative total of no more than 12 credits may be taken on a non-matriculated basis.

ADVANCED CERTIFICATE PROGRAM IN APPLIED BEHAVIOR ANALYSIS

The goal of the Advanced Certificate in Applied Behavior Analysis is to prepare people to design, deliver, and evaluate individualized behavioral intervention. The aim of the certificate program is to provide practitioners with high-quality academic training in applied behavior analysis. To that end, faculty carefully integrate the practicum coursework experience with didactic coursework to provide a meaningful repertoire of behavior analysis skills and to help prepare professionals for the National Board Certified Behavior Analyst (BCBA) Examination.

The certificate program is not a Master's program, and thus, a graduate degree is not awarded upon completion of the coursework. The program is designed to fulfill the coursework requirements necessary to sit for the BCBA national exam (www.bacb.com), it does NOT fulfill the experience supervision requirements for the BCBA. You *do not* receive your BCBA upon completion of our program—you will have simply met the coursework requirements necessary to sit for the exam. Students (on their own) must research the requirements for the practice component of the BCBA.

Requirements for Matriculation and Continuation in the Program

Applicants for admission must possess a BA or BS degree (but are strongly encouraged to have a Master's degree) with an earned grade-point average of at least 3.0 (*B*). Maintenance of a GPA of at least 3.0 through the entire program is required. Additionally, applicants will be required to have some background in psychology (i.e.., courses in learning, advanced experimental psychology, developmental disabilities, behavior analysis, etc.). Background in special education and/or field-based experience in behavior analysis are an added strength. The GRE is NOT required, but students for whom English is not a native language must show a score of 600 or higher on the TOEFL.

Transfer credits from other programs will not be applied to the completion of this program.

Curriculum of the Program

The curriculum for the 18-credit Advanced Certificate Program in Applied Behavior Analysis will include the following classes:

PSYCH 730.01.	Theory and Method in Applied Behavior Analysis I	3 cr.

PSYCH 730.05.	Applied Behavior Analysis: Measurement and Applied Project I	3 cr.
PSYCH 771.3.	Ethical Issues in Psychology	3 cr.
PSYCH 730.02.	Theory and Method in Applied Behavior Analysis II	3 cr.
PSYCH 730.06.	Applied Behavior Analysis: Measurement & Applied Project II	3 cr.
PSYCH 720.05	Autism *or* PSYCH 791.3 Special Topics: Autism Treatment	3 cr.

COURSES IN PSYCHOLOGY*

The general prerequisites for courses in the 700 category are matriculation for the Master of Arts in Psychology (or matriculation for the MS in Education with a major in School Psychology for PSYCH 720, 730, 735, 740, and 760), or permission of the department.

PSYCH 700. History of Psychology. 2 lec. hr. plus conf.; 3 cr. Prereq.: At least 15 undergraduate credits in psychology, including Psychological Statistics and a laboratory course in Experimental Psychology. Modern psychological problems are seen in historical perspective. Topics include the mind-body problem, motivation and empiricism, hedonism and reinforcement, hypnotism and spiritualism, psychophysiology and psychopathology. The nineteenth- and twentieth-century schools of psychology—structuralism, functionalism, Gestalt, psychoanalysis, and behaviorism—are reviewed, as are the contributions of philosophers and physical, biological, and social scientists.

PSYCH 701. Advanced Experimental Psychology I. 2 lec., 4 lab. hr.; 4 cr. Prereq.: Undergraduate courses in: a) Experimental Psychology with laboratory, and b) Psychological Statistics. A detailed examination and analysis of the ways in which experimental inquiry approaches psychological questions. The problems and paradigms typical of the various areas of the field are studied, and experiments from the literature scrutinized. Particular attention is paid to potential sources of error and problems of control in different kinds of experiments and to the use of experimental design to minimize error. MA students will undertake an original research study to fulfill the laboratory requirement.

PSYCH 703.1. Design of Psychological Research. 2 lec. hr. plus conf.; 3 cr. An intensive examination of experimental research methodology. Prior approval of the research project by both the faculty advisor and the MA advisor is required before registering. Individual research projects.

The neuroscience methods and design series, PSYCH 704.1–704.2, is designed to provide a conceptual overview as to how neuroscience research is conducted— from design to analysis. The overarching emphasis in this series is to provide students with the tools to design and quantitatively evaluate research properly as well as critically evaluate research by others.

PSYCH 704.1 Neuroscience Methods I: Statistics and Research Design. 3 lec. hr.; 3 cr. Prereq.: Permission of the instructor. This course focuses on principles of designing rigorous experiments and basic statistical tools used to test and support inferences and conclusions drawn from data.

PSYCH 704.2 Neuroscience Methods I: Quantitative Tools in Neuroscience. 3 lec hr.; 3 cr. Prereq.: PSYCH 704.1. Building on the methods and design principles in PSYCH 704.1, this course will provide a survey of quantitative tools in neuroscience research. Statistical methods will be reviewed with a focus on their appropriateness and rigor in the context of common neuroscience designs, addressing questions of power, robustness, and repeatability. A critical perspective will be emphasized, identifying current challenges and critiques of statistical methods in the neuroscience field. Students will learn *R* as a tool for analysis and data visualization.

PSYCH 705. Statistical Methods in Psychology I. 2 lec., 2 conf. or lab. hr.; 3 cr. Prereq.: An undergraduate course in statistical methods. Descriptive and inferential statistics, including t-tests, correlation, chi square, tests of normality, and distribution-free procedures. Other topics include independent groups, repeated measures and factorial ANOVA, multiple comparisons, multiple regression and ANCOVA.

PSYCH 706. Statistical Methods in Psychology II. 2 lec., 2 conf. or lab. hr.; 3 cr. Prereq.: PSYCH 705. Multivariate methods including MANOVA, factor analysis, canonical correlations, discriminant functions analysis, and related topics.

PSYCH 709.1. Basic Neuroscience: Molecular and Cellular Neuroscience. 3 lec. hr.; 3 cr. Prereq.: Permission of the instructor. This course is designed to provide basic knowledge of neural function at a molecular and cellular level, encompassing neurophysiology and neurochemistry. Key concepts include electrical properties of neurons, propagation of action potentials, synaptic transmission, molecular signaling pathways, and major neurotransmitter systems. The course centers on identifying molecular mechanisms underlying neural processing.

PSYCH 709.2. Basic Neuroscience: Systems Neuroscience. 3 lec. hr.; 3 cr. Prereq.: Permission of the instructor. This course focuses on neuroanatomy, circuits, and functional systems within the brain. The course will provide basic knowledge of brain regions and pathways (i.e., essential neuroanatomy) together with how these anatomical regions/pathways form circuits and systems to mediate critical organismal functions. Emphasis in functional systems will be placed on motor, sensory, and homeostatic systems.

* MAT charges are possible.

PSYCH 709.3. Basic Neuroscience: Cognitive Neuroscience. 3 lec. hr.; 3 cr. Prereq.: PSYCH 709.1, 709.2. May be taken concurrently. This course is designed to provide students with an overview of cognitive neuroscience, with an emphasis on human studies. It covers such topics as cognitive control, attention, and executive function as well as affective and social processing, including relevant neuropsychiatric disorders associated with these cognitive functions such as ADHD, schizophrenia, autism, and others. Relevant neuroscience methods—including imaging, EEG, and TMS—are covered.

PSYCH 709.4. Basic Neuroscience: Behavioral Neuroscience. 3 lec. hr.; 3 cr. Prereq.: PSYCH 709.1, 709.2. May be taken concurrently. This course is designed to provide students with an overview of behavioral neuroscience, with an emphasis on animal models. It covers such topics as reward, reinforcement learning, memory, associative processes, appetitive regulation, habit, emotional regulation, motor learning, and spatial navigation.

PSYCH 711.03. Cognitive and Affective Aspects of Behavior. 3 hr.; 3 cr. Prereq. or coreq.: A basic course on cognition. Foundational course on cognitive and affective aspects of behavior. Covers current issues in cognitive psychology, focusing on topics of perception, attention, memory, language, and problem solving. Additionally covers the connection between cognition and emotion, including the cognitive regulation of emotion, the structure and theories of emotion, emotion regulating cognition, and emotion regulation.

PSYCH 720. Developmental Psychology I. 2 lec. hr. plus conf.; 3 cr. Prereq.: One graduate or undergraduate course in developmental or child psychology (or its equivalent). An introduction to the major concepts, principles, theories, and methods of developmental and child psychology (e.g., critical periods, nature-nurture issue, relation of phylogeny to ontogeny).

PSYCH 720.01. Developmental Disabilities I. 2 hr. plus conf.; 3 cr. Prereq.: Permission of the instructor and a course in developmental psychology. This course is an overview of the field of mental retardation and developmental disabilities. The content includes readings, lecture, and discussion on the history of the field, the concepts of intelligence and adaptive behavior, classification systems, litigation on behalf of people with developmental disabilities, etiology, service-delivery systems, the special case of autism, a review of early intervention programs and research, language programming, and a review of attention, memory, and cognition. Readings will be included on behavioral assessment and intervention strategies for people with developmental disabilities.

PSYCH 720.02. Developmental Disabilities II: Functional Assessment. 3 hr.; 3 cr. Prereq.: PSYCH 730, 730.01 or permission of the instructor. This course will provide students with an overview of how to conduct a functional behavioral assessment for individuals with developmental disabilities. The course curriculum includes a) learning about a variety of data collection procedures toward identifying behavioral functions, and b) conducting a case study where a student conducts a functional behavioral assessment.

PSYCH 720.03. Behavioral Intervention in Developmental Disabilities. 2 hr. plus conf.; 3 cr. Prereq.: A course in Applied Behavior Analysis (PSYCH 730.01 or 730.02) or the equivalent and a course in Developmental Disabilities (PSYCH 720.01 or 720.02), or permission of the instructor. This course is an overview of behavioral intervention procedures in the field of mental retardation and developmental disabilities. The content includes readings, lecture, and discussion on the context of intervention, the concepts of behavioral assessment and intervention in the field of developmental disabilities, staff training issues, and an in-depth review of many of the research-based behavioral intervention procedures used to train appropriate repertoires in people with developmental disabilities.

PSYCH 720.04. Behavior Analysis of Child Development. 3 hr.; 3 cr. A critical review of basic concepts in child psychology from the point of view of the field of behavior analysis. Content includes readings, lecture, and discussion concerning: a) the criteria for evaluating scientific theories; b) the concept of behavior in developmental psychology; and c) the behavior analytic view of development.

PSYCH 720.05. Autism. 3 hr.; 3 cr. This course will provide students with an overview of issues concerning individuals with Autism Spectrum Disorders (ASD) and related disorders. The course will focus on characteristics of ASD, family issues, and empirically supported treatments. Students are encouraged to analyze extant research and to propose new solutions to problems in this area.

PSYCH 730. Psychology of Learning. 2 lec. hr. plus conf.; 3 cr. Prereq.: Experimental Psychology and Statistical Methods in Psychology I. An examination of representative investigations and theories of learning.

‡PSYCH 730.01. Theory and Method in Applied Behavior Analysis I. (Formerly PSYCH 770.1.) 3 hr.; 3 cr. Prereq.: Undergraduate courses in statistics and research design (experimental psychology with laboratory) and permission of the Executive Committee of the MA Program (permission should be requested three months prior to registration for this course); coreq.: PSYCH 730.05. Introduction to basic theory and methodology in the field of applied behavior analysis, including: (1) the technical language; (2) operational definition; (3) assessment of reliability and generality; (4) data analysis; (5) research design. Students will conduct supervised laboratory and fieldwork as part of the requirements.

