Statement of Nondiscrimination
The College of Staten Island is an Equal Opportunity and Affirmative Action institution. The College does not discriminate on the basis of race, color, national or ethnic origin, religion, age, sex, sexual orientation, transgender, disability, genetic predisposition or carrier status, alienage or citizenship, veteran or marital status in its student admissions, employment, access to programs, and administration of educational policies.

Lisa Ebert, Acting Director of the Office of Diversity and Compliance, serves as the College's Compliance Officer, Title IX Coordinator, and 504 Coordinator. Her office is located in Building (1A), Room 302, and her telephone number is 718.982.2250.
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. The responsibility for compliance with the regulations in each catalog rests entirely with the student.

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2800 Victory Blvd, Staten Island, NY 10314
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MESSAGE FROM THE PRESIDENT

Greetings. I am delighted to welcome each and every one of you to the graduate programs at the College of Staten Island, a senior college of The City University of New York.

As the only public institution of higher learning in the borough, CSI is committed to providing you with a variety of learning opportunities both in and outside of the classroom, which, in combination with your own hard work, we are sure will help you continue toward your educational, philosophical, and professional goals. Here on our beautiful 204-acre campus, you will join other students who are pursuing master's degrees in 14 different programs of study, and earning doctoral degrees we offer in cooperation with the CUNY Graduate Center.

CSI's administration, faculty, and staff are singularly dedicated to our students' success, and, as we affirm in the College's mission statement, "practice their commitment to educational excellence as they instill in students preparing to enter their chosen careers an enduring love of learning, a sensitivity to pluralism and diversity, a recognition of their responsibility to work for the common good, and an informed respect for the interdependence of all people."

This focus on mutual interdependence and civic responsibility is nicely illustrated by the research focuses of many of our extraordinary faculty members. For example:

- Professor Eric Ivison (History) has for several years conducted archeological research in Turkey on Byzantium, and was recently awarded a grant to support his work by the Loeb Classical Foundation of Harvard University;
- Ten faculty members in the Modern China Studies Group collaborated with The New York Times to design and develop curricular guides for a Website to complement the Discovery Channel's four-part series, China Rises;
- Professor Cate Marvin (English) has received a 2007 Whiting Writers Award, in addition to a number of other awards in creative writing. Her poems have appeared in The New England Review, Poetry, The Kenyon Review, Fence, The Paris Review, The Cincinnati Review, Slate, Verse, Boston Review, Ninth Letter, and Tri-Quarterly;
- Professor William Wallace's (Biology) area of research, broadly defined as ecotoxicology, examines how metals, such as cadmium, zinc, and mercury, are passed from prey to predator in marine food chains. He has developed a novel approach for monitoring metallic contamination in aquatic animals that may have broad applications for risk management and cleanup; and
- Distinguished Professor Fred Naider (Chemistry) was recently elected a fellow of the American Association for the Advancement of Science and is a board member of the Federation of the American Societies for Experimental Biology. He has received numerous grants from the National Institutes of Health, the National Science Foundation, the U.S.-Israel Binational Science Foundation, and was a Fulbright Fellow.

These are only a few examples of what you will find at CSI. I encourage you to explore this catalogue and our Website, www.csi.cuny.edu, to learn more about the programs and the people you are joining by becoming a member of our College community today.

Welcome, and I look forward to seeing you on campus!

Tomás D. Morales, PhD

President
Administration

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Physical Therapy
   Jeffrey Rothman, BS, MA, EdD
Political Science, Economics, and Philosophy
   Vasilios Petratos BA, PhD
Psychology
   Nan Sussman, BA, MA, PhD
Sociology, Anthropology, and Social Work
   Jacqueline LeBlanc, BS, MS, PhD
ABOUT THE COLLEGE

The College of Staten Island is a four-year, senior college of The City University of New York that offers exceptional opportunities to all its students. The Master’s degree is awarded in selected fields of study: Biology (MS); Business Management (MS); Cinema and Media Studies (MA); Computer Science (MS); Education: Childhood (Elementary) Education (MSEd); Adolescence (Secondary) Education (MSEd); Special Education (MSEd); English (MA); Environmental Science (MS); History (MA); Liberal Studies (MA); Neuroscience, Mental Retardation, and Developmental Disabilities (MS); Nursing: Adult Health Nursing (MS) and Gerontological Nursing (MS). Post-Master’s Advanced Certificates are awarded in Leadership in Education, Adult Health Nursing, Cultural Competence, Gerontological Nursing, and Nursing Education.

The Doctoral program in Nursing and Physical Therapy are offered jointly with The City University Graduate School, University Center. The College also participates in The City University Doctoral programs in Biology, Chemistry, Computer Science, and Physics.

The academic year follows a two-semester pattern, with a separate summer session. Classes are scheduled days, evenings, and weekends.

The College of Staten Island of The City University of New York was founded in 1976 through the union of two existing colleges - Staten Island Community College and Richmond College. Staten Island Community College, the first community college in the University, opened in 1955. Richmond College, an upper-division college offering undergraduate and graduate degrees to students who had successfully completed the first two years of college study elsewhere, was founded in 1965. The merger of these two colleges resulted in the only public four-year institution of higher learning on Staten Island.

The Campus
Completed in 1994, the 204-acre campus of CSI/CUNY is the largest site for a college in New York City. Set in a park-like landscape, the campus is centrally located on the Island. Mature trees and woodlands, flowering trees and ornamental plantings, fields and outdoor athletic facilities, the Great Lawn, sculpture, and seating areas create a green oasis in an urban setting.

Fourteen renovated neo-Georgian buildings serve as classrooms, laboratories, and offices. The academic buildings house approximately 300 classrooms, laboratories and instructional spaces, study lounges, department and program offices, and faculty offices. The Library and Campus Center serve as focal points for the Academic Quadrangles with the Center for the Arts located midway between the Quadrangles at the fountain plaza. The Sports and Recreation Center and the athletic fields are located near the main entrance to the campus.

Fifteen works of art, a permanent collection of works either commissioned or purchased through the Art Acquisitions Program of the Dormitory Authority of the State of New York, are installed throughout the campus. Artists and the free-standing sculptures and reliefs are: Vincenzo Amato, Body of Hector/Glaucus; Miriam Bloom, Shooliloo; Fritz Bultman, Garden at Nightfall (extended loan); Chryssa, Untitled; Lucille Friedland, Big Stride (gift of the artist); Red Grooms, Marathon; Sarah Haviland, Staten Island Arch; Jon Isherwood, Borromini’s Task; Zero Higashida, Maquette for a Small Universe; Valerie Jaudon, Untitled; Niki Ketchman, Red Inside; Win Knowlton, Ellipse; Mark Mennin, Torak; Don Porcaro, Moon Marker; and Hans Van de Bovenkamp, Stele in the Wind.

Astrophysical Observatory: The 16-foot dome astrophysical observatory was completed in 1996. In addition to serving students in astronomy courses, the facility is used for faculty and student research projects, environment monitoring projects, and community programs.

Biological Sciences/Chemical Sciences Building: An ultramodern facility, the building contains classrooms, laboratories, faculty offices, research facilities for faculty and students, the Center for Environmental Science, and the Center for Developmental Neuroscience and Developmental Disabilities.

Campus Center: The Campus Center incorporates facilities for a complete program of student activities and offices for student organizations, food services, health services, a study lounge, bookstore, and the studios of WSIA-FM, the student-operated radio station.

Center for the Arts: Entered from the Great Lawn and from the Alumni Walk, the Center for the Arts houses two academic wings for programs in the arts as well as superb public spaces: the Clara and Arleigh B. Williamson Theatre, a 900-seat concert hall, a recital hall, an experimental theater, lecture halls, an art gallery, and a small conference center.

Library: Designed with inviting reading rooms, open shelves, and study carrels, its research and study facilities are enhanced by computer data-based operations available to all students. Library Media Services makes accessible pedagogical multimedia materials to distant classrooms and laboratories by means of the campus fiber-optic network.

Sports and Recreation Center: This 77,000 square-foot, multipurpose facility and surrounding
athletic fields serve the intercollegiate and intramural sports and recreation programs for students.

Research Institutes and Centers

Center for Developmental Neuroscience and Developmental Disabilities
Dr. Robert Freedland, Director
Office: Biological Sciences/Chemical Sciences Building (6S), Room 229
The Center for Developmental Neuroscience and Developmental Disabilities (CDN) is supported jointly with the New York State Institute for Basic Research (IBR). The Center conducts, promotes, and sponsors research, education, and training in the developmental neuosciences with special emphasis on research and educational programs in the specific field of developmental disabilities. The Center provides for collaborative efforts between the College and IBR in offering the Master of Science degree in Neuroscience, Developmental Disabilities, and Mental Retardation, as well as with the University’s Doctoral programs in Biology, subprogram in Neuroscience and Physiology, and in Psychology, subprogram in Learning Processes. On the CSI campus, the Center has established research laboratories for investigations in cellular and molecular neuroscience and provides advanced research training for graduate and undergraduate students.

Center for Environmental Science
Dr. Alfred M. Levine, Director
Office: Biological Sciences/Chemical Sciences Building (6S), Room 310
The Center for Environmental Science, established in 1987, provides support for research and policy recommendations concerning environmental problems. One of the major purposes of the Center is to define and solve environmental problems on Staten Island and its environs through research that includes studies of respiratory diseases, toxic and carcinogenic chemicals in the air, and the population at risk for lung cancer.

Center for the Study of Staten Island: Staten Island Project (SIP)
Dr. Mirella Affron, Director
The Center for the Study of Staten Island is designed to integrate the work of the College with the public affairs concerns of the people of Staten Island. To that end, it mediates and facilitates the collaboration of the College's faculty, students, and staff with government, civic organizations, and businesses in order to identify and assist in finding solutions to the borough's pressing public issues. More specifically, the Center serves as an information and consultation resource to prepare citizens and leaders to make better informed decisions about public life; it fosters the development of faculty research and undergraduate and graduate education through engagement with the Staten Island community; and it builds bridges to other public affairs institutes and local communities as a spur to innovations in public life on Staten Island. Whenever possible, the Center seeks to partner with community groups and agencies in advancing initiatives of mutual interest and in fulfilling consonant missions.

While encouraging and facilitating debate that accommodates differing and sometimes conflicting positions on controversial issues crucial to the community, the Center is committed to maintaining a nonpartisan stance.

Center for Interdisciplinary Applied Mathematics and Computational Sciences
The Center for Interdisciplinary Applied Mathematics and Computational Sciences brings together a wide range of research faculty and students with interests in interdisciplinary applications of mathematics and computational science.

The Center’s activities include the use of the campus super-computer, faculty collaboration, grant writing, student mentoring, undergraduate research, and sponsored lectures. More information can be found at www.math.csi.cuny.edu/ciamcs.

The City University of New York
The City University of New York (CUNY), of which the College of Staten Island is a part, traces its beginning to 1847 and a public referendum that provided tuition-free higher education for residents of New York City. The municipal college system grew rapidly and its various colleges were consolidated as The City University of New York by an act of the New York State Legislature in 1961. CUNY is comprised of 11 senior colleges, six community colleges, the William E. Macaulay Honors College at CUNY, the Graduate School and University Center, the CUNY Graduate School of Journalism, the CUNY School of Law, the CUNY School of Professional Studies, and the Sophie David School of Biomedical Education. It is the largest municipal college system and the third largest university in the nation.

The Board of Trustees
CUNY is governed by the Board of Trustees composed of 17 members, ten of whom are appointed by the Governor of New York State, and five by the Mayor of New York City. The chairperson of the University Faculty Senate serves ex officio, without vote; the chairperson of the University Student Senate serves ex officio, with vote. The individual colleges of CUNY have considerable latitude in governing their own affairs through various bodies representing faculty, students, and administrators. The Board of Trustees decides overall University policy and approves major new collegiate plans and programs.
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Executive Vice Chancellor and Chief Operating Officer
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College of Staten Island
Tomás Morales
York College
Marcia Keizs

Sponsorship and Accreditation
CSI is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104; 215.662.5606. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Commission on Recognition of Postsecondary Accreditation. The MA in Liberal Studies is accredited by the Association of Graduate Liberal Studies Programs. The MS in Adult Health Nursing is accredited by the National League for Nursing Accrediting Commission, 61 Broadway, New York, NY 10006; 212.363.5555. The DPT Program is accredited by the Commission of Accreditation in Physical Therapy Education (CAPTE) and in keeping with the American Physical Therapy Association (APTA) recommendation that physical therapists be doctorally credentialed.

Copies of these accreditation documents as well as the respective accreditation documents for the various academic disciplines are available for review in the College Library.

Mission of the College of Staten Island
The College of Staten Island, one of the 11 senior colleges of The City University of New York, is, like the University, committed to both access and excellence. This double commitment is especially critical given CSI’s status as the only public college on Staten Island and the one instance in which CUNY is represented in a borough by one unit alone. The College offers the associate degree in selected areas, a comprehensive range of baccalaureate programs,
selected master’s programs, and, in cooperation with
the CUNY Graduate Center, doctoral programs.

The College of Staten Island’s remarkable
campus, with its superb laboratories, studios, and
classrooms, serves the pivotal endeavors of teaching
and research that promote discovery and dissemination
of knowledge while developing human minds and
spirits.

The College’s faculty, administration, and staff
practice their commitment to educational excellence as
they instill in students preparing to enter their chosen
careers an enduring love of learning, a sensitivity to
pluralism and diversity, a recognition of their
responsibility to work for the common good, and an
informed respect for the interdependence of all people.

Goals

1. To view the quality and success of the
College’s educational mission not by the
qualifications of entering students alone but
by the qualifications of those we educate and
those who receive degrees.

2. To foster and enhance faculty commitment to
effective teaching and learning.

3. To encourage and support faculty scholarship,
research, publication, creative work, and the
involvement of students as partners in
research and creative activities.

4. To extend the benefits of the College to the
larger community by making educational,
intellectual, and cultural activities available to
all, and by supporting research programs that
serve the people of Staten Island, its agencies,
and institutions.

5. To offer rigorous general education and
degree programs in the liberal arts and
sciences and in a range of professional
disciplines.

6. To advance the effective use of technology in
all aspects of the College’s operations, so as
to strengthen support services, teaching, and
research.

7. To provide, with efficiency and sensitivity,
the broad range of academic and
administrative services required by a
commuting student population.

8. To further, in all aspects of the College’s
activities, an appreciation of the pluralism of
American society and an awareness of the
importance of global education and
international understanding.

9. To cultivate civility and dialogue between
and among all members of the College’s
communities.

10. To build academic and research programs
through collaborative initiatives with the
community colleges, senior colleges, and the
Graduate Center of The City University of
New York, and with national and
international counterparts.

11. To forge professional relationships with
educators at all levels, and to work
collectively to seek new and effective
approaches to K-12 education.

12. To strengthen student interest in lifelong
learning, their purposeful participation in the
issues that face our society, and their lively
commitment to their own physical and
spiritual well-being.
ADMISSIONS

Office of Recruitment and Admissions
Acting Director, Emmanuel Esperance, Jr.
Building 2A, Room 103
718.982.2010
Visit our Website: www.csi.cuny.edu/admissions

Graduate Applications
Application booklets and information about the graduate programs may be obtained from the:
Office of Recruitment and Admissions
College of Staten Island / CUNY
North Administration Building (2A), Room 103
2800 Victory Boulevard
Staten Island, NY 10314
Telephone: 718.982.2010
Email: admissions@mail.csi.cuny.edu
www.csi.cuny.edu

You may apply online or download an application booklet from www.csi.cuny.edu/graduatestudies.

Admission Requirements for Graduate Programs
Applicants for graduate study should have a bachelor's degree or its equivalent from an accredited institution of higher education. Transcripts from all post-secondary institutions attended are required. The cumulative grade point average (GPA) used for admission will be based on all undergraduate and/or graduate grades. In addition, applicants are expected to meet the specific requirements of the graduate program to which they are applying. Some programs may require scores on the Graduate Record Examinations (GRE) or Graduate Management Admissions Test (GMAT). Please see the Summary of Admissions Requirement Table or the section on a particular graduate program for specific requirements.

A minimum TOEFL score of 550 (paper), 213 (computer), or 79-80 (Internet) is required for all students for whom English is a second language.

Applications are evaluated after all official transcripts and supporting documents have been received and applicants are notified by mail regarding their acceptance.

Non-Matriculated Status
A student who does not fully qualify for matriculation may be admitted as a non-matriculated student. No more than 12 credits may be taken as a non-matriculated student unless the student already holds a master's degree. Acceptance as a non-matriculated student in no way commits the College to grant matriculation at a later date.

Non-matriculated students who are completing undergraduate coursework to qualify for admission must maintain a minimum GPA of 3.0 to be considered for matriculation.

Non-Matriculated Study for Visiting Students
Students enrolled in another college may enroll as visiting non-matriculated students if they are in good academic standing at their home college and have permission to take courses at CSI. In addition, a selected number of courses in participating programs/departments are available for students who wish to take courses for personal or professional reasons, without intending to pursue a degree. Not all graduate courses are open to non-matriculated students.

For more information, please obtain an “Application for Graduate Non-Matriculated Study for Visiting Students” from the Office of Recruitment and Admissions or download a copy from www.csi.cuny.edu/graduatestudies.

Doctoral Programs
Application to the Doctoral programs in Biology (Neuroscience), Computer Science, Nursing, Physical Therapy, Physics, Polymer Chemistry, and Psychology (Learning Processes) is made directly to the Graduate School and University Center/CUNY, 365 Fifth Avenue, New York, NY 10016; 212.817.7470; email: admissions@gc.cuny.edu. The Website address is www.gc.cuny.edu.