---

‡Course is open to all matriculated students enrolled in either the Clinical Behavioral Applications in Mental Health Settings MA Program or the CUNY Learning Processes PhD Sub-Program. Enrollment is limited. All other students must obtain special permission from the Head of the MA Program.

‡PSYCH 730.02. Theory and Method in Applied Behavior Analysis II. (Formerly PSYCH 771.1.) 3 hr.; 3 cr. Prereq.: PSYCH 730.01 (formerly PSYCH 770.1) and permission of the Executive Committee of the MA Program (permission should be requested three months prior to registration for this course); coreq.: PSYCH 730.06. An advanced course in theory, methodology, and professional issues in the field of applied behavior analysis, focusing on contemporary issues in behavioral assessment strategies, single case research design, data evaluation, program development, and learning processes, and providing the student with the following skills: (1) competence in critically analyzing behavioral analytic research articles; (2) writing applied research proposals; (3) carrying out applied behavioral research in the field; (4) writing applied research/treatment reports for dissemination in professional journals and at professional conferences.

PSYCH 730. 04. Supervised Practicum in Applied Behavior Analysis. 3 hr.; 3 cr. (8–12 fieldwork hours per week plus 2 hours supervision with Queens College faculty). Prereq.: PSYCH 730.01 (formerly PSYCH 770.1) and PSYCH 730.02 (formerly PSYCH 771.1) or comparable background. Students must receive prior consent of instructor, which will be based on a personal interview. Students must also sign an acknowledgement of fieldwork regulations. This course is designed as a supervised field experience in agencies and institutional settings where behavior modification is in practice. Structured experiences include behavior assessment, as well as the development, administration, and evaluation of behavior modification programs for individuals and groups. Students will be required to purchase a malpractice insurance policy at a small fee.

Fieldwork Regulations

At any time, either the student or the fieldwork supervisor may initiate a request for termination. Students who are thought to lack certain of the personal qualifications needed in patient/client relationships may be required to discontinue the fieldwork. Appeals from the decision of the fieldwork supervisor will be considered.

PSYCH 730.05. Applied Behavior Analysis: Measurement and Applied Project I. 3 hr.; 3 cr. Coreq.: PSYCH 730.01 and permission of the Executive Committee of the Psychology MA Program. Introduction to field applications of basic theory and methodology of applied behavior analysis, including: (1) the technical language; (2) operational definition; (3) assessment of reliability and generality; (4) data analysis; (5) research design in natural settings. Students will attend their project site in order to plan an applied behavior change project. Group supervision will be provided in the weekly meetings on campus.

PSYCH 730.06. Applied Behavior Analysis: Measurement and Applied Project II. 3 hr.; 3 cr. Coreq.: 730.02 and permission of the Executive Committee of the Psychology MA Program. An advanced project in the application of theory, methodology, and professional issues in the field of applied behavior, focusing on contemporary issues in behavior assessment strategies, single case design, data evaluation, program development, and learning processes, and carrying out applied behavior research in the field. Students will attend their project site in order to carry out an applied behavior change project. Group supervision will be provided in the weekly meetings on campus.

PSYCH 730.07. Theories of Association. 3 hr.; 3 cr. Prereq.: PSYCH 730. This course examines the recent history of learning from an association perspective, including the major molar learning theorists (Thorndike, Pavlov, Hull, Tolman, Guthrie, Skinner) and extending to current theories of association as represented in competition and comparator models of conditioning.

PSYCH 731. Stimulus Control of Behavior. 2 lec., 4 lab. hr.; 4 cr. Prereq.: A graduate course in basic learning processes, such as PSYCH 730. Emphasis is on the acquisition and maintenance of discriminative behavior. Topics include discrimination training, generalization, perception, signal detection, and psychophysics.

PSYCH 732. Motivation and Reinforcement. 2 lec., 4 lab. hr.; 4 cr. Prereq.: A graduate course in basic learning processes, such as PSYCH 730 or equivalent. The role of motivation in behavior theory, and the experimental manipulation of reinforcement variables as these interact with motivational variables. Topics include response strength, contingency, motivation and establishing operations, schedules of reinforcement, choice, and conditioned reinforcement.

PSYCH 735. Psychology of Perception. 2 lec. hr. plus conf.; 3 cr. Prereq.: An undergraduate or graduate course in experimental psychology. The phenomenology, psychophysics, and psychophysiology of perception are discussed. Topics may include perceptual organization and development, illusions, constancies, and the Ames demonstrations. Heredity and environment interactions are considered in relation to perceptual theories (Gestalt, transactionism, etc.).

PSYCH 738. Cognition. 3 hr.; 3 cr. This course focuses on the study of cognition in humans. Among the topics covered are attention, recognition of patterns (such as speech and visual forms), imagery, storage and retrieval of information from short-term and long-term memory, and the organization of thought and language. A central theme of the course is a focus on structure and organization in these various cognitive processes.

PSYCH 740. Personality. 2 lec. hr. plus conf.; 3 cr. Survey of contemporary research topics in personality psychology.

PSYCH 746. Social Psychology. 2 lec. hr. plus conf.; 3 cr. Prereq.: An undergraduate or graduate course in experimental psychology. Among the topics to be covered are: (1) foundations of modern social psychology; (2) physiological process and social man; (3) social interaction and social process; (4) the nature and characteristics of

social groupings; (5) types of social groupings; (6) the relations between groups; (7) social change and stability.

PSYCH 754. Behavioral Science and Business. 2 lec. hr. plus conf.; 3 cr. The behavioral science principles that can be applied to employee-employer relationships are considered. Basic problems such as personnel promotion, motivation, training, measurement of job satisfaction, increasing worker efficiency, and merit ratings are reviewed from the standpoint of the psychologist in industry.

PSYCH 755. Psychopathology. 2 lec. hr. plus conf.; 3 cr. Prereq.: a) Introductory psychology and b) personality theory or psychopathology, or permission of the instructor. Identification, diagnosis, assessment, and treatment of psychopathological conditions. Several models of psychopathology are considered, including psychological (cognitive, behavioral, and psychoanalytic), medical, sociocultural, and mixed models. The study of anxiety and anxiety disorders is emphasized. The other syndromes considered are somatoform, dissociative, psychophysiological, and personality disorders.

PSYCH 756. Clinical Psychopharmacology. 3 lec. hr., 3 cr. Prereq.: Permission of the instructor. This course covers psychopharmacology, including basic principles of pharmacology and neurochemistry. Geared toward doctoral-level clinical students, the emphasis is on examining neuropsychiatric disorders and the drugs used to treat them from a practice perspective.

PSYCH 760. Psychometric Methods. 2 lec. hr. plus conf.; 3 cr. Prereq. or Coreq.: PSYCH 705 or permission of MA Advisor. A general introduction to psychometric methods which focuses on administration, standardization, norms, reliability, validity, and test construction. Lectures cover the history of intelligence testing and the development of techniques for assessing personality and psychiatric disorders, as well as basic issues related to intelligence testing and an introduction to the Wechsler intelligence scales.

PSYCH 771.1, 771.2, 771.3. Ethical Issues in Psychology. 1 hr.; 1 cr., 2 hr.; 2 cr., 3 hr.; 3 cr. This course examines ethical and legal standards that apply to psychologists and others involved in the application of psychological principles. Emphasis will be placed on ethical standards recognized by and for professionals and on laws concerning professional practice.

PSYCH 772.1. Ethics: Neuroscience. 1 lec. hr.; 1 cr. Prereq.: Must be MABN student or have permission of the instructor. This course covers basic ethical questions relevant to neuroscience, including topics of human subjects, animal welfare, data manipulation, authorship, intellectual property rights/ownership, collaboration, and public dissemination of information.

PSYCH 772.2. Neuroscience Colloquia. 1 hr.; 1 cr. Prereq.: None. This course consists of weekly seminars, primarily consisting of scientific talks from both outside speakers and college faculty. In addition, some seminars will be devoted to professional development and student presentations. May be taken two times for credit.

PSYCH 772.3. Thesis Seminar: Neuroscience. 2 hr.; 2 cr. Prereq.: Permission of the instructor. This course is designed for students who have had at least two semesters of research (may be in second semester) and who have sufficient data to begin writing their MA thesis. In this workshop-format course, students will write, share, and critique each other's thesis drafts with the goal of having a completed thesis by the end of the course. The course will also help students prepare applications for doctoral programs, including crafting personal statements and developing their curriculum vitae.

PSYCH 791. Seminar in Selected Topics in Psychology. Prereq.: Permission of the instructor. Content will be determined by the special interest of students and the instructor. The course may be repeated for credit by permission of the department as the topic changes.

PSYCH 791.1. 1 hr.; 1 cr.

PSYCH 791.2. 2 hr.; 2 cr.

PSYCH 791.3. 3 hr.; 3 cr.

PSYCH 791.4. 4 hr.; 4 cr.

PSYCH 795. Fieldwork Project in Applied Behavior Analysis. 3 hr.; 3 cr. Prereq.: PSYCH 730.06 During this course students will develop and implement an Applied Behavior Analysis skill acquisition project. This project may be an extension of the project conducted in 730.05/.06 or an entirely new project. The project requires selecting a socially significant target behavior, developing a measurement system, implementing a technological procedure within a single-subject research design, and writing an APA-style manuscript regarding the applied project. Class time will be spent problem solving all aspects of applied projects and developing professional skills. Students are required to attend an Applied Behavior Analysis fieldwork site for at least 9 hours per week for the semester (144 total hours). This course is open to all matriculated MA students in the Applied Behavior Analysis Program, for whom the courses are required. Enrollment is limited. All other students must obtain special permission from the head of the ABA MA Program.

COURSES IN RESERVE

PSYCH 712. Recording and Stimulational Techniques in Physiological Psychology.

PSYCH 720.1. Lifespan Developmental Psychology.

PSYCH 721. Developmental Psychology II.

PSYCH 730.03. Behavioral Interventions with Children.

PSYCH 730.11. Theory and Practice of Behavior Modification I: Assessment and Techniques.

PSYCH 730.12. Theory and Practice of Behavior Modification II: Applications.

PSYCH 733. Information and Decision Processes in Human Behavior

PSYCH 741. Psychoanalytic Theories: The Classical Freudian Approach.

PSYCH 743. Survey of Psychotherapy and Counseling: A Case Study Approach.

PSYCH 743.1. Survey of Psychotherapy and Counseling.

PSYCH 745. Human Motivation.

PSYCH 747. Human Memory.

PSYCH 748. Self-Awareness Training.

PSYCH 749. Self-Awareness Training II.

PSYCH 753. Psychobiology of Sex and Gender.

PSYCH 756. Psychopathology II.

PSYCH 761. Neuropsychological Assessment.

PSYCH 764. Assessment of Personality with Standardized Objective Measures.

PSYCH 774. Assessment of Intellectual Functioning.

PSYCH 777. Practicum in Interviewing and Personality Appraisal.

PSYCH 788. Cooperative Education Placement.

PSYCH 799. Research Practicum.

Risk Management

Director: Cara M. Marshall

The Program in Risk Management includes a series of MS degree programs designed for highly motivated individuals with strong communication and analytical backgrounds looking to advance their careers or to gain a foothold in the growing area of risk management within corporate and financial organizations. There are four degrees offered: MS in Risk Management, Accounting Concentration ("CPA track"); MS in Risk Management, Actuarial Studies ("Actuarial track")*; MS in Risk Management, Finance Concentration ("CFA track"); and MS in Risk Management, DFA Concentration ("DFA track").