Readmission
Graduate students who do not register for a semester and then decide to return in a subsequent semester, and who have not maintained their matriculated status, must apply for readmission at least 30 days before registration. Requirements for programs may change and students applying for readmission must meet current requirements. Students who have a GPA below 3.0 will need approval from their program coordinator. Readmission is not guaranteed and may be denied in such cases. You can download a graduate readmission form from www.csi.cuny.edu/graduatestudies.

Veterans
The veterans advisement service is supervised by the Registrar. Assistance is available in interpreting regulations and policies of the Veterans Administration, and educational and financial counseling is offered. The Office of the Veterans Adviser is in the North Administration Building (2A),
Immunization Requirement
New York State Public Health Law requires immunization against measles, mumps, and rubella for some students. All students born on or after January 1, 1957, who are enrolling for six or more equated credits must have proof of immunization on file at the College Health Center, Campus Center (1C), Room 112, one week prior to registration. Transfer students must request that their health records be transferred to College of Staten Island. New York State Public Health Law 2167 requires all students to complete and return the meningitis vaccination response form prior to registration. Information and the immunization forms are available at the Health Center and the Registrar’s Office, or you may download a copy from wwwcsi.cuny.edu/registrar/importantforms.htm.

Teacher on Sabbatical Program
The Teachers on Sabbatical Program is designed especially for veteran teachers who wish to hone their classroom management skills, effectively incorporate writing in their disciplines, apply assessment data to promote student learning, and increase their effective use of technology. Courses are taught by expert faculty from the College of Staten Island's Education Department and other disciplines. Topics covered are applicable to career professionals across teaching levels and subject specialization and address timely pedagogical issues. For more information, visit www.csi.cuny.edu/teachersabbatical.
## Summary of Admissions Requirement Table

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>DEGREE EARNED</th>
<th>GPA/COURSES</th>
<th>EXAMINATION</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology (MS)</td>
<td>Baccalaureate degree in Biology or related discipline with required undergraduate biology courses</td>
<td>2.75 in all undergraduate courses, 3.0 in science and mathematics courses</td>
<td>GRE: general test, subject test in biology</td>
<td>Two letters of recommendation; Supplemental Department Application</td>
</tr>
<tr>
<td>Business Management (MS)</td>
<td>Baccalaureate degree in Accounting, Business, or related fields with required undergraduate courses</td>
<td>3.0 undergraduate average; accounting, communications, computer fundamentals, economics, and quantitative methods</td>
<td>GMAT Students with degrees in corporate communications may choose to take the GRE.</td>
<td>Two letters of recommendation including a professional one if possible. Steering committee may request an interview</td>
</tr>
<tr>
<td>Cinema and Media Studies (MA)</td>
<td>BA or BS in liberal arts or sciences</td>
<td>3.0 average in courses required for Cinema Studies BA or Communications BS at CSI or their equivalent, including CIN 100 or COM 150</td>
<td>None</td>
<td>Three letters of recommendation; a one- to two-page statement of intent; writing sample, 10-12 pages; priority deadline: 4/15 (fall), 11/15 (spring)</td>
</tr>
<tr>
<td>Computer Science (MS)</td>
<td>BS in Computer Science or related discipline</td>
<td>3.0 average in major; calculus, linear algebra, probability; and seven computer science courses or equivalent</td>
<td>GRE: general test</td>
<td></td>
</tr>
<tr>
<td>Education, Childhood (Elementary) (MSEd)</td>
<td>For Sequences 1 and 2: Baccalaureate degree in a liberal arts and sciences major, or 36 credits in a liberal arts and sciences concentration; at least six approved credits each in English, history, mathematics, and science</td>
<td>For Sequences 1 and 2: 2.75 undergraduate average</td>
<td>Sequence 1: New York State Initial or Provisional Certification in childhood or elementary education. Sequence 2: None</td>
<td>Two academic or professional letters of recommendation; a one- to two-page letter of intent; priority deadlines: last Monday in April (fall), third Monday in November (spring)</td>
</tr>
<tr>
<td>Education, Adolescence (Secondary)(MSEd)</td>
<td>For Sequence 1: Baccalaureate degree in appropriate major. For Sequence 2: Baccalaureate degree in appropriate major or 32 approved credits in an appropriate subject area</td>
<td>For Sequences 1 and 2: 2.75 undergraduate average</td>
<td>Sequence 1: New York State Initial or Provisional Certification in adolescence or secondary education. Sequence 2: None</td>
<td>Two academic or professional letters of recommendation; a one- to two-page letter of intent; priority deadlines: last Monday in April (fall), third Monday in November (spring)</td>
</tr>
<tr>
<td>Education, Special (MSEd)</td>
<td>For Sequences 1 and 2: Baccalaureate degree in a liberal arts and sciences major, or 36 credits in a liberal arts and sciences concentration; at least six approved credits each in English, history, mathematics, and science</td>
<td>For Sequences 1 and 2: 3.0 undergraduate average, 12 credits in psychology with grades of 3.0</td>
<td>Sequence 1: New York State Initial or Provisional Certification in childhood or elementary education Sequence 2: None</td>
<td>Two academic or professional letters of recommendation; a one- to two-page letter of intent; priority deadlines: last Monday in April (fall), third Monday in November (spring)</td>
</tr>
<tr>
<td>Leadership in Education (Post-Master's Advanced Certificate)</td>
<td>Master's degree</td>
<td>3.0 graduate average</td>
<td></td>
<td>Four years of teaching, three professional letters of recommendation, interview</td>
</tr>
<tr>
<td>English (MA)</td>
<td>BA with at least 32 credits in English</td>
<td>3.0 undergraduate average, 3.0 in English courses</td>
<td>None</td>
<td>After initial review, letter of intent, recommendations, and/or interview may be requested.</td>
</tr>
<tr>
<td>Environmental Science (MS)</td>
<td>Baccalaureate degree</td>
<td>2.7 undergraduate average; 3.0 in science and engineering courses; chemistry physics, calculus, and ecology</td>
<td>GRE: general test</td>
<td>Interview</td>
</tr>
<tr>
<td>History (MA)</td>
<td>Baccalaureate degree</td>
<td>3.0 undergraduate average, 3.0 in history courses</td>
<td>None</td>
<td>Two academic letters of recommendation; letter of intent</td>
</tr>
<tr>
<td>Liberal Studies (MA)</td>
<td>Baccalaureate degree</td>
<td>3.0 undergraduate average</td>
<td>None</td>
<td>Interview for conditional admission</td>
</tr>
<tr>
<td>Neuroscience, Mental Retardition, and Developmental Disabilities (MS)</td>
<td>Baccalaureate degree</td>
<td>3.0 undergraduate average in biology, mathematics, psychology, or other science courses; statistics</td>
<td>None</td>
<td>Three letters of recommendation</td>
</tr>
<tr>
<td>Program</td>
<td>Requirements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nursing Adult Health (MS)/Gerontological (MS)</strong> Clinical Nurse Specialist OR Dual Clinical Specialist/Nurse Practitioner</td>
<td>BS in Nursing or BS in appropriate major with specified courses 3.0 in undergraduate nursing courses, including statistics, nursing research, health assessment, pharmacotherapeutics, leadership in management of patient care, community health nursing. New York State license as RN Essay, two professional references One year experience with BS in Nursing Three years experience with Bachelor's in another field</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nursing (Post-Master's Advanced Certificate)</strong> Adult Health Nursing Gerontological Nursing</td>
<td>Master's Degree in Nursing Master's-level courses in pathophysiology, health assessment, and pharmacology. Candidates who do not have the required courses may take them before beginning the required courses.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nursing (Post-Master's Advanced Certificate)</strong> Cultural Competence Nursing Education</td>
<td>Master's Degree in Nursing or be accepted as a master's degree student in CSI's graduate Nursing program.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TUITION AND FEES

Office of the Bursar
North Administration Building (2A), Room 105
Bursar: Michael D. Baybusky
718.982.2060
Visit our Website: www.csi.cuny.edu/bursar

All tuition and fees schedules listed in this Catalog and in any registration material issued by the College are subject to change by action of the Board of Trustees without prior notice.

All tuition and fee schedules are necessarily subject to change without notice, at any time, upon action by the Board of Trustees of The City University of New York regardless of tuition and fee schedules in effect at the time of this printing.

If you do not make full payment on 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, including agency fees, attorney fees, and court costs, in addition to whatever amounts you owe the College.

In addition, non-payment or a default judgment against your account may be reported to a credit bureau and reflected in your credit report.

Graduate Tuition for Master’s Degree Programs

New York State Residents

<table>
<thead>
<tr>
<th></th>
<th>Part-time per equated credit</th>
<th>Full-time per semester</th>
<th>Excess hours per hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>$270</td>
<td>$85</td>
<td>$3,200</td>
<td>$65</td>
</tr>
</tbody>
</table>

Non-State Residents (including foreign students)

<table>
<thead>
<tr>
<th></th>
<th>Part-time per equated credit</th>
<th>Full-Time per equated credit</th>
<th>Excess hours per hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>$500</td>
<td>$500</td>
<td>$500</td>
<td>$85</td>
</tr>
</tbody>
</table>

Graduate students who register in an undergraduate course as part of their program, and are receiving graduate credit for the course, will be charged at applicable graduate rates according to residency. Charges to be included are not to exceed the stipulated maximum semester rate for the applicable graduate tuition. Graduate students taking an undergraduate course as non-degree students, and receiving undergraduate credit, pay applicable undergraduate tuition. Tuition is subject to change without prior notice by the CUNY Board of Trustees.