FACULTY

This interdisciplinary program draws full-time faculty from the Economics, Accounting & Information Systems, Mathematics, and Computer Science departments.

Address questions to the program director, Cara M. Marshall (cara.marshall@qc.cuny.edu).

ADMISSIONS REQUIREMENTS

The faculty advisory committee will make admissions decisions. Admission is available for both the Fall and Spring semesters. The admissions process is competitive and meeting the minimum standards does not guarantee acceptance. The following admissions requirements and materials are minimum standards applicable to all applicants:

1. An undergraduate bachelor's degree from an accredited college or university.
2. A minimum GPA of at least 3.0 in one's undergraduate program.
3. GMAT. The GMAT may be substituted with a GRE, LSAT, CFA, CPA or Actuarial exam(s), or waived by permission of the program director.
4. For international students, a minimum TOEFL score of 100 (Internet-based). This may be waived for a student holding a degree from a U.S. college or university with permission of the director.
5. Two letters of recommendation, either academic or professional.
6. An essay describing one's interest in the program and career objectives.
7. A resume. Candidates with relevant or extensive experience are encouraged to apply.
8. Students must apply to one of four degree concentrations: Accounting/CPA, Actuarial Studies, Finance/CFA, or DFA Modeling.

In addition, no more than 12 graduate credits may be transferred from another program or institution. Evaluation of the transferred credits will be by the faculty advisory committee.

Although students with any undergraduate background are encouraged to apply to the program, students with finance, accounting, computer science, or math backgrounds will be able to complete the program faster. Accepted accounting majors, students graduating in any of the majors leading to the Bachelor of Business Administration at Queens College, or computer science or math majors or minors may be able to complete their respective program in 30 credits. Students with other backgrounds or other majors may need to complete additional graduate foundation courses, as described below.

Students who have taken the following undergraduate courses or who have permission of the program director will not need to take the graduate foundation courses: introductory micro- and macro-economics (ECON 101 and 102 or equivalent), introductory corporate finance (BUS 241 or equivalent), money and banking (ECON 215 or equivalent), and statistics (ECON 249 or equivalent).

CURRICULUM

The MS in Risk Management takes a minimum of 30 credits to complete, depending on one's academic background. The program can be completed in as few as three semesters, and, because courses may be offered during the summer, the program may be completed in one calendar year for students attending on a full-time basis.

All students across the four concentrations will take an overview course which will give them a broad view of risk management, and three additional courses: risk transfer to financial markets, risk transfer to insurance markets, and a team-based, hands-on capstone course after at least 18 credits have been taken in the program.

Students will have additional required courses specific to their chosen concentration. If equivalent courses have been taken prior to admission, students may choose courses from a set of additional electives with the approval of the program director.

Areas of Concentration

ACCOUNTING/CPA CONCENTRATION

The concentration is designed to give students a solid risk management foundation, including basic risk management skills in finance, math, risk transfer markets, and modeling, plus training in enterprise risk management. The five graduate-level accounting electives will further enhance the student's accounting expertise as it relates to tax, audit, communications, and business law. The curriculum satisfies New York State's 150-hour education requirement for the CPA and provides students with a differentiated skill set to complement their core competencies.

ACTUARIAL STUDIES CONCENTRATION

The concentration is designed to give students a solid risk management foundation, including basic risk management skills in finance, math, risk transfer markets, and modeling, plus training in enterprise risk management. The graduate-level actuarial electives will further enhance the student's financial, accounting, risk measurement, and financial modeling expertise. The curriculum covers a vast majority of the Society of Actuaries' and the Casual Actuarial Society's body of knowledge and should help students be well-prepared to study for and pass the many exams required for associate or full fellowship in these two societies.

FINANCE/CFA CONCENTRATION

The concentration is designed to give students a solid risk management foundation, including basic risk management skills in math, risk transfer markets, and modeling, plus training in enterprise risk management. The five graduate-level finance electives will further enhance the student's financial and credit risk analysis, accounting, portfolio management, and financial modeling expertise. The curriculum covers a vast majority of the CFA Institute's body of knowledge and should help students be well prepared to study for and pass the three exams required for the CFA Charter holder professional designation.

DFA MODELING CONCENTRATION

The concentration is designed to give students a solid risk management foundation, including basic risk management skills in finance, math, risk transfer markets, and financial modeling, plus training in enterprise risk management. The curriculum will further enhance the student's expertise in modeling and programming for asset liability management, financial instruments, and econometric analysis of financial variables and capital markets. The curriculum is designed for students with computer science or mathematics backgrounds but covers a vast majority of the CFA Institute's body of knowledge as well as that of the Society of Actuaries and the Casualty Actuarial Society, so it should help students be well prepared to study for and pass the various exams required for professional designations from the three organizations should they wish to pursue these career paths.

ADVANCED CERTIFICATE IN RISK MANAGEMENT

The Advanced Certificate in Risk Management is designed to give students exposure to risk management. It is ideal for students who already have an MBA or other graduate degree but wish to gain a specialization in risk management. Students in the certificate program can apply their courses toward an MS in Risk Management should they later choose to pursue a graduate degree.

A. GRADUATE FOUNDATION COURSES

Students who enter the program must take some or all of the graduate foundation courses or their equivalents before taking the required risk management courses.

Basic Foundation Courses

The following courses must be taken by all students entering the MS in Risk Management programs. Individual courses may be waived for those students who have taken equivalent courses.

Graduate Foundation Courses

ECON 601.	Introduction to Micro and Macro Economics
ECON 602.	Introduction to Corporate Finance and Money and Banking
ECON 649.	Statistics as Applied to Economics and Business

Students who have successfully completed ECON 101, 102, 215, 249 and BUS 241 may be exempt from the Graduate Foundation Courses.

Additional Graduate Foundation Courses

Accounting/CPA Concentration

ACCT 600.	Financial Accounting Theory and Practice, Part 1
ACCT 601.	Financial Accounting Theory and Practice, Part 2
ACCT 602.	Financial Accounting Theory and Practice, Part 3

ACCT 603.	Concepts of Managerial Accounting
ACCT 604.	Concepts of Auditing and Computer Auditing
ACCT 605.	Introduction to Business Law
ACCT 606.	Federal and New York State Taxes on Income
CSCI 688.	Advanced Productivity Tools for Business

Students with an undergraduate degree in accounting or who have taken the appropriate undergraduate courses will be exempt from these additional graduate foundation courses. Such undergraduate courses include ACCT 201, 202, 261, 305, 306, 311, 321, 322, 362, 367; and CSCI 012 or 018. Additional undergraduate prerequisites include BUS 387.

Actuarial Studies Concentration
Students with an undergraduate degree or minor in mathematics or actuarial studies will be exempt from the following graduate foundation courses:

ECON 602.	Introduction to Corporate Finance and Money and Banking
ECON 649.	Statistics as Applied to Economics and Business

Additional prerequisites include ACCT 600 (or ACCT 101 and 102), MATH 201, and MATH 231.

Finance/CFA Concentration

ACCT 600.	Financial Accounting Theory and Practice, Part 1

Students with an undergraduate degree in finance, or who have completed any of the BBA degrees at Queens College, or who have taken ACCT 101 and 102, will be exempt from the Additional Graduate Foundation Courses. Additional undergraduate prerequisites include BUS 341W, ECON 382 (or BUS 384), and BUS 387.

Modeling/DFA Concentration
Students with an undergraduate degree or minor in either computer science or mathematics will be exempt from the following graduate foundation courses:

ECON 602.	Introduction to Corporate Finance and Money and Banking
ECON 649.	Statistics as Applied to Economics and Business

Additional undergraduate prerequisites include CS 111, 211, 212, 220, 313, and 331.

Students who have successfully completed the appropriate graduate basic and additional foundation and other prerequisite courses for their concentration as described above with no lower than a *B-* in any given course, must then complete at least 30 additional graduate credits with a minimum overall GPA of 3.0. Students whose GPA in the program falls below 3.0 will be placed on probation, and will have one semester to bring their GPA back to or above a 3.0. In order to graduate, students must receive a grade of *B-* or better in their capstone course and have an overall GPA of 3.0. Appeals may be made to the Risk Management Faculty Advisory Committee. Only one course may be retaken for grade replacement.

B. REQUIRED COURSES IN RISK MANAGEMENT

The following courses are required of all MS in Risk Management students. All courses are 3 credits.

RM 701.	Risk Management
RM 705.	Risk Transfer to Financial Markets
RM 706.	Risk Transfer to Insurance Markets
RM 790.	Applied Dynamic Financial Analysis
or	
RM 791.	Applied Financial Dynamic Analysis Model Building

Note: For students in the Accounting/CPA concentration, RM 704, Risk Measurement (Fall), satisfies the New York state requirement for a quantitative measurements course; RM 705, Risk Transfer to Financial Markets (Spring, Summer), satisfies the New York state requirement for a finance course; and RM 706, Risk Transfer to Insurance Markets (Fall, Spring, Summer), satisfies the New York state requirement for an economic analysis course.

In addition to the required courses, students must take the additional courses listed below for their chosen area of concentration.

C. ACCOUNTING/CPA CONCENTRATION

Students with an undergraduate background in accounting or having all the prerequisites listed above under "Graduate Foundation Courses" can complete the program in 30 credits. In addition to the courses required of all RM students, Accounting/CPA students must take the six courses below. If an equivalent course has been taken at the undergraduate level, additional recommended elective courses are listed below.

1. Required Courses

ACCT 712.	Advanced Financial Accounting Theory
ACCT 723.	Advanced Auditing Theory and Practice
ACCT 747.	Communications and Accountants
ACCT 752.	Advanced Studies in Business Law
ACCT 757.	Taxation of Business Entities
ECON 715.	Corporate Finance

2. Additional Recommended Electives

ACCT 707.	Contemporary Issues in Management Accounting
ACCT 748.	Advanced Accounting Information Systems
RM 707.	Financial Statement Analysis and Credit Risk Management (not open to students who have taken ACCT 350)
RM 710.	Fixed Income Instruments

RM 711. Applied Financial Analysis. Not open to students who have completed BUS 387.
RM 712. Macroeconomic Risk Management and Corporate Strategy
RM 792. Special Topics in Risk Management

D. ACTUARIAL STUDIES CONCENTRATION

Students with an undergraduate degree in mathematics or actuarial studies usually can complete the program in 30 credits. In addition to the courses required of all MS in Risk Management students, Actuarial Studies concentrators must take the six courses listed below. If an equivalent course has been taken at the undergraduate level, additional recommended elective courses are listed below.

1. Required courses

ECON 715. Corporate Finance
RM 702. Accounting for Risk Management
RM 704. Risk Measurement
MATH 621. Probability
RM 708. Financial Econometrics
RM 710. Fixed Income Instruments

2. Additional Recommended Electives

RM 707. Financial Statement Analysis and Credit Risk Management
RM 709. Portfolio Management
RM 711. Applied Financial Analysis. Not open to students who completed BUS 387.
RM 712. Macroeconomic Risk Management
RM 713. Advanced Derivatives
RM 792. Special Topics in Risk Management

E. FINANCE/CFA CONCENTRATION

Students with an undergraduate background in finance usually can complete the program in 30 credits. In addition to the courses required of all MS in Risk Management students, Finance/CFA concentrators must take the six courses listed below. If an equivalent course has been taken at the undergraduate level, additional recommended elective courses are listed below.

1. Required Courses

In addition to the courses required of all students, which introduce students to risk measurement and management, and risk transfer to both insurance markets and financial markets, the following courses will help students to prepare for the CFA exams and will give them the skills needed for risk management positions in the financial services industry.