Student Status
Graduate students are considered part-time if registered for 11 equated credits or less, and full-time if registered for 12 or more equated credits.

Senior Citizens
Individuals satisfying the New York City/State residency requirements and who are 60 years of age or older (as of the first day of the semester or session) are permitted to enroll in undergraduate courses on a space-available basis. Proof of age is required by the College; the following forms of proof of age are acceptable: Medicare card, driver’s license, or birth certificate.

Administrative fee: A non-refundable administrative fee of $65 per semester or session is charged senior citizens who are enrolling on an audit basis. The application fee and Student Activity Fee are not charged. Senior citizens as students are responsible for the Consolidated Service Fee and any other fees they might incur.

Graduate courses: Senior citizens are not permitted to register free of tuition or fee for graduate-level courses. Senior citizens may register for graduate courses on a space-available basis and are charged the graduate tuition rate regardless. No exception is made for matriculated or non-matriculated status. The Student Activity Fee and application fee must also be paid.

Place of Residence
Students are eligible for the tuition rate for residents of New York State if they meet the following requirements for resident status: are 18 years of age or older, are United States citizens or aliens with permanent resident status, have maintained their principal place of abode in New York State for a period of 12 consecutive months immediately preceding the first day of classes for the semester under consideration, and state their intention to live permanently and maintain their principal place of abode in New York State. The residence of a person under the age of 18 is that of his/her parents unless the person is an emancipated minor (one whose parents have intentionally and voluntarily renounced all the legal duties and surrendered all the legal rights of their position as parents). Students currently classified as non-residents, who wish to apply for resident status, must present proof that the above conditions have been met to the Office of Admissions or the Office of the Registrar.
Maintenance of Matriculation Fee
Graduate students who are not registered in a given semester must pay a maintenance of matriculation fee of $750 for New York residents or $1,250 for non-residents a semester if they wish to maintain their matriculated status. If the fee is not paid, the student will be considered to have withdrawn and must apply for readmission.

Non-Instructional Fees
The Student Activity Fee is billed to all students at the following rate:

<table>
<thead>
<tr>
<th>Full-time</th>
<th>Part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>$74</td>
<td>$48</td>
</tr>
</tbody>
</table>

Fees include a $4 contribution to the New York Public Interest Research Group (refundable through the NYPIRG office) and an 85-cent University Student Government fee. Non-instructional fees are non-refundable.

Miscellaneous Fees and Charges
Note: All students pay the Consolidated Service Fee and the Technology Fee.

| Consolidated Service Fee | $15 |
| Technology Fee          | $100 (full-time students per semester) |
|                        | $50 (part-time students per semester) |

| Application              | $125 |
| Readmission             | $10  |
| Late registration       | $25  |
| Reinstatement           | $15  |
| Program change          | $18  |
| Late payment            | $25  |
| Payment reprocessing    | $15  |
| Special examination     | $15 ($5 each additional) |
| Transcript              | $7 each (no fee for other CUNY units) |
| Duplicate diploma       | $15  |
| Duplicate I.D. card     | $5   |
| Duplicate bill          | $5   |
| Thesis binding          | $15  |

Materials Charges
Special materials charges of $10 or more are required in some courses. Details may be found in the Semester Bulletin. Materials charges are not refundable.

Library Fines
Overdue books: general circulation: 10 cents per day, including days on which the Library is closed, to a maximum of the current price of the item.
Reserve items: $1.20 per overdue hour to a maximum of the current price of the item.
Damaged books: borrower must pay any overdue fines up to and including the date the item is reported as being damaged, plus an amount to be determined by the nature and extent of the damage, not to exceed the current price of the item, plus a processing charge of $10.
Lost items: borrower must pay a $10 processing charge in addition to the current price of the item.

Payment
A student is not registered until all financial obligations to the College have been satisfied. Before registration can be completed, students must have paid in full unless the student (a) has been awarded financial aid sufficient to cover tuition and fees, (b) is enrolled in a University Payment Plan, (c) is eligible for a tuition waiver, or (d) is in a special registration status (e.g., veteran).

The registration dates are printed in the Semester Bulletin. During the registration process, a student’s bill is prepared with payment/validation due date indicated. Students registering late will be given a bill at the time of registration and are expected to pay their bill within three or fewer days. If a student’s bill is not paid and a student is not covered by one of the above categories the registration will be canceled. A student who has not fulfilled all financial obligations to the College will be barred from obtaining any transcripts or from registering for the next semester.

Tuition and Fee Refunds
When courses are canceled by the College a full refund of appropriate tuition and fees will be made. In cases of student-initiated withdrawal, the date on which the withdrawal application is received by the Registrar, not the last date of attendance, is considered the official date of withdrawal for the purpose of computing refunds. Withdrawal from a course before the beginning of classes allows a 100 percent refund of tuition only; withdrawal in order to register at another unit of The City University during the same semester allows a 100 percent refund. The withdrawal application form is available from the Registrar. Withdrawals for medical reasons require documentation. Non-attendance of class or informing the instructor of intent to withdraw does not constitute an official withdrawal. The Semester Bulletin contains information about withdrawing from a course and the schedule for refunds.

Students should be aware that withdrawal or failure to complete a course affects their financial aid obligations. Questions about financial aid obligations should be referred to the Office of Student Financial Aid.
Aid. If a portion of tuition charges has been paid with federal financial aid funds, that portion of any tuition refund is returned to the appropriate financial aid program. Details on the allowable refunds are printed in the Semester Bulletin.

**Return of Title IV Funds**

Title IV funds (Pell, SEOG, Direct, and Perkins loans) to recipients who are withdrawn from all courses, officially or unofficially, are subject to recalculation to determine earned federal financial aid. This calculation may result in a requirement of payment toward tuition and fees, which previously was determined to have been satisfied.
FINANCIAL AID

Office of Student Financial Aid
North Administration Building (2A), Room 401
Director: Philippe Marius
Telephone 718.982.2030
Fax: 718.982.2037
Website: www.csi.cuny.edu/finaid

Application Procedures and Deadlines

Obtain/Use a Federal PIN Number at www.pin.ed.gov
Graduate students/spouses – you will need a federal PIN to sign the FAFSA (Free Application for Federal Student Aid) and TAP (Tuition Assistance Plan) applications when you file on the Web. This federal PIN will also be needed to sign the electronic Multiple-Year Promissory Note (e-MPN), if you apply for a Direct Loan, the PIN may also be used to access your federal grant and loan history, which is located at www.nslds.ed.gov.

You may obtain a federal PIN www.pin.ed.gov. You may also have your current PIN emailed to your email address if you have forgotten it.

College Codes
CSI’s FAFSA college code is 002698 and the TAP code is 1417.

Apply on the Web at www.fafsa.ed.gov
Use our Student Service Center where you will be able to ask questions regarding your applications. Appointments may be made by calling 718.982.2601.

If you filed a FAFSA for the last academic year you must file a RENEWAL FAFSA. The RENEWAL FAFSA will have most questions answered with last year’s data. If the data is unchanged, you advance to the next question. Answer all unanswered questions and submit your application. When the Confirmation Page appears on your screen, print a copy for your records. Then use the hyperlink on the Confirmation Page under the heading “New York State Residents” to go to your TAP on the web application. Complete and submit the application for processing. Your federal PIN number on your FAFSA is also recognized as your signature on your TAP on the web application.

Priority Deadlines
The priority deadline is March 30 for students applying for federal and state financial aid for the summer/fall semesters, and November 30 for students applying for federal and state financial aid for just the spring semester.

Federal Financial Aid
Eligibility: To receive Title IV federal financial aid, a student must:
1. be a U.S. citizen, or an eligible non-citizen, and
2. be matriculated, and
3. not be in default of any federal loan or, if in default, have completed the required process to obtain “Renewed Federal Aid Eligibility,” and
4. not owe a refund on any Title IV Grant, and
5. be making satisfactory progress toward a graduate degree, and
6. meet all applicable eligibility criteria of individual aid programs.

Withdrawing from Courses May Affect Your Financial Aid
Federal and state financial aid programs have academic guidelines that students must meet in order to maintain their eligibility. To learn more about these requirements, review the Federal Satisfactory Academic Progress Guidelines and the TAP Progress and Pursuit Chart. Withdrawing from or failure to attend class in one or more courses may affect eligibility status.

Review to Determine If Federal Aid Funds Must Be Repaid
Students who withdraw from all classes, officially or unofficially, or who have no passing grades at the end of a semester, will have their records reviewed to determine if they must repay any federal aid paid to them or to their student account.