RM 702. Accounting for Risk
RM 704. Risk Measurement
RM 707. Financial Statement Analysis and Credit Risk Management
RM 708. Financial Econometrics
RM 709. Portfolio Management
RM 710. Fixed Income Instruments

2. Additional Recommended Electives

RM 711. Applied Financial Analysis. Not open to students who completed BUS 387.
RM 712. Macroeconomic Risk Management.
RM 713. Advanced Derivatives
RM 792. Special Topics in Risk Management

F. DFA MODELING CONCENTRATION

Students with an undergraduate background in computer science or mathematics (major or minor) can usually complete the program in 30 credits. In addition to the courses required of all RM students, DFA Modeling concentrators must take the six courses listed below. If an equivalent course has been taken at the undergraduate level, additional recommended elective courses are listed below.

1. Required Courses

ECON 715. Corporate Finance
RM 708. Financial Econometrics
RM 709. Portfolio Management
RM 710. Fixed Income Instruments
RM 713. Advanced Derivatives
CSCI 780. Numerical Methods

2. Additional Recommended Electives

RM 711. Applied Financial Analysis. Not open to students who have completed BUS 387.
RM 712. Macroeconomic Risk Management and Corporate Strategy
RM 792. Special Topics in Risk Management

G. ADDITIONAL ELECTIVES FOR ALL CONCENTRATIONS

The following mathematics courses are recommended for students in all concentrations.

MATH 621. Probability
MATH 623. Operations Research (Probability Methods)
MATH 633. Statistical Inference
MATH 635. Stochastic Processes

Note 1: Electives not on the list may be substituted with permission of the program director. If all electives in the area of concentration are completed, the student should consult with a faculty advisor to choose additional courses.
Note 2: In addition to meeting academic standards, a degree candidate must act honorably and with integrity; work collaboratively with faculty and peers; exercise professional judgment; and conduct him- or herself ethically and with academic integrity. Ethical, professional, and honorable conduct are core attributes of a risk management professional and are thus integral to the awarded degree. Candidates who fail to meet these personal and professional standards will be subject to review by the program faculty, and sanctions, such as dismissal, may result.

H. ADVANCED CERTIFICATE

The Advanced Certificate in Risk Management is designed to give students exposure to risk management. It is ideal for students who already have an MBA or other graduate degree but wish to gain a specialization in risk management. Students in the certificate program can apply their courses toward an MS in Risk Management should they later choose to pursue a graduate degree. Students with an undergraduate background in finance, accounting, mathematics or computer science, can complete the certificate in 12 credits. Undergraduates who wish to take part in the Accelerated Degree program may also pursue the 12-credit Advanced Certificate in Risk Management. Students must take three required courses and choose one elective course.

1. Required Courses

RM 701.	Risk Management
RM 704.	Risk Measurement
RM 711.	Applied Financial Analysis

2. Elective Courses

RM 706.	Risk Transfer to Insurance Markets
RM 705.	Risk Transfer to Financial Markets
RM 702.	Accounting for Risk
RM 707.	Financial Statement Analysis and Credit Risk Management

COURSES IN RISK MANAGEMENT

RM 701. Risk Management. 3 hr.; 3 cr. Prereq. or coreq.: RM7 11 or evidence of sufficient computer programming experience, as determined by the program director. The course provides a broad overview of why managing risk is important to organizations and of the risk management function. The course utilizes the RM framework to identify sources of value and stakeholder objectives, to categorize events that pose risk, to determine the organization's appetite for risk. and to determine levels of risk retention. The course covers various risk types and examines how each is quantified, transferred, or retained and priced for. The course is case-study and group-study intensive.

RM 702. Accounting for Risk. 3 hr.; 3 cr. Prereq. or coreq.: RM 701. This course is intended to provide graduate-level exposure to accounting theory for students enrolled in the MS in Risk Management program. The course will cover essentials of the conceptual framework of accounting and will focus on issues affecting recognition and measurement of the economic events that affect financial statements in particular, those that affect the firm's risk profile and risk transfer. The course will not be open to MS in Accounting students. Credit will not be given for this course if ACCT 350 or BUS 250 has already been taken and students will be required to take an additional elective from the RM program offerings.

RM 703. Analysis of Investment and Market Risk. 3 hr.; 3 cr. Prereq.: ECON 602 or BUS 241; ECON 649; or equivalent as approved by the program director. The course will focus on the application of financial theory to the issues and problems of investment management. Topics will include bond valuation and strategies, stock valuation and strategies, portfolio optimization and asset allocation, the CAPM, and their implications for investment management. The course will first examine the valuation and selection of various investment instruments, then move on to cover portfolio optimization issues and risk management.

RM 704. Risk Measurement. 3 hr.; 3 cr. Prereq. or coreq.: RM 701. This course provides an in-depth review of the fundamentals of probability and statistics, followed by the measurement of various risk types. The course examines instances of market failure, the role of collateralization requirements, the impact of term, time horizon, and covariance, and extreme value theory. The course also covers probabilistic and stochastic risk modeling, calculations of value-at-risk, stress testing, and other risk metrics, and the limitations of each of these measures.

RM 705. Risk Transfer to Financial Markets. 3 hr.; 3 cr. RM 703 or BUS 350 is recommended. The primary emphasis of this course is on the structure, pricing, hedging, and strategies of futures and options contracts and their applications in a risk management context. The economic role of options and futures markets is examined. Specific topics include determinants of forward and futures prices, option valuation using binomial trees and Monte Carlo simulation, implied binomial trees, relation between puts and calls, uses of options in investment strategies, hedging techniques, exotic options, applications to corporate securities and other financial instruments.

RM 706. Risk Transfer to Insurance Markets. 3 hr.; 3 cr. Prereq. or coreq.: Undergraduate degree in accounting or completion of Graduate Core Curriculum: ECON 601; ECON 602; ECON 649; and ACCT 600, or permission of program director. RM 701 is recommended. This course examines risk transfer to insurance markets. Topics covered will include the variety of ways that risk transfer can occur, including quota share and excess of loss agreements, catastrophe bonds, captives, reciprocals, segregated cells, and their structuring, such as retentions, limits, corridors, collateralization, reinstatement, and commutation provisions, and structured/financial insurance. Insurance products will be evaluated for their efficiency in risk transfer. How effective insurance markets are relative to capital markets will be evaluated in terms of terms and conditions, pricing, and basis risk.

RM 707. Financial Statement Analysis and Credit Risk Management. 3 hr.; 3 cr. Prereq.: RM 702 or ACCT 201, and ACCT 202. Analyses are made of financial statements of public companies from auditors. Financial statements and related disclosures will be analyzed to gain perspective on a company's health. Business valuation models and techniques to develop forecasts and pro forma results will be discussed and illustrated. Structured products and securitization will

be covered in depth. Ratio analysis and key performance indicators will be emphasized with a case-study approach to this subject. Credit will not be given if ACCT 350 or BUS 250 has been successfully completed.

RM 708. Financial Econometrics. 3 hr.; 3 cr. Prereq.: ECON 721 or equivalent; and RM 704, or MATH 241, or permission of the instructor. The course covers modern statistical and econometric techniques necessary for both professional and academic quantitative research in finance. Particular emphasis will be placed on measuring and analyzing the risk of holding and trading financial assets.

RM 709. Portfolio Management. 3 hr.; 3 cr. Prereq. or coreq.: RM 703 or BUS 350. This course provides a detailed examination of portfolio management. Topics include definition and measurement of risk market efficiency, testing for inefficiencies, components and determinants of trading costs, mechanics of creating and managing a portfolio, and investment philosophies. The mechanics of creating and managing a portfolio are illustrated for both bonds and equities.

RM 710. Fixed Income Instruments. 3 hr.; 3 cr. Prereq.: ECON 602 or BUS 241. Recommended: MATH 131, Calculus with Applications to the Social Sciences. The course exposes students to an in-depth analysis of the concepts encountered in the market for fixed income securities. The student will develop tools to price bond and money market instruments, understand the term structure of interest rates, analyze the Treasury yield curve, and evaluate credit yield spreads. The course illustrates hedging and other trading and portfolio strategies, and explores fixed income derivative instruments.

RM 711. Applied Financial Analysis. 3 hr.; 3 cr. Prereq.: ECON 602 or BUS 241. This course will introduce students to programming for quantitative analysis with finance applications. The course will start with a review of advanced Excel functions (financial functions, data tables, regression functions, conditional functions, dates, lookup functions, pivot tables, matrices) and then will cover VBA, including recording macros, creating and using functions in VBA, creating and using VBA sub procedures, incorporating user interaction, loops, and arrays, objects, and add-ins. Students will work with dynamic datasets, construct Bloomberg formulas, extract Bloomberg data into Excel, and use Bloomberg's function builder. Students will also cover documentation and good practices for database and model management. Credit will not be given if BUS 387 has been successfully completed.

RM 712. Macroeconomic Risk Management and Corporate Strategy. 3 hr.; 3 cr. The course will introduce and educate the students to the concepts of macroeconomic risk management, its applications in a corporate setting, necessity and relevancy in today's corporate strategic planning, and operational risk management processes.

RM 713. Advanced Derivatives. 3 hr.; 3 cr. The course will investigate a variety of pricing models used across interest rate, equity, and credit derivative markets, including particular finite difference methods, tree models, and Monte Carlo simulations. The course will also cover stochastic volatility models, local volatility surface, pricing of volatility swaps, Asian options and barrier options, Gaussian and other copulas, and interest rate derivative models, including the Libor Market Model and the Hull and White model.

RM 742. Data Science via Machine Learning and Statistical Modeling. 4 hr. lec., 2 hr. lab; 4 cr. Prereq.: MATH 241, MATH 231, CSCI 111 (or equivalent). Recommended corequisites include ECON 382, MATH 341, MATH 369 or their equivalents. Philosophy of modeling and learning using data. Prediction using linear, polynomial interaction regressions and machine learning, including neural nets and random forests. Probability estimation with asymmetric cost classification. Underfitting versus overfitting and R-squared. Model validation. Correlation versus causation. Interpretations of linear model coefficients. Formal instruction of statistical computing. Data manipulation and visualization using modern libraries. Writing intensive. Spring

RM 790. Applied Dynamic Financial Analysis. 3 hr.; 3 cr. In this course, students will contribute to the building and development of Dynamic Financial Analysis (DFA) models tailored to a financial institution, non-financial corporation, or pension fund. The DFA model is an asset-liability management model in which an organization's asset and liability values are forecasted over time and simulated by allowing economic, financial, and other business drivers of the cash flows to vary stochastically, in a dynamic and simultaneous fashion, using Monte Carlo and other simulation methods. The course is open to students only by permission of the program director.

RM 791. Applied Financial Dynamic Analysis Model Building. 3 hr.; 3 cr. In this course, students will develop and build Dynamic Financial Analysis (DFA) models tailored to a financial institution, non-financial corporation, or pension fund. The DFA model is an asset-liability management model in which an organization's asset and liability values are forecasted over time and simulated by allowing economic, financial, and other business drivers of the cash flows to vary stochastically, in a dynamic and simultaneous fashion, using Monte Carlo and other simulation methods. In this capstone course for the DFA concentrators, students will write their own code for the numerical methods underlying the models. Open to students only by permission of the program director.

RM 792. Special Topics in Risk Management. 3 hr.; 3 cr. Prerequisites or corequisites will vary with the particular topic, or with permission of the program director. This course will be a seminar in risk management covering a special topic as it relates to RM, such as governance, behavioral finance, or corporate strategy.