Some Financial Aid May Be Taxable
IRS regulations require that some grants, scholarships, and fellowships be reported on a student’s federal tax return. All students are urged to maintain accurate records of the financial aid received and to keep receipts of related educational expenses. For more information about possible federal tax liability, consult your tax advisor or the Internal Revenue Service.

Federal Satisfactory Academic Progress Guidelines
In order to be making satisfactory academic progress toward a degree, for purposes of receipt of Title IV Federal Student Assistance, a graduate student must meet at least the GPA required for good academic standing at the institution and:
1. Accumulate credits toward the degree greater than or equal to two-thirds the cumulative credits attempted at the institution;
2. Not have attempted more than 150% of the credits normally required for completion of the degree. Students will be measured against the satisfactory academic progress standard at the end of the spring term to determine eligibility for receipt of Title IV student financial assistance for the upcoming year.

**Appeals**

Graduate students who fall below Federal Satisfactory Academic Progress guidelines may appeal through the Academic Advisement Office, South Administration Building (1A), Room 101, to regain eligibility for receipt of Title IV federal student assistance.

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.

**Federal Work-Study Program**

This program provides on- and off-campus employment opportunities for eligible students. At the time this Catalog was prepared, on-campus wage rates were $10 per hour for graduate students. Work schedules are developed around a student’s class schedule and the average work schedule consists of ten hours per week.

**Federal Perkins Loan Program**

This is a loan program and funds received under this program must be repaid. All students awarded a Federal Perkins Loan complete a Web Federal Perkins pre-loan conference and take and pass the Default Reduction Test before the first disbursement of the loan proceeds each year. No Federal Perkins Loans will be disbursed to students who do not comply. Students are required to disclose their driver’s license number when applying for a Federal Perkins Loan and must provide, in writing, changes of address to the Office of Student Financial Aid within ten days of the change. Federal Perkins Loan borrowers must complete a Web Exit Interview prior to graduation, if they plan to transfer to another institution, leave the College for any reason, or continue their education as a less than half-time student (less than six credits). The online Entrance and Exit Interview sessions may be accessed through the Office Website www.csi.cuny.edu/finaid. Borrowers should be aware that federal regulations require the University to report the disbursement of and default on a Federal Perkins Loan to credit bureaus. Deferments and cancellations are available on these loans in certain circumstances, and these are covered in the Exit Interview. These loans are awarded to students by The University. College services are withheld if a borrower defaults on a loan.

**Federal Direct Loan Programs**

The elements listed below are common to all the Federal Direct Loan programs unless otherwise noted:
1. The application may be obtained from The Hub (2A-106), the Student Financial Aid Office (2A-401), or from the CSI Website at www.csi.cuny.edu/finaid.
2. Promissory notes must be completed on the Web at www.dlenote.ed.gov. You will need your federal PIN to sign your note electronically. This electronic Multiple-Year Promissory Note (e-MPN) is cumulative. After signing the e-MPN, a disclosure notice will be sent to you each time a disbursement is made.
3. All Direct Loans must be repaid.
4. A Web Entrance Interview is required for the first loan at CSI. This is available through www.csi.cuny.edu/finaid.
5. Students who carry fewer than six credits a term or who leave the College for any reason must complete a Web Exit Interview. The Exit Interview can be accessed through the College Website www.csi.cuny.edu/finaid. Holds will be placed on the academic records of students who fail to complete the Exit Interview.
7. College academic services will be withheld for anyone defaulting on a loan.

**Federal Direct Subsidized Loans**

FAFSA data must be received before a Federal Direct Loan can be processed. Graduate students may borrow up to $8,500 annually if the College budget permits. The aggregate graduate Federal Direct Loan limit is $138,500, which includes undergraduate borrowing.

**Federal Direct Unsubsidized Loans**

A student applicant must establish his/her eligibility or ineligibility for the Federal Direct Subsidized Loan before a Federal Direct Unsubsidized Loan can be processed. While attending school, students borrowing under this program must either capitalize the interest or pay the interest by the due date while attending graduate school. The maximum yearly amount a student can borrow from both the Federal Direct Subsidized and Federal Direct Unsubsidized Loan Programs combined is $20,500.
New York State Financial Aid
Eligibility: A student must:
1. be a New York State resident for a year prior to the start of a semester, and
2. be a U.S. citizen or eligible non-citizen, and
3. be a full-time matriculated student, and
4. enroll for at least 12 credits that meet the requirements of the student’s curriculum, and
5. meet the TAP Progress and Pursuit guidelines, and
6. not be in default on a Federal Loan or if in default, have completed the required process to obtain “Renewed Eligibility,” and
7. be economically eligible based on current New York State criteria.

TAP Progress and Pursuit Standards
Students must meet the TAP Progress and Pursuit guidelines prior to the start of each term. Students who do not meet one of these standards lose their TAP eligibility and are notified of this by the Registrar. The Pursuit and Progress Chart appears below.

Appeals
A student who has failed to meet either the Progress or Pursuit guidelines or both may apply for one waiver which, if granted, will allow that student one additional TAP award. At the end of the waiver semester, the student must meet the TAP Progress and Pursuit requirements to be eligible for all future TAP awards.

CSI Financial Aid
Scholarships
A limited number of scholarships are available for full-time graduate students in recognition of academic excellence and community/College service. Designated scholarships are awarded for study in a variety of fields. Information and applications are available at the Career and Scholarship Center, South Administration Building (1A), Room 105; telephone 718.982.2300. Applications are also available on the Web at www.csi.cuny.edu. See the deadline dates on the Web.

Aid for Doctoral Candidates
Information about fellowships, assistantships, and other financial aid opportunities for doctoral candidates taking coursework at CSI is available through the Financial Aid Office at the Graduate School and University Center at 365 Fifth Avenue, New York, NY 10016-4309; telephone 212.817.7460; and via the Web at www.gc.cuny.edu. You may also link to the Graduate School Website from CSI’s Financial Aid Webpage at www.csi.cuny.edu/finaid.

Graduate Progress Chart

<table>
<thead>
<tr>
<th>PROGRAM PURSUIT*</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be certified for payment #:</td>
<td>0</td>
<td>50</td>
<td>50</td>
<td>75</td>
<td>75</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>student must have completed this percentage of coursework the last semester</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>State aid was received</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Undergraduate payments, if any, are counted toward program pursuit for graduate students.

ACADEMIC PROGRESS

<table>
<thead>
<tr>
<th>To be certified for payment #</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>[payment points to be accrued]</td>
<td>6</td>
<td>12</td>
<td>18</td>
<td>24</td>
<td>30</td>
<td>36</td>
<td>42</td>
<td>48</td>
</tr>
<tr>
<td>at the end of the prior semester, student must</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) have earned this # of credits*</td>
<td>0</td>
<td>6</td>
<td>12</td>
<td>21</td>
<td>30</td>
<td>45</td>
<td>60</td>
<td>75</td>
</tr>
<tr>
<td>(b) with at least this GPA</td>
<td>0</td>
<td>2.00</td>
<td>2.50</td>
<td>2.75</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
</tbody>
</table>

*Includes successful completion of credit-equivalent work as set forth in Section 145.2.1 of the Commissioner’s Regulations.
ACADEMIC POLICIES AND PROCEDURES

Advisement
Upon acceptance to the College of Staten Island, graduate students are assigned an academic advisor. Before registration, each semester students must meet with their advisors to plan their programs.

Registration
Students must register each semester. Registration materials are sent by the Office of the Registrar prior to registration to all current, readmitted, and newly admitted students. Registration is not complete until all financial obligations have been satisfied. Programs may be changed and courses dropped or added until the end of the first week of classes. A detailed set of instructions for registration is published each semester in the Semester Bulletin. Students who do not register each semester must maintain their matriculation or apply for readmission (see section under Admissions).

Full-Time Classification
Graduate students are classified as full-time if they are taking nine or more credits.

Attendance Policies
Instructors are required to keep an official record of class attendance. Students are expected to attend all sessions. A student who is absent in excess of 15 percent of the class hours in one semester is assigned a grade of WU (withdrew unofficially), subject to the discretion of the instructor.

Graduate Program Policies
The following academic policies apply to all of the graduate degree programs in the College. Please refer to the program description for any specific policies.

1. **Transfer Credits.** Graduate courses taken within the last five years at an accredited college or university may be accepted at the discretion of the coordinator of the graduate program. A maximum of 12 graduate credits in graduate courses, with a minimum grade of 3.0 (B) in each course, may be applied toward a graduate degree from the College of Staten Island. For specific requirements, please see the program description.

2. **Undergraduate Courses.** Graduate students may not enroll in undergraduate courses for graduate credit. Graduate students may, however, enroll in undergraduate courses in order to remedy deficiencies in their preparation for graduate study. Such courses will not be credited toward the requirements of the graduate degree. Non-matriculated students who are completing undergraduate coursework to qualify for matriculation status must maintain a minimum GPA of 3.0 in order to be considered for matriculation. (See also specific requirements for remedying deficiencies in the description of the degree program.)