Sociology

See Data Analytics and Applied Social Research.

Urban Studies

Chair: Tarry Hum

Graduate Advisor: Do Lee

Graduate Admissions Advisor: Melissa Checker

Dept. Office: Powdermaker Hall 250, 997-5130

Accelerated MA in Urban Affairs

The Accelerated MA program will operate as follows:

1. The program will be available to Urban Studies majors (and, on a case-by-case basis, majors in other social science disciplines) with an overall GPA of 3.0 and a GPA of 3.0 or greater (a GPA of 3.5 is strongly recommended) in Urban Studies courses, or courses in their major, if they are not Urban Studies majors. They must maintain a 3.0 GPA in their graduate courses in order to receive the MA degree.
2. Students must apply to the Accelerated MA program in their upper sophomore or junior year. They will apply through the Office of the Dean of Graduate Studies with the normal letters of recommendation and personal statement.
3. After acceptance to the Accelerated MA program, students may take up to four 3-credit graduate-level Urban Studies elective courses while they are still undergraduates. They must attain a minimum grade of *B–* in these courses, and they must achieve an overall GPA in these four courses of at least 3.0 if they are to continue into the remainder of the program. The required courses for the MA in Urban Affairs are:

   URBST 705. The Just City in Theory and Practice
   plus two of three governance/policy classes:
   URBST 706. Non-Profits in the 21st Century Metropolis
   URBST 718. Governing the City
   URBST 724. Public Policy in Practice
   plus one of three methods classes:
   URBST 725. Urban Research Methods
   URBST 732. Researching New York City
   URBST 751. Critical Perspectives on Urban Research
4. Students in the program may take the required graduate courses (see above) only after completing their undergraduate program. Thus, the typical student in the Accelerated MA program will take four elective graduate courses during their senior year and, during the fifth year, will take four required graduate courses (URBST 705, two of URBST 706, 718, or 724, and one of URBST 725, 732, or 751) and two graduate electives, for a total of 18 credits.
5. It is generally expected that Accelerated MA students will complete their graduate studies within one year after completing their undergraduate requirements.

MA in Urban Affairs

The MA program in Urban Affairs is designed to prepare the student for professional work and career advancement in the areas of urban and public administration, social policy, community advocacy, and the management of community-based organizations. Graduates of the program work in government agencies, community-based and nonprofit organizations, health care and education institutions, and private enterprises such as metropolitan real estate firms. Studying with faculty who have extensive knowledge and experience in contemporary urban affairs, students gain training and expertise in the design and administration of programs addressing issues of social and urban policy.

FACULTY

Hum, Tarry, Chair, *Professor,* PhD 1997, University of California at Los Angeles: urban planning, immigrant and transnational urbanism, community economic development, Asian American studies

Lee, Do, Graduate Advisor, *Assistant Professor,* PhD 2018, City University of New York: environmental psychology, mobilities, critical theories and social justice, participatory action research, sustainability

Checker, Melissa, Graduate Admissions Advisor, *Associate Professor,* PhD 2002, New York University: social movements, urban anthropology, environmental anthropology, race, class, and ethnicity

Baker, Dwayne, *Assistant Professor*, PhD 2016, University of Illinois at Urbana-Champaign: urban planning, transportation planning and policy, neighborhood and community development, GIS and spatial analysis

Baron, Sherry, *Professor,* MD 1982, Case Western Reserve University: environmental public health, immigrant public health, and workers' health and safety

Davis, Dana-ain, *Professor*, PhD 2001, City University of New York: urban anthropology, gender, race, public policy, participatory action research, black studies, feminist theory

Hanlon, Martin D., *Associate Professor,* PhD 1979, Columbia University: health policy, public management, public policy evaluation, workforce issues

Ioannides, Christos, *Associate Professor,* PhD 1977, University of Pennsylvania: Greek-American community, Greek-American relations

Khandelwal, Madhulika S., *Associate Professor,* PhD 1992, Carnegie-Mellon University: Asian-American issues, immigrant communities

Larson, Scott, Co-Director, Office of Community Studies, *Lecturer,* PhD 2010, City University of New York: urban geography, urbanism, gentrification

Lawson, Ronald L., *Professor Emeritus,* PhD 1970, University of Queensland, Australia: urban,

American-born Christian groups, Seventh-day Adventism, tenant movements

Maskovsky, Jeff, *Professor,* PhD 2000, Temple University: urban poverty, urban activism, politics of health and housing

Muraskin, William A., *Professor,* PhD 1970, University of California at Berkeley: social/urban history, health policy, international health

Rodberg, Leonard S., *Professor Emeritus,* PhD 1957, Massachusetts Institute of Technology: health policy, employment policy, urban data analysis

Sardell, Alice, *Professor,* PhD 1980, New York University: health policy, community health planning, urban and community politics

Seley, John E., *Professor Emeritus,* PhD 1973, University of Pennsylvania: urban and regional planning, public policy, geography, computer mapping

Steinberg, Stephen, *Distinguished Professor Emeritus,* PhD 1971, University of California at Berkeley: racial and ethnic minorities, public policy, urban sociology

Vacca, James, Co-Director, Office of Community Studies, *Distinguished Lecturer*, MA 2001, Queens College, CUNY: New York City politics, public administration, community organizations, urban politics

Vena, Natalie Bump, *Assistant Professor*, JD and PhD 2016, Northwestern University: environmental law- and policy-making in U.S. cities

PROGRAM FOR THE MASTER OF ARTS DEGREE

Requirements for Matriculation

Applicants must demonstrate aptitude for completing a graduate program in urban affairs either through previous academic performance or through performance in relevant life situations. Applicants' experience in urban policy or administration or in community service jobs or activities will be evaluated along with the academic record in the admissions decision. Inquiries should be addressed to: Graduate Admissions Committee, Department of Urban Studies.

Requirements for the Master of Arts Degree

Thirty credits are required for the MA degree, including three required courses (9 credits). Students must also complete a final project based on original research.

Required Courses (12 credits)

Program Requirements
URBST 705. The Just City in Theory and Practice

plus two of three governance/policy courses:
URBST 706. Non-Profits in the 21st-Century Metropolis
URBST 718. Governing the City
URBST 724. Public Policy Analysis

plus one of the three methods courses:
URBST 725. Urban Research Methods
URBST 732. Researching New York City
URBST 751. Critical Perspectives on Urban Research

Electives (18 credits): Students are free to choose from among any of the department's MA-level nonrequired courses.

Final Project: Students must complete a final project based on original, community or studio research and presented in the form of a report or paper, or as a video, art, or web exhibition.

Fieldwork (3–6 credits)

Field placements may be in areas of urban activity of interest to the student. Students can be placed in an outside organization or participate in a group project or workshop organized by the department. The department will assist students in finding field placements. Students should enroll in courses related to the field placement to receive maximum benefit from the experience. Fieldwork will be under the direction of a Faculty Advisor, who shall hold regular conferences with students. Papers on fieldwork are required. Fieldwork courses are URBST 780 and 781.

Thesis or Capstone Paper (3 credits)

Students may prepare a thesis or capstone paper. A thesis generally involves primary research in which the students complete an original field project. A capstone paper typically consists of a critical review of an existing body of knowledge on a topic related to social or urban policy. Students have the option of enrolling in a 3-credit tutorial while working on the thesis/capstone paper. Each student works with a faculty advisor, and the final product is subject to the approval of both the Faculty Advisor and the Graduate Advisor.

COURSES IN URBAN STUDIES

URBST 620. Urban Research Writing. 3 hr.; 3 cr. This course will assist students in developing the skills necessary for graduate level writing in Urban Affairs. The focus will be on developing writing skills in three specific areas: (i) writing in response to texts; (ii) writing across texts (comparing and contrasting); and (iii) writing a research paper on a topic in urban studies. In each instance original drafts will be revised for clarity of content. The course will review the steps in writing a research paper including choosing topic, developing a cogent thesis, using the library and Internet for research note taking, and drafting and revising the finished paper.

URBST 626. Computer Methods in Urban Policy Analysis. 3 hr.; 3 cr. This course introduces the student to various methods for performing urban policy analyses using microcomputers, including the use of spreadsheets, database systems, graphics programs, mapping systems, and statistical packages. Students will be introduced to essential file management functions and will learn to use these computer-based tools to analyze, interpret, and display demographic, economic, and geographic data. Students will carry out and present projects using their own data or data provided by the instructor.

URBST 640. Public Administration. 2 hr. plus conf.; 3 cr. This course offers a comprehensive survey of the

field of public administration, from the philosophical underpinnings of government activities to the structure and function of present-day state and local government programs and agencies.

URBST 701. Urban Politics. 2 hr. plus conf.; 3 cr. This course examines the historical development of local government structures, political parties, machine politics and reform movements. The current forms of government in U.S. cities, especially New York City, and their relationship to states and the federal government will be analyzed. Theories of power in the urban setting, and the role of advocacy groups, ethnic organizations, business, labor, and other interest groups will be discussed.

URBST 702. Urban Social Movements. 2 hr. plus conf.; 3 cr. The course analyzes social change movements impacting urban institutions or policies, especially the mobilization of groups without ready access to power through normal political channels. Students will analyze one movement and use its experience to test the prevailing theories concerning social movements.

URBST 703. Protest Movements in Film. 3 hr.; 3 cr. This course examines the dynamics of urban-centered protest movements in the U.S., such as the labor movement, the African-American, feminist, and gay and lesbian civil rights movements, and the anti-Vietnam war, and pro-life and pro-choice movements through a combination of reading books about such movements and watching film footage featuring the activities of movements.

URBST 704. Religion, Politics, and Urban Society. 2 hr. plus conf.; 3 cr. This course weighs recent examples of both left- and right-leaning endeavors by religious groups, in the United States and abroad, to impact political decisions, testing them against theories that attempt to understand such attempts. Guest speakers whose political actions are rooted in their religious faith will present their views to the class.

URBST 705. The Just City in Theory and Practice. 3 hr; 3 cr. A required course introducing the core themes in the Master of Arts program in Urban Affairs, the Just City in Theory and Practice explores the debates and proposals around the imperative to create more socially just and sustainable cities, with an emphasis on both theory and practice. The course offers a theoretical and practical background into processes of social, cultural, economic, and physical change in urban society. Themes covered include urban planning and policy, social movements, injustice, and inequality based on socioeconomic status, race, nationality, ethnicity, sexuality, and gender. Students will be equipped with the tools and vocabulary to refine their interests and to explore these themes in further detail in subsequent courses.

URBST 706. Nonprofits in the 21st-Century Metropolis. 3 hr.; 3 cr. The nonprofit sector serves a vital role in society by addressing needs that neither for-profit business nor government is prepared to fulfill. Over the past century, this sector has grown in size, impact, and influence. This course presents a broad overview of the nonprofit sector. Students will gain an understanding of the challenges and opportunities within the sector, the various domains comprising the sector, and the functions that nonprofit organizations play in this city, in the broader American society, and internationally. Domains covered include arts and culture, health, education, social services, community organizing, philanthropy, international assistance, and others.

URBST 708. New York City Politics. 3 hr.; 3 cr. This course will provide a historical view of the development of New York City governmental and non-governmental institutions involved in policy-making, such as the development of Democratic and Republican parties, the impact of immigrant and ethnic groups on City politics, reform movements, and changes in NYC governmental structure over time. It will discuss the relation of policy-making in New York City to New York State and federal decision-making. It will analyze the roles and relative political resources of official actors such as the Mayor, the City Council and other citywide elected officials and of non-governmental political actors such as unions, corporations, business associations, civic and neighborhood associations, etc., in the policy-making process. The role of ethnicity, immigrant status, gender and sexual orientation in terms of access to political resources and influence in policy-making will be discussed. The instructor will use a series of historical and contemporary policy case studies as illustrations. The course may include invited speakers involved in the policy-making process who can discuss some of the case studies used in the course.