3. **Credits as a Non-Matriculated Student.** Not more than 12 credits of graduate courses may be taken as a non-matriculated student, unless the student already holds another master’s degree.

4. **Independent Study.** Graduate students may take a maximum of two independent study courses. Approval of the graduate program coordinator and the dean of the division is required.

5. **Five-Year Time Limit.** All credits for a graduate degree must be completed within five years. Extensions may be granted only with the written permission of the program coordinator.

6. **Grade Point Average for Retention.** Students must have a minimum grade point average (GPA) of 3.0 (B) to be retained in a graduate program. Students whose GPA falls below 3.0 are on probationary status. While they are on probationary status, their registration forms must be signed by the coordinator of their program. Students may raise their GPA only through enrollment in graduate courses approved by their program coordinator. Students on academic probation will not be dismissed but will be automatically continued on probation as long as they achieve a grade point average of 3.5 or better each year until they have reached the required minimum grade point average. Students who fail to achieve the minimum 3.5 grade point average for any year while on probation will be dismissed.

7. **Grade Appeals.** Students wishing to appeal a grade other than WU (withdrew unofficially) or FIN (F from incomplete) must do so within 60 school days, excepting summer session, following the end of the semester. Appeals must be submitted in writing to the chairperson of the department in which the course was offered. Upon receipt of the appeal, the chairperson shall direct the student to discuss the issue with the instructor who assigned the grade. If the issue remains unresolved, the student may request a review by
the Department Committee on Grade Appeals, composed of three faculty members. The committee shall review all information presented by the student and the instructor and render a decision within 30 days after the student requested the grade review. If the committee upholds the appeal by a vote of 3-0, the chairperson shall change the grade to reflect the decision of the committee. If the committee does not uphold the student, there is no further appeal within the College.

In all deliberations on grade appeals, the burden shall be on the student to prove that a violation of the College’s regulations occurred or that the instructor’s own stated criteria for grading, which shall have been enunciated at the beginning of the semester, have not been followed. Students needing advice on the procedure may consult a counselor.

Students wishing to appeal a WU or a FIN grade must file a written petition supported by documentation to the Graduate Studies Committee.

8. Academic Dismissal. Students whose academic performance falls below the minimum requirements may be dismissed from the College upon review by the Graduate Studies Committee.

9. Graduation. Students who believe they will have fulfilled the degree requirements must file for graduation by the date specified in the College calendar in the Semester Bulletin. There is no fee for this application. Application for graduation may be submitted online at [www.csi.cuny.edu/registrar](http://www.csi.cuny.edu/registrar) or in person at The Hub, North Administration Building (2A), Room 106.

**Grading Symbols and GPA Equivalents**

The following grading symbols are used:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Identification</th>
<th>Quality Points per Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td></td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td></td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td></td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>Satisfactory</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>2.0</td>
</tr>
<tr>
<td>F</td>
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<tr>
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<tr>
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<tr>
<td>W</td>
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<tr>
<td>WA</td>
<td>Administrative Withdrawal</td>
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</tr>
<tr>
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<tr>
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</tr>
<tr>
<td>Z</td>
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<td></td>
</tr>
<tr>
<td>PEN</td>
<td>Grade Pending</td>
<td></td>
</tr>
</tbody>
</table>

A brief explanation of the grades receiving no quality points follows:

F Graduate courses in which a student has received an F grade may be repeated; however, the grade of F will continue to be calculated in determining the GPA. Students should refer to the requirements of the program for any specific policy regarding F grades.

INC The grade INC is a temporary grade assigned when, in the instructor’s judgment, course requirements are not completed for valid reasons. Recipients of INC are required to complete all assignments before the end of classes during the succeeding semester. Students should not register a second time for a course in which an INC is given. Rather, arrangements should be made with the instructor to complete the remaining work. If a student registers again for a course in which an INC was awarded, the INC will become a FIN and the course will appear a second time on the student’s transcript with the grade earned.

FIN If a grade of INC is not changed before the last day of classes of the succeeding semester, it will automatically be changed to a grade of FIN. If the required work is not completed for continuing valid reasons, the course instructor may grant an extension. Such extensions shall not exceed a period of more than two years beyond the original due date of the uncompleted work.

W Students may withdraw without academic penalty from any course up to the end of the ninth week of the semester (see College calendar for deadline to withdraw); a grade of W will be assigned. After that date, students may petition the instructor and the chairperson for permission to withdraw until the last day of classes. Consult the Office of the Registrar for the procedures to be followed when withdrawing from a course. If these procedures are not followed, students may receive a penalty grade of WU. In cases of illness, students may apply to the Health Center for a medical withdrawal. Under no circumstances will a W be assigned after the last day of classes without positive action by the Graduate Studies Committee or its designee.

WA Students not in compliance with the New York State immunization requirement receive the grade of WA. This grade carries no academic penalty.
An unofficial withdrawal due to non-attendance in a course. No credit is received for a course in which this grade is assigned; it is equivalent to a grade of F.

An unofficial withdrawal results in a grade of WU. No credit is received for a course in which this grade is assigned; it is equivalent to a grade of F.

An administrative symbol assigned when no grade has been submitted by the instructor.

An administrative symbol assigned for thesis courses.

The Graduate Studies Committee reviews student records and considers student appeals related to admission, readmission, and graduation. Students can petition the Committee through a counselor in the Division of Student Affairs.

The “Grandfather” Clause
Requirements in this Catalog were approved effective September 1, 2005. The “Grandfather” clause is designed for students who matriculated in a program, major, or curriculum prior to that date. This provides that students may meet degree requirements in effect the year of their matriculation in a particular program, curriculum, or major provided the student has not had an interruption in matriculation exceeding four consecutive fall and spring semesters.

Students changing major or curriculum are subject to the requirements in effect the year of the change.

Transcripts
Students may request that their transcript be sent to other institutions (see Fee Schedule). Official transcripts are signed and sealed by the Registrar.

Library Submission of the Master’s Thesis
A finished master’s thesis is a scholarly work that is the product of extensive research and related preparation. The Library will make theses publicly available to students, faculty, and outside researchers. For purposes of preservation, and to prepare them for bindery, theses must adhere to uniform standards of format and construction. The guidelines for submission to the CSI Library are in Appendix i.

Academic Integrity, Plagiarism, and Cheating
Integrity is fundamental to the academic enterprise. It is violated by such acts as borrowing or purchasing assignments (including but not limited to term papers, essays, and reports) and other written assignments, using concealed notes or crib sheets during examinations, copying the work of others and submitting it as one’s own, and misappropriating the knowledge of others. The sources from which one derives one’s ideas, statements, terms, and data, including Internet sources, must be fully and specifically acknowledged in the appropriate form; failure to do so, intentionally or unintentionally, constitutes plagiarism.

Violations of academic integrity may result in a lower grade or failure in a course and in disciplinary actions with penalties such as suspension or dismissal from the College. More information on the CUNY policies on Academic Integrity can be found in Appendix iii.

Academic Freedom
The City University of New York subscribes to the American Association of University Professors 1940 Statement of Principles on Academic Freedom, and the College of Staten Island respects academic freedom for faculty and students as well as freedom in their personal lives for all individuals in the campus community.

Computer User Responsibilities
The computer resources of The City University of New York and the College of Staten Island must be used in a manner that is consistent with the University’s educational purposes and environment. All users of computer resources are expected to act in a spirit of mutual respect and cooperation, and to adhere to the regulations for their use (see Undergraduate Catalog, appendix ii). The University reserves the right to monitor, under appropriate conditions, all data contained in the system to protect the integrity of the system and to ensure compliance with regulations.

I.D. Cards
Each student will be provided with a photo identification card. Each semester the I.D. cards are validated upon completion of registration. Validated I.D. cards must be carried by a student on campus at all times. Duplicate I.D. cards are available at a cost of $5.

Admission of Sex Offenders
The College reserves the right to deny admission to any student if in its judgment, the presence of that student on campus poses an undue risk to the safety or security of the College community. That judgment will be based on an individualized determination taking into account any information the College has about a student's criminal record and the particular circumstances of the College, including the presence of a child care center, a public school or public school
students on the campus.
ACADEMIC SERVICES/STUDENT SERVICES

Alumni Relations
Associate Director, Jennifer Lynch, South Administration Building (1A), Room 111

The Office of Alumni Relations maintains contact with alumni through ongoing social, educational, athletic, and cultural events.

The office also assists the CSI Alumni Association and its elected Board of Directors, who serve as the representative voice for over 50,000 alumni worldwide. The Alumni Association was established in 1980 and its mission is dedicated to promoting a lifelong spirit of pride, fellowship, loyalty, and learning among alumni, students, and the community.

All persons who have a degree or six-year certificate from CSI or its predecessor institutions, Richmond College and Staten Island Community College, are members of the Alumni Association. Alumni seeking further information or wishing to obtain a permanent alumni photo ID are invited to call 718.982.2290, email alumni@mail.csi.cuny.edu, or visit the office in South Administration Building (1A), room 301.

Campus Center
Office: Campus Center (1C), Room 201

The Campus Center is the focal point of extra- and co-curricular student life. It houses the Office of Student Life, the Student Government and clubs, student publications, the Campus Activities Board, the CSI Association Inc., and the Auxiliary Services Corporation. Such services as the bookstore, cafeteria, Park Café, the Health and Wellness Center, the Wellness Program, the Peer Drop-in Center, and the Prayer/Meditation Room are located in the Campus Center. Lounges for entertainment and studying, a computer lab, a video game room, conference and meeting rooms, and lockers are available for student use. WSI А-FM (88.9) broadcasts from the Campus Center. Questions regarding use of facilities and locker rentals may be directed to the Campus Center, Room 201. The telephone number is 718.982.3071.

Center for the Arts
Office: Center for the Arts (1P), Room 116

The Center for the Arts contains, in the instructional wing, the Department of Media Culture and the Department of Performing and Creative Arts, studios, performance and rehearsal spaces, a screening room, a recital hall, a studio theater, film and video production facilities, and laboratories for communications and graphics. The workshops include facilities for print making, painting, sculpture, photography, electronic music, and recording. The Center houses the Clara and Arleigh B. Williamson Theatre, a 442-seat, proscenium-stage theater; a 911-seat Concert Hall; a recital hall and a lecture hall; and an art gallery. The Center for the Arts presents a year-round performing arts series that includes jazz, drama, dance, classical, popular, folk, world, country, and family programming.

Center for International Service
Office: North Administration Building (2A), Room 206
Director, Ann Helm

The Center for International Service encourages and supports the international component of the academic life of the College. The Center provides direction and assistance in matters affecting the College’s international student population, sponsors study abroad programs, directs scholar and student exchange programs, administers the English Language Institute, and facilitates international development programs. Guidance for the Center’s activities is provided by a faculty advisory committee.

English Language Institute (ELI)
The Institute, a member of the American Association of Intensive English Programs, offers intensive English language study and programs in American language and culture to international students and professionals. The Institute is supported by course fees. Admission to the English Language Institute does not constitute admission to the College.

Foreign Student and Scholar Services
The staff, serving foreign students and scholars, processes immigration documentation; facilitates admission procedures; provides academic advisement, counseling, adjustment, and orientation to college life in the U.S.; and assists in off-campus housing.

Study Abroad Programs
The Center offers a variety of study abroad programs for undergraduate credit only with partner institutions around the world including the following: Nanjing University, Shanghai University, and the City University of Hong Kong in China; the Danish Institute for Study Abroad (DIS) in Copenhagen, Denmark; the Catholic University of Guayaquil and the University of San Francisco de Quito in Ecuador; Middlesex University in London, England; The
American College of Thessaloniki in Greece; Scuola Lorenzo deMedici in Florence and Tuscania, The American University of Rome and the Istituto Venezia in Italy; the Universidad Internacional Menéndez Pelayo in Santander, Spain; IPAG in Nice and Paris, France; Seinan Gakuin University in Fukuoka, Japan; and Dublin Institute of Technology in Ireland. Overseas study programs in more than 25 countries are open to CSI students through membership in the College Consortium for International Studies.

There is no foreign language prerequisite; however, students are required to study the language of the country and are placed in courses suitable to their ability. A minimum grade point average of 2.5 is required for participation in most of the CSI-sponsored study abroad programs. The staff provides assistance and information about admissions, financial aid, orientation, and re-entry. To prepare effectively for participation in the program, students are encouraged to investigate the overseas study opportunities early in their academic careers. Most students who receive financial aid are eligible for study abroad programs and special scholarship funds are available for eligible students.

International Faculty Activities
The Center coordinates a faculty exchange program with Shanghai University in China on behalf of The City University. The Center also has responsibility for CSI exchange programs and faculty development activities and international projects in various countries. On-campus programs for faculty and students include the World on Wednesday lecture series, International Education Week Events, and special programs.

Disability Services
Office: Center for the Arts (1P), Room 101
The Office of Disability Services has responsibility for providing services for students with documented disabilities. All documentation is kept confidential and should be submitted directly to the Office. Services include pre-admissions counseling and accessibility information, advisement, priority registration, and testing accommodations. Software for tutorial programs, personal computers, scientific calculators, tape recorders, and a Braille writer are available. The Resource Center for the Deaf serves the specific needs of deaf and hard of hearing students by providing interpreters, captioning, tutors, and notetakers. Interpreters are available for academic advisement, teacher conferences, or College business. The College’s policy for students with disabilities conforms to federal guidelines and the Office of Disability Services offers services mandated by federal and state law. All students with disabilities are encouraged to use the services of the Office. Services are also available to students who are temporarily disabled. For more information please visit www.csi.cuny.edu/disabilityservices.

Evening, Summer, and Weekend Services
Office: North Administration Building (2A), Room 204
Co-Director, Thomas Brennan
The Office of Evening, Weekend, and Summer Sessions provides administrative assistance and academic advisement for evening, weekend, and summer students, and advocates the special needs of this student population within the College community.

The College regularly schedules a wide choice of courses in the evenings and on the weekend. These courses accommodate students in graduate, baccalaureate, and associate’s degree programs who prefer to take classes at these times. Classes in the evening session start at 6:30pm or later; weekend session classes are scheduled on Saturday mornings and afternoons, as well as on Sunday afternoons.

The Summer Session offers courses in a mix of schedules; four-week courses meet day and evening in June and July; six-week courses meet Saturday and Sunday mornings during June and July; eight-week courses meet day and evening, Monday/Wednesday or Tuesday/Thursday during June and July. The varied summer session course schedule provides an opportunity for students to accelerate completion of their degree programs.

Matriculated and non-matriculated students may register for one or more courses in the evening, summer, and weekend sessions.

Health Services
Office: Campus Center (1C), Room 112
The College Health Center, located on the main floor of the Campus Center, Room 112, is staffed by College personnel, including a full-time Registered Nurse and part-time nurse practitioners (funded by the Student Activity Fee) in collaboration with Staten Island University Hospital. Services include emergency care, physicals, immunizations, consultations, and referrals to outside agencies and clinics, smoking cessation, nutritional counseling, and HIV/AIDS counseling and testing. The telephone number is 718.982.3045; TTY.718.982.3315; email: healthcenter@mail.csi.cuny.edu. For more information, please consult our Webpage at www.csi.cuny.edu/studentaffairs/healthcenter.

Information Technology
North Administration Building (2A), Room 303
Vice President for Technology Systems, Professor Michael Kress

The Office of Information Technology (OIT) advances and supports the use of information technology at the College. OIT administers 20 general
The Library is the focal point of the South Academic Quadrangle. It houses instructional, tutorial, and research laboratories; and personal computer classrooms. Over 2,500 desktop computers are connected through a high-speed local area network running Windows XP or Windows 2000. This hardware configuration allows students, faculty, and staff full access to specialized software, the Internet, online library resources, and email. Over 50 classrooms, two conference rooms, and two portable units are equipped to run multimedia presentations from a central location. One of the conference rooms is equipped for two-way video conferencing.

Four open computer labs running Windows XP or Windows 2000 are equipped with the software that students need to do their assignments. Computer labs for students with disabilities include software like JAWS, Dragon, etc. as well as ADA-compliant furniture. In addition to the open labs, there are computers available in the lobbies of Buildings 1S, 2S, 3S, 4S, 1N, 2N, 3N, and 4N, and systems are also located in the 1L Cybercafé and the 1C Campus Center. These stations allow students to use the Internet.

“CSI unplugged,” wireless access is via 802.1 lb/g technology. The network can be accessed from any of the academic or administrative buildings. The College of Staten Island's Data network spans 19 buildings and provides access for all campus staff, faculty, and students, 24 hours a day, seven days a week. Wireless HOTSPOTS are designed to expand service to users with laptops or PDAs equipped for wireless networking. With HOTSPOTS, wireless computers have high-speed access to the Internet and College Web Services.

The new OIT homepage is www.csi.cuny.edu/technologysystems.

**Laboratories**

The Biological Sciences/Chemical Sciences Building (6S), home of the Department of Biology, the Department of Chemistry, the Center for Environmental Science, and the Center for Developmental Neuroscience and Developmental Disabilities, contains 74 state-of-the-art laboratories for study and research. The ten departmental buildings in the Academic Quadrangles house instructional, tutorial, and research laboratories; and personal computer classrooms.

**Library**

Library (1L)

Chief Librarian, Associate Professor Wilma L. Jones

The Library is the focal point of the South Academic Quadrangle. The building, with its distinctive rotunda, is the home of five central services: a study center for the campus community, a broad collection of books and journals in the liberal arts and sciences, computer facilities and online services and databases that serve as points-of-access to informational resources beyond the walls of the Library, an instructional facility for the teaching of information retrieval and information literacy; and media distribution services in support of instruction.