URBST 710. Urban Environment Policy. 2 hr. plus conf.; 3 cr. This course will examine the theory and practice of American urban environmental policy in the second half of the twentieth century. We will focus mainly on the natural, social, and political forces that have shaped New York City's urban environment, but will also look at comparative case studies of other American and European cities. This course will be of interest to graduate students in urban planning, sociology, and environmental policy and science.

URBST 711. Urban Infrastructures and Technologies. 3 hr.; 3 cr. This course focuses on the relationship between contemporary cities and the technological infrastructures that sustain their existence. From transport to sanitation, telecommunication to electricity transmission, modern cities rely upon complex systems that are often invisible or taken for granted, yet the city could not sustain itself without them. We will explore how technological change impacts cities, how policies influence infrastructure provision and management, how technical systems can work to make societies more or less equal, and the

relationship between technological systems and urban sustainability.

URBST 712. Urban Labor and Labor Movements. 3 hr.; 3 cr This course introduces students to the nature of work and work organization in contemporary urban settings. It covers such topics as the social organization of work, changes in the composition of the work force, the impact of technology on work and workers, and the organization of workers through labor unions and other forms of worker organization. The evolution of work and worker organization from the beginning of industrialization through the shift to a service-oriented economy will be the central focus of the course.

URBST 713. Urban Cultural Diversity. 2 hr. plus conf.; 3 cr. This course explores the rich and diverse subcultures and communities that dot the urban landscape. In recent years new patterns of cultural belonging and new forms of identity have displaced earlier forms of community organization and neighborhood life. This course traces the emergence of urban subcultures from "Hippies to HipHop." It will expose students to a number of studies by professional ethnographers and prepare them to undertake an original field study on a topic of their choice.

URBST 714. Social Welfare Policy. 2 hr. plus conf.; 3 cr. This course examines our society's efforts to address social-economic problems relating to poverty. After an historical overview of the development of welfare programs in this country, the course focuses on measures taken to combat poverty in the contemporary context. Issues such as the relation between welfare and work, out-of-wedlock childbearing, privatization, and immigrant access to public benefits are addressed. While the course primarily emphasizes basic income maintenance, it also provides a survey of social welfare policies and programs that comprise our current social safety net.

URBST 715. Urban Religious Movements. 2 hr. plus conf.; 3 cr. Religious movements centered in urban areas are radically altering the face of religion, both globally and in the United States. This course examines the dynamics and consequences of such movements, including the role of religious movements in acting as bridges to immigrants entering the U.S.

URBST 716. Immigration in Metropolitan New York. 3 hr.; 3 cr. This course examines the social, political, economic, and environmental factors affecting the successive waves of migration to New York from the 1800s to the present. It analyzes the development and role of ethnic and immigrant organizations during the early migrations and through the changes in contemporary migrant flows. The course introduces theories of immigration and models of assimilation/acculturation and analyzes these processes for several of the newer immigrant groups (Asian, Latino, Afro-Latinos, Indo-Caribbean, and others) as compared to several of the older groups (Irish, Jewish, Italian). Finally, the course assists students in conducting immigrant enclave analysis for some of the major groups that have settled in the area in the recent period.

URBST 717. Sex and the City. 3 hr.; 3 cr. This course will examine sexuality and city life. The unique social, political and cultural features of U.S. cities have long made them important to the pursuit of self-discovery and sexual freedom and to the creation and growth of robust sexual subcultures and communities. Yet cities have also found ways to regulate sexuality and to oppress sexual minorities as well. In this course, we will discuss how the modern U.S. city simultaneously shaped and was shaped by the development of modern sexual identities. The course proceeds through four themes: 1) fundamental concepts in the study of sex and the city; 2) specific histories and case studies of sexual oppression and liberation; and 3) landscapes of power and sex in the city today. We will answer questions such as, what role did sophisticated forms of policing and regulation, municipal bureaucracies, and consumer cultures play in encouraging and discouraging the growth of sexual subcultures? How did sexual and gendered ideologies shape the making of urban public and private spaces? And how have the political struggles of sexually oppressed groups, including working class women, gays and lesbians, and transgender people reshaped the city itself?

URBST 718. Governing the City. 3 hr.; 3 cr. This course provides an overview of the major debates around the political and governmental forces, institutions, and movements that guide economic and physical development, the distribution of resources, and other aspects of daily life in urban areas. It examines what structures enable and constrain collective decision-making about particular urban issues such as housing, immigration, economic development, education, and health.

URBST 719. Applications of Social Psychology to Urban Problems. 2 hr. plus conf.; 3 cr.

URBST 720. Race, Ethnicity, and Immigration. 2 hr. plus conf.; 3 cr. This course combines historical and sociological approaches in a broad survey of racial and ethnic minorities in the United States, tracing their disparate origins and trajectories to the present. Differences between African Americans, with their roots in slavery, and immigrant minorities are emphasized. The course also examines recent trends in immigration, including patterns of incorporation into American society and enduring transnational links to countries of origin.

URBST 721. Perspectives on the Labor Movement. 2 hr. plus conf.; 3 cr. This course will examine theories of industrial relations systems; the philosophy and political perspectives of labor unions; and the current discussion concerning the state and future of the labor movement. Issues examined will include the meaning of work, its changing nature, and the consequent implications for industrial relations and the trade unions.

URBST 722. Processes of Urbanization. 2 hr. plus conf.; 3 cr. Provides an overview of (1) the historical

growth and economic position of cities as centers of industry or commercial and bureaucratic control; (2) internal differentiation within cities; (3) the experience of urban life at different socioeconomic levels. Fall

URBST 723. Introduction to Urban Housing. 3 hr.; 3 cr. This course explores the situation of renters and owners in New York City. How does the housing market affect how neighborhoods change? What is government doing to assure that all residents have decent safe housing? What housing options and programs are available in the city? How do they differ from those in the rest of the country? What role do public housing, rent regulation, mortgage finance, and other public and private programs play in the development of housing in the city?

URBST 724. Public Policy Practice. 3 hr.; 3 cr. This course is an introduction to policy making in public and nonprofit organizations. Students learn the major elements of the policy-making process: defining problems, developing alternative policies, evaluating alternatives, policy implementation, and evaluating policy outcomes. The focus is on policy making at the local and state level. Substantive policy areas covered in the course include: welfare, urban economic development, environmental and land use policy, housing policy, and health policy. The course is intended to provide the theoretical and analytical basis for a series of proposed courses in each of these areas.

URBST 725. Urban Research Methods. 2 hr. plus conf.; 3 cr. This course introduces students to the range of methodological approaches used in urban-related research. These include macroscopic analysis, demography, survey research, historical research, participant observation, community studies, institutional analysis, policy analysis, and evaluation research. Emphasis is placed on the development of critical skills in reading, interpreting, and analyzing social science research, whether this research is encountered in textbooks and lectures, in professional journals, or in the popular media. Spring

URBST 726. The Urban Criminal Justice System in the United States. 3 hr.; 3 cr. The course will deal with the modern criminal justice system as it has developed through time in cities. Special attention will be given to the urban problems that led to the creation and evolution of the professional police, criminal courts, and penal institutions. Emphasis will be placed on the specifically urban influences (demographic, geographic, political, economic, and social) that originally shaped and continue to mold the criminal justice system.

URBST 727. Public Management. 2 hr. plus conf.; 3 cr. This course is devoted to the study of management in local and state government and the nonprofit sector. Defining the unique characteristics of public management is one of the goals of the course. Another is to provide an understanding of what government and nonprofit managers actually do. Finally, the course is intended to develop skills that are essential to effective public management. The course relies heavily on the case method approach, which is intended to simulate the world of actual managers and the processes of management decision-making.

URBST 728. Nonprofit Organization Management. 3 hr.; 3 cr. This course is an introduction to the management and operation of nonprofit organizations. Nonprofit organizations have a long and respected history in the delivery of services to the communities of New York City and State. This course reviews their and evolution to their current status and importance for the millions of constituents that depend on their existence. We focus on the different types of non-profit organizations, from those whose mission is to deliver services to seniors, adults, and children, to entities that are primarily advocates for specific services and constituencies, to watchdog groups whose oversight and expertise influence public policy. We review their mission statements, corporate infrastructure, budgeting, governance, community outreach, advocacy, the dangers of non-compliance with laws and regulations, and the role they play in the development of public policy.

URBST 729. Employment and Labor Law. 3 hr.; 3 cr. This course will examine primary (case) and secondary (commentary) materials on the legislative, administrative, and contextual aspects of U.S. employment and labor law, including as they pertain to collective bargaining and union organization. The course will be divided into three parts: (1) U.S. law, employment, and labor relations (including the institutional and sociological aspects of law, a review of the constitutional and common law basis for employment and labor law, and a survey of the history and current status of employment and labor law); (2) The legislative, judicial, and administrative aspects of employment and labor law, including issues concerning jurisdiction, procedure, and interpretation of contracts; (3) Current problems in employment and labor law, with an emphasis on practical applications, will be examined.

URBST 730. The Urban Economy: Growth and Problems. 3 hr.; 3 cr. This course examines the multiple, dynamic industry sectors that compromise an urban economy, along with trends in economic growth and related consequences for employment conditions and patterns of inequality. We will study emergent sectors based on immigrant entrepreneurship as well as declining sectors such as industrial manufacturing. By focusing on New York City, the class examines the economic restructurings of this current period of globalization, and how these changes in the urban economy create opportunities for immigrants, along with hardships for native-born minorities.

URBST 731. Evaluating Urban Policies. 2 hr. plus conf.; 3 cr. This course will focus on strategies and methods for evaluating policies and programs of government agencies and nonprofit social service organizations. It covers the major elements of evaluation research, including evaluation goal setting, outcome measures,

research design, policy significance, and the politics of evaluation. Students will review and analyze evaluation research studies drawn from several public policy areas including education, public assistance, health services, criminal justice, housing, and employment training. No formal prerequisite; URBST 725 recommended.

URBST 732. Researching New York City. 2 hr.; 3 cr. The application of urban research methods to investigate a specific planning or policy challenge in New York City. It gives students the opportunity to work together, in studio format, to scope out a planning or policy problem, to design the appropriate planning or policy process, and then to pursue that process to its conclusion. Course topics vary year to year.

URBST 733. Introduction to Urban Planning. 3 hr.; 3 cr. This course provides a broad introduction to urban planning theories, practices, actors, and issues. It reviews the historical development of modern city planning and introduces the administrative and legal context in which planning takes place. It identifies the multiple players that engage in city planning, as well as the theories that shape different types of planning practice. This class provides an overview of key planning issues including issues like land use and zoning, comprehensive planning, affordable housing, community and neighborhood planning, transportation planning, economic development, and environmental sustainability.

URBST 734. Women, Health, and Society. 2 hr. plus conf.; 3 cr. This course examines the broad range of health issues confronting women. Using basic information on the health status of women in the U.S., the focus is on how this health status is influenced by gender, race, and class. Careful attention is paid to political and economic factors influencing the health of women in our society and to the impact of health policy and social policy on health status. Models of care including the Western medical model as well as some of the new and emerging models are explored. Finally, we examine the latest thinking on specific health issues women face including reproductive health, mental health, peri- to post-menopause, sexually transmitted diseases, and aging.

URBST 735. NYC Land Use Planning Process. 2 hr. plus conf.; 3 cr. This course examines the ways in which New York City has historically exercised its zoning authority and has created a variety of institutions to intervene in the zoning process. It examines the role of real estate interests, the general public, and the city government agencies specifically charged with planning functions.

URBST 736. Urban Epidemics: Tuberculosis to AIDS. 3 hr.; 3 cr. The course will deal with infectious diseases in American cities over time. Severe epidemics of contagious disease are a creation of civilization, requiring as they do the large population that crowded cities provide. A number of devastating diseases will be considered, among them tuberculosis, cholera, syphilis, hepatitis, polio, and AIDS, along with their effect on city life. The social construction of disease and the changing cultural meanings of different diseases will be dealt with. Special emphasis will be placed on the role of stigma and discrimination in how society reacts to those who have a disease.

URBST 737. U.S. Health System. 2 hr. plus conf.; 3 cr. This course describes and analyzes health care delivery and financing in the U.S. using concepts and data from sociology, economics, history, philosophy and political science. It begins with the history of American medical practice and education, tracing the ways in which scientific ideas, technological innovation and the politics of professional competition shaped the current U.S. health care system. Next, the patterns of illness in the U.S. population are described in relation to the distribution of health care resources and other social and economic resources. Issues of health services access, quality, financing and cost are discussed, including the ethics of resource distribution. The U.S. health care system is then compared to the systems in Canada, Japan and several European countries. The recent history of health care reform in the U.S. is analyzed and students engage in a debate over current and future policy options.

URBST 738. Emerging Diseases and Public Policy. 2 hr. plus conf.; 3 cr. This course deals with the problem of "Emerging Diseases" and the policy implications that they entail. Emerging diseases are broadly defined to include: (1) new diseases that have not been seen before (e.g., HIV, SARS, Lyme); (2) diseases that are spreading into geographic areas from which they have been absent (e.g., Dengue Fever and Dengue Hemorrhagic Fever); and (3) older diseases that were in significant decline but have now reversed direction (e.g. tuberculosis itself, and also in its antibiotic resistant form) and pose a major threat to the public's health. The course emphasizes the social causation of infectious disease (i.e., the political, economic, social, and cultural practices that inadvertently favor the emergence of disease) and the social construction of disease (i.e., how diseases and their victims are perceived, and how that helps or hinders measures aimed at controlling them). The course entails reading both theoretical and descriptive material and emphasizes learning a body of factual material.

URBST 739. Health Policymaking. 2 hr. plus conf.; 3 cr. This course examines the process of health policymaking at the city, state, and federal levels of government, from agenda-building through policy formulation, adoption, implementation, and evaluation of health policies. The relationships among government executives, legislators, bureaucrats, advocates, and other participants will be analyzed.

URBST 740. Delivery of Public Services. 2 hr. plus conf.; 3 cr. This course examines the theory and practice of public service delivery by urban government within the context of budgetary constraints and the politicization of issues relating to public services. New York City's practices are compared with public service

delivery in other political jurisdictions in the United States and other countries.

URBST 741. Labor Unions and Industrial Relations. 2 hr. plus conf.; 3 cr. This course will examine labor-management relations in the contemporary U.S., considering both the internal dynamics of management, and the structure, governance, and goals of labor unions. Particular emphasis will be given to comparing and contrasting labor relations in unionized and non-unionized workplaces, and in different sectors of the economy (manufacturing, services, and government). Topics to be covered include: the development of management's industrial relations policies, the impact of the changing international economy on labor, the dynamics of collective bargaining, decision-making processes within unions, and problems of union democracy.

URBST 742. Public Budgeting. 2 hr. plus conf.; 3 cr. This course examines contemporary government budgeting practices within the context of urban politics, public administration, collective bargaining, and federal and state impacts on local budgeting. The emphasis is on the budgeting process in New York City, beginning with the role of the fiscal crisis of 1974–75 in reforming City government budgeting.

URBST 743. Advocacy, Politics, and Disease. 3 hr.; 3 cr. This course is concerned with the politics of emergent diseases, the controversies and conflicts among various social groups and the impact on whether or not an emergent disease is recognized as a legitimate ailment. These groups might include communities of sufferers, "disease champions," medical specialists, and their disciplinary organizations, biomedical researchers and their institutions, politicians and political institutions at the local, state, and federal levels, and governmental bureaucracies. It also examines factors that determine what level of priority emergent diseases receive in the allotment of scarce financial and bio/scientific resources. The course emphasizes diseases found disproportionately in urban populations, but not to the exclusion of diseases found scattered in the general population.

URBST 744. Human Resource Management. 2 hr. plus conf.; 3 cr. This course examines personnel management, including the legal issues associated with the day-to-day employment related decisions and actions of managers. The Human Resources function is divided into major areas of Personnel, Labor Relations, Equal Employment Opportunity, and discipline. Students will openly discuss topics associated in the context of problems that most typically arise in the work place. The framework for studying the topics will be reading federal, state, and local laws, along with reviewing the government policies and court decisions.

URBST 745. Community Organization. 2 hr. plus conf.; 3 cr. Analysis of the structure and organization of urban communities and how community resources can be mobilized to solve social and economic problems.

URBST 746. Urban Transportation Policy. 2 hr. plus conf.; 3 cr. This course provides an overview of urban transportation policy in the United States. Course topics include the historical relationships between transportation innovations and urban development; the evolution of federal transportation policy; the impact of the Interstate highway system on U.S. metropolitan areas; the decline and revival of mass transit in U.S. cities; policies for combating traffic congestion, metropolitan sprawl and air pollution; the impact of current transportation policies on women, the elderly and the poor; and recent efforts to encourage the development of pedestrian-friendly cities.

URBST 747. Human Resources and Law. 2 hr. plus conf.; 3 cr. This course introduces the principles of employment law. Students are introduced to the principal theories, policies and literature concerning federal and state regulations in the private and public sectors, in the context of problems that typically arise in the workplace. Students will be exposed to statutes and substantive case law using a case study approach. The statutes and case law examined encompass employment discrimination, New York State employment law statutes and regulations, sexual orientation, Fair Labor Standards Act, American with Disabilities Act, and Family and Medical Leave Act. Lastly, this course will also address issues such as termination-at-will, negligent hiring and retention, wrongful discharge, privacy and drug-free workplace.

URBST 748. Organizational Behavior and Urban Politics. 3 hr.; 3 cr. This course is an introduction to the theory of the operation and behavior of public, private, and nonprofit organizations. Students will be introduced to the works of theorists such as Woodrow Wilson, Max Weber, Frederick Taylor, Chester Barnard, Robert Merton, Abraham Maslow, Douglas MacGregor, Frederick Mosher, Robert Dahl, and Charles Lindblom. Students will examine selected aspects of organizational operation including organizational decision-making, organizational culture, motivation, and politics. The course will study human behavior in organizations at the individual and group level, including the effect of organizational structure on employees' performance. Issues such as diversity in the workplace, ethics, and social responsibility will be analyzed and specific problems discussed in detail. Case analyses are drawn from City and State agencies and contemporary political issues.

URBST 749. Urban Education. 2 hr. plus conf.; 3 cr. This course explores the structure and history of education in the United States, especially in urban areas. It examines such questions as racial, ethnic, and class segregation, financing, school restructuring, school choice, high-stakes accountability policies, the role of socioeconomic class, the education of multicultural populations, and teaching as a profession within the city. Students will gain an understanding of the cultural, economic, sociological, historical, and political factors

that impact teaching and learning in urban schools and the efforts of educators and policymakers to improve teaching and learning within that environment.

URBST 750. Contemporary Urban Theory. 2 hr. plus conf.; 3 cr. This course will explore the principal theoretical perspectives, paradigms and schools of thought that can help understand such urban phenomena as gentrification, urban poverty, urban activism, neighborhood development, segregation, city politics, suburbanization, economic restructuring, and urban planning. Urban theory encompasses many interdisciplinary points of view, and we will explore the work of geographers, sociologists, economists, historians, political scientists and anthropologists. The goal of this course is to understand not only how cities have changed in recent decades, but also the theoretical basis for describing these changes. Students will learn to appreciate the importance of theory for making sense of the social world around us and will learn how to think theoretically, a skill that they can bring to bear in their future analyses of urban issues.

URBST 751. Critical Perspectives on Urban Research. 2 hr.; 3 cr. Critical analysis of urban research methodologies including macroscopic analysis, demography, intensive interviewing, survey research, participant observation, community studies, policy analysis, and evaluation research. Students will gain a critical sense of the political and ideological assumptions that inform research design and implementation.

URBST 752. Women in Urban Society. 2 hr. plus conf.; 3 cr. Effects of urban life on the status of women in the family and the political economy. Current changes and future prospects.

URBST 753. Drugs and Criminal Justice. 2 hr. plus conf.; 3 cr. This course will analyze how the U.S. criminal justice system has impacted on the use of drugs and treatment for drug abuse. It will examine how the Federal, State and local police organizations plan, implement, and coordinate policies and procedures for combating the use of illegal drugs. It will focus in particular on the "War on Drugs." The New York State Penal Laws (Rockefeller Drug laws) will be discussed in depth.

URBST 754. Domestic Violence and Criminal Justice. 2 hr. plus conf.; 3 cr. This course will focus on the operation of the criminal justice system in situations of domestic and family violence. Theories dealing with the sources of domestic violence will be reviewed. The focus will be on the operation of those parts of the criminal justice system having principal responsibility for arresting, prosecuting and adjudicating domestic and family violence cases—the police, prosecution, and courts. The role and effectiveness of contemporary public programs and community remedies for domestic violence will also be analyzed.

URBST 755. Community Development and Redevelopment. 3 hr.; 3 cr. This course is focused on the theory and practice of community development in urban neighborhoods, particularly in neighborhoods undergoing redevelopment. It draws from community-based urban planning processes, community organizing, and contemporary debates around processes of economic development and gentrification. Students will learn how to assess the assets of a neighborhood based on human, social, physical, financial, political, environmental, and cultural capital. Issues of social equity and inclusivity will be emphasized in exploring how community-based planning can be a tool of social justice organizing.

URBST 756. The Law and Urban Society. 2 hr. plus conf.; 3 cr. This course examines the role of law in relation to a variety of urban issues. It begins with an overview of legal processes within the American constitutional system. It then proceeds to address the relationship of law to issues of welfare, housing, racial discrimination, education, and urban crime.

URBST 758. Climate Change and Public Policy. 3 hr.; 3 cr. This course will examine the science, politics, and economics of global climate change and its likely impact on humankind's use of energy. Data showing the past and likely future of global warming will be examined, including alternative interpretations and the controversy surrounding these data. The future of energy production and consumption will be studied. Issues related to climate change including population growth, urbanization, transportation, energy consumption and energy alternatives will be discussed. The role of public policy, especially urban policy, and of the environmental movement will be examined. Videos, Internet sources, and guest speakers will be brought into the course to provide the most up-to-date information.

URBST 759. Planning and Politics. 3 hr.; 3 cr. Land use planning in New York City is governed by a number of regulatory programs including zoning, environmental regulations, and the NYC building code. However, in New York City, as in many other cities, powerful economic and political forces really determine how land is developed. Community and special interest groups confront politicians and developers in determining what eventually gets built. This course looks at all of these factors, focusing in particular on current planning controversies.

URBST 760.1–760.6. Selected Topics in Urban Policy and Planning. 2 hr. plus conf.; 3 cr. An intensive analysis of policies and planning in one urban topic in one semester (e.g., health, housing, transportation, education, welfare). May be repeated for credit.

URBST 762. Jobs and Occupations in Urban Society. 2 hr. plus conf.; 3 cr. Changing job structures and the labor force are considered in relation to employment and unemployment, education, discrimination, government programs, labor unions, corporation policies, and economic and social change.

URBST 763. Race, Ethnicity, and Public Policy. 3 hr.; 3 cr. This course begins with an overview of the

status of racial and ethnic minorities in contemporary American society. It then examines a number of critical policy issues, such as enforcement of antidiscrimination laws, affirmative action, bilingual education, transracial adoptions, the creation of black-majority Congressional districts, and multicultural education.

URBST 765. Urban Poverty. 2 hr. plus conf.; 3 cr.

URBST 770.1–770.5. Roots of the Urban Crisis. 2 hr. plus conf.; 3 cr. Selected topics in the development of urban institutions in American cities and their problems in meeting individual and social needs. May be repeated for credit (each institution will be dealt with in a separate course).

URBST 773. Labor and Globalization. 3 hr.; 3 cr. This course examines the social, political, and economic effects of the expansion of global capitalism, with an emphasis on the impact on workers in the United States, and New York City in particular. The course surveys the phenomenon of "globalization" from several critical angles—as a central aspect of the historic development of capitalism, as a recent development of an old process, as a new frontier in social studies, and as a force for the betterment and/or detriment of the world. It explores theories of economic development and trade and examines those from a variety of differing perspectives. What is the relationship between corporate globalization and economic growth, employment, poverty, and democracy? We examine the impacts on workers and unions and consider models of organizing in the current context including global unions, cross-border solidarity campaigns, anti-sweatshop work, corporate social responsibility, and worker protest. Finally, we consider some of the models of political economy that are posed

URBST 765. Urban Poverty. 2 hr. plus conf.; 3 cr.

URBST 770.1–770.5. Roots of the Urban Crisis. 2 hr. plus conf.; 3 cr. Selected topics in the development of urban institutions in American cities and their problems in meeting individual and social needs. May be repeated for credit (each institution will be dealt with in a separate course).

URBST 773. Labor and Globalization. 3 hr.; 3 cr. This course examines the social, political, and economic effects of the expansion of global capitalism, with an emphasis on the impact on workers in the United States, and New York City in particular. The course surveys the phenomenon of "globalization" from several critical angles—as a central aspect of the historic development of capitalism, as a recent development of an old process, as a new frontier in social studies, and as a force for the betterment and/or detriment of the world. It explores theories of economic development and trade and examines those from a variety of differing perspectives. What is the relationship between corporate globalization and economic growth, employment, poverty, and democracy? We examine the impacts on workers and unions and consider models of organizing in the current context including global unions, cross-border solidarity campaigns, anti-sweatshop work, corporate social responsibility, and worker protest. Finally, we consider some of the models of political economy that are posed as alternatives to corporate globalization.

URBST 775. Changing Urban Institutions. 2 hr. plus conf.; 3 cr.

URBST 780. Fieldwork I. Hr. to be arranged; minimum of 12 hr. a week required; 3 cr. Includes fieldwork assignment and seminar sessions. Fall, Spring

URBST 781. Fieldwork II. Hr. to be arranged; minimum of 12 hr. a week is required; 3 cr. Includes fieldwork assignment and seminar sessions. Must be a different assignment from that of Fieldwork I. Fall, Spring

URBST 784. Research Paper, Tutorial. Hr. to be arranged; 1 cr. May be repeated for up to 2 credits.

URBST 785. Tutorial. May be repeated up to a total of 4 cr. Advanced work involving specialized readings and research on a topic chosen by the student and faculty sponsor. Includes regular conferences with the sponsor and preparation of a paper. May be taken twice if the topics are different. Fall, Spring
URBST 785.1. 1 hr.; 1 cr.
URBST 785.2. 2 hr.; 2 cr.
URBST 785.3. 3 hr.; 3 cr.

URBST 790. Seminar in Selected Topics in Urban Studies. 2 hr. plus conf.; 3 cr. The topic will vary from semester to semester. Fall, Spring

URBST 791. Seminar on Research and Writing. 2 hr. plus conf.; 3 cr. Students will learn to do research, and organize and write an original research paper on a subject of their choice. It may take the form of a policy report, planning study, or research paper that engages current issues or policy debates. This research paper can be used to fulfill the final project required for graduation. Spring


QUEENS
COLLEGE

Getting to the College

Queens College of the City University of New York is located at the corner of the Long Island Expressway (LIE) and Kissena Blvd. (exit 24) in Flushing.

BY CAR

The campus can be reached from Manhattan via the Midtown Tunnel; from the Bronx or Westchester via the Robert F. Kennedy (Triboro), Whitestone, or Throgs Neck Bridge; and from farther out on Long Island via the LIE, Grand Central Parkway, or Northern Blvd.

BY PUBLIC TRANSPORTATION

Via Flushing: Take the Long Island Railroad (LIRR) or the #7 subway to Main St., Flushing. From Main St., take the Q25, Q34, or Q17 bus to Kissena Blvd. in front of the college's main gate.

Via Forest Hills: Take the E, F, M, or R subway to 71st/Continental Ave., Forest Hills. From there, take the Q64 bus to Kissena Blvd. and Jewel Ave.

Via Jamaica: Take the F subway to Parsons Blvd./Hillside Ave. or the Long Island Rail Road (LIRR) to the Jamaica station. From either Hillside Ave. and Parsons Blvd. or Jamaica Ave. and 160th Street, take the Q25 or Q34 bus. Alternatively, from Hillside Ave. and either 169th or 179th Street in Jamaica, take the Q17 bus to the Long Island Expressway and Kissena Blvd.

BUS LINES (NYC TRANSIT AUTHORITY)

Q17 Runs from Main Street, Flushing (IRT and LIRR stations), to 165th Street terminal in Jamaica (passing the IND 179th Street station). Travels along Kissena Blvd., the LIE service road, 188th Street, and Hillside Ave. Stops at Kissena Blvd. and the LIE, two blocks north of the main gate.

Q25 & Q34 Both run from Main Street, Flushing (IRT and LIRR stations), along Kissena and Parsons Blvds. to Jamaica Ave. and 160th Street (BMT and IND connections), and stop at the main gate.

Q44 Runs from West Farms Square, Bronx (IRT station), to Sutphin Blvd., Jamaica (LIRR station). Stops at Main Street and Melbourne Ave., two blocks west of the campus.

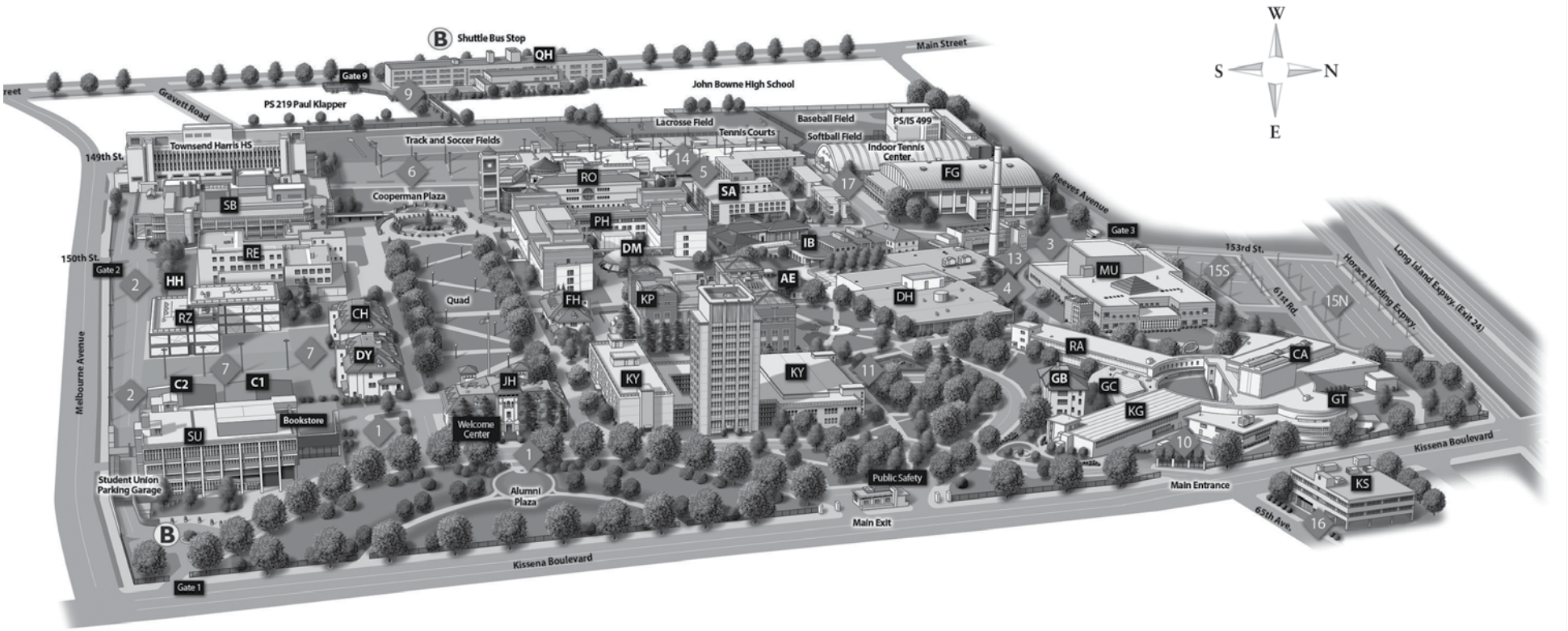
Q64 Runs from 71st/Continental Ave., Forest Hills (IND station), along Jewel Ave. to 165th Street. Stops one block south of the campus at Kissena Blvd. and Jewel Ave.

Q88 Runs from Springfield Blvd. and Union Turnpike along Springfield Blvd. to 73rd Ave., along 73rd Ave. to 188th Street, along 188th Street to the LIE, along the LIE service road to Queens Blvd. and Woodhaven Blvd. Stops at Kissena Blvd. and the LIE, two blocks north of the main gate.

Queens College Shuttle

All students may ride the Queens College Shuttle, which travels between the college and mass-transit hubs at Jamaica Station and the Flushing–Main Street Station. For routes and schedules, visit www.qc.cuny.edu/shuttle.

Campus Map



Alumni Hall	**AE**	Delany Hall	**DY**	Goldstein Theatre	**GT**	Kissena Hall	**KS**	Rathaus Hall	**RA**	Student Union	**SU**
Campbell Dome	**DM**	Dining Hall	**DH**	Honors Hall	**HH**	Klapper Hall	**KP**	Razran Hall	**RZ**	Summit Apartments	**SA**
Colden Auditorium	**CA**	FitzGerald Gym	**FG**	I Building	**IB**	Music Building Aaron Copland School of Music	**MU**	Remsen Hall	**RE**	James Muyskens Conference Room	
Colwin Hall	**CH**	Frese Hall	**FH**	Jefferson Hall	**JH**	Powdermaker Hall	**PH**	Rosenthal Library	**RO**	◆ Parking Lots	
Continuing Ed 1	**C1**	G Building	**GB**	Kiely Hall	**KY**	Queens Hall	**QH**	Science Building	**SB**	Ⓑ Shuttle Bus Stop	
Continuing Ed 2	**C2**	Gertz Center	**GC**	King Hall	**KG**						

QUEENS COLLEGE CUNY

Notes