Seventy-five computer workstations for student use are available throughout the building. The general reference area is located on the first floor, as is the faculty Center for Excellence in Learning Technology. The second floor leads to the elegant archives facility, the distance-learning center, the microform area, the Library instruction facility, and the Media Services unit. The circulating book collection and the print journal holdings are housed on the third floor.

**Hours of Service:**

Monday–Friday: 8:00am – 8:00pm
Saturday: 8:30am – 5:00pm
Sunday: Noon – 5:00pm

**Media Services**

Director: Mark Lewental
Library (1L), Room 201

Media Services provides audio-visual support for classroom use, as well as student viewing facilities in the Library. Our office manages and makes accessible the College's collection of videotapes, DVDs, and other media. The Media Distribution System, using fiber-optic technology, serves a large number of classrooms equipped with LCD projectors, plasma
monitors, and Smart Classroom technology. Media Services also operates the Videoconferencing Lab, manages the Student Laptop Loan Program, and oversees the Center for Excellence in Learning Technology (CELT), which assists faculty in using technology to promote better learning.

Ombudsperson
Reporting to the Vice President for Student Affairs, the Ombudsperson is authorized to investigate student concerns and to make recommendations regarding the outcome of those investigations. The Ombudsperson, available to all students enrolled at the College, is a source of information about College policies and procedures and, in certain situations, will provide mediation and advocacy services. Students may be advised to visit other College offices to file official student concerns as well.

The Ombudsperson helps students to develop positive strategies to resolve problems and conflicts and acts as a neutral party to hear any type of student concern or dispute related to the College.

The Office deals with academic matters such as grade appeals, accusations of cheating and plagiarism, faculty/student disputes, and non-academic matters such as billing disagreements, conduct issues, campus issues, and interpersonal conflict. This is not a comprehensive list, as it is understood that each individual may have concerns and needs that are unique.

Students can file an official complaint or put information “on the record” at the Office of the Ombudsperson in the South Administration Building (1A), Room 301.

Email Accounts
The Office of Technology Systems will generate a College email/computer login account for all currently registered students. If you have any questions or forget your password after changing it, come to the Library (1L), Room 204. A validated student ID card is required. For more information, please call 718.982.4080, visit cix.csi.cuny.edu and click on the appropriate links, or visit www.csi.cuny.edu/currentstudents and select the link "Student Central" to look up CIX Webmail.

Sports and Recreation Center
Office: Sports and Recreation Center (1R), Room 204
The Sports and Recreation Center houses a full range of facilities and equipment for individual and team sports and games: a gymnasium with seating capacity for 1,200 spectators, an auxiliary gymnasium, two fitness rooms, racquetball courts, and a 25-meter pool. Outdoor facilities include a track, tennis courts, and ball fields. On a membership basis, faculty, staff, alumni, and the general public also have access to the facilities.

Student Affairs
South Administration Building (1A), Room 301
Vice President Michael R. Daniels (Acting)
718.982.2335
The Division of Student Affairs is committed to providing quality services and programs that support the mission of the College and enhance the learning and development of our diverse populations of students. The programs and services coordinated through the Division of Student Affairs are provided by professionals committed to students' intellectual, emotional, social, cultural, and recreational development.

The offices providing the programs and services of the Division are:

Career and Scholarship Center 1A-105 718.982.2300
Center for the Arts 1P-116 718.982.2504
Counseling Center 1A-109 718.982.2392
CSI Association 1C-202 718.982.3097
Disability Services 1P-101 718.982.2510
Graduate Admissions 2A-103 718.982.2190
Health Center 1C-112 718.982.3045
New Student Orientation/CLUE 2A-208 718.982.2529
SEEK 1A-112 718.982.2415
Sports and Recreation 1R-204 718.982.3160
Student Life 1C-201 718.982.3074
Wellness Program 1C-112 718.982.3113

The Bertha Harris Women's Center
Coordinator, Associate Professor Ellen J. Goldner
The Bertha Harris Women's Center promotes the education and personal growth of women students and the men who support their concerns. It encourages a confidential support network among students and faculty and serves as a conduit of information about counseling and other resources available to women both on campus and in the broader communities of Staten Island and New York City. The Bertha Harris Women's Center raises awareness about issues important to women and encourages community service by CSI students at organizations that serve women on campus, on Staten Island, and in New York City. In response to needs and interests voiced by students each semester, the Bertha Harris Women's Center organizes student activities, panels, and speakers on a variety of topics and other events. Visit us on the Web at www.library.csi.cuny.edu/~wrc, or in Building 2N, Room 106.
GRADUATE DEGREES AND CERTIFICATE PROGRAMS

Biology (MS)  
Business Management (MS)  
Cinema and Media Studies (MA)  
Computer Science (MS)  
Education  
  Childhood (Elementary) (MSEd)  
  Adolescence (Secondary) (MSEd)  
  Special (MSEd)  
  Post-Master's Advanced Certificate for Leadership in Education  
English (MA)  
Environmental Science (MS)  
History (MA)  
Liberal Studies (MA)  
Neuroscience, Mental Retardation, and Developmental Disabilities (MS)  
Nursing  
Nursing, Adult Health (MS)  
Gerontological (MS)  
Post-Master's Advanced Certificate in Adult Health Nursing  
Post-Master's Advanced Certificate in Cultural Competence  
Post-Master's Advanced Certificate in Gerontological Nursing  
Post-Master's Advanced Certificate in Nursing Education  

Graduate Program Coordinators  
Biology  
  Richard Veit, PhD, University of California (Irvine)  
  Probal Banerjee, PhD, Indian Institute of Science (Irvine)  
  Andrzej Wieraszko, PhD, Polish Academy of Science  
Business  
  John Sandler, JD, Touro Law School  
Cinema and Media Studies  
  Matthew Solomon, PhD, University of California (Los Angeles)  
Computer Science  
  Anatoliy S. Gordonov, PhD, Russian Academy of Science (Moscow)  

Education  
Childhood Education  
  Sequence I: Vivian Shulman, PhD, CUNY Graduate Center  
  Sequence II: Gregory Seals  
Adolescence Education  
  Sequence I: Irina Lyublinskaya, PhD, Leningrad State University of Russia Pedagogic University  
  Sequence II: David Kritt, PhD, CUNY Graduate Center  
Special Education  
  Sequence I and II: Eleni Tournaki, PhD, New York University  
Leadership in Education  
  Ruth Silverberg, EdD, Hofstra University  
English  
  Terry Rowden, PhD, Cornell University  
Environmental Science  
  Alfred M. Levine, PhD, Princeton University  
History  
  Catherine Lavender PhD, University of Colorado  
Liberal Studies  
  David Traboulay, PhD, University of Notre Dame  
Neuroscience, Mental Retardation, and Developmental Disabilities  
  Probal Banerjee, PhD, Indian Institute of Science  
  Robert Freedland, PhD, University of Wisconsin-Madison  
  Dan McCloskey, PhD, SUNY Stony Brook  
  Andrzej Wieraszko, PhD, Polish Academy of Science  
Nursing, Adult Health and Gerontological  
  Graduate Program Coordinator: Margaret Lunney, PhD, New York University  
  Nurse Practitioner Program Coordinator: Elizabeth Wheeler, DNS, SUNY at Buffalo  
Physical Therapy  
  Jeffrey Rothman, EdD, Rutgers University  
Physics  
  William Schreiber, PhD, Yeshiva University  
Polymer Chemistry  
  Nan-Loh Yang, PhD, Polytechnic Institute of Brooklyn  

New York State Registration  
The following listing gives the title of each of the graduate degree programs of the College and the Program Code under which that program is registered with the State Office of Education.  

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<th>Degree</th>
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<td>Polymer Chemistry*</td>
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*Available only to students in the PhD program in Polymer Chemistry.

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.
DOCTORAL DEGREE PROGRAMS

Computer Science (PhD), offered jointly with The City University Graduate School
Biology (PhD), offered jointly with The City University Graduate School
Nursing (DNS), offered jointly with The City University Graduate Center
Physical Therapy (DPT), offered jointly with The City University Graduate School
Physics (PhD), offered with the PhD program of The City University Graduate School
Chemistry (PhD), offered jointly with The City University Graduate School and Brooklyn College

Doctoral Programs
The College participates in several doctoral programs with the CUNY Graduate School and University Center. Please consult the Graduate Center Catalog for complete information on admissions and programs.

Doctoral Program in Biology (Neuroscience)
The College participates with the Graduate School and University Center, and in cooperation with the New York State Institute for Basic Research in Developmental Disabilities, in offering a PhD program in Biology with a subspecialty in Neuroscience. The program is designed to give the student advanced knowledge in physiology with emphasis on neurobiology and neurochemistry. State-of-the-art neuroscience laboratories equipped with facilities for neuronal cell cultures, cell imaging microscopy, bioenzymatic analyses, protein purification, gene cloning, electrophysiology, and other advanced research procedures provide the setting for graduate training and doctoral dissertation research. Research emphasis is on neuronal development, synaptic plasticity, and molecular mechanisms underlying learning, memory, and developmental disabilities. Students are admitted to the program by the Graduate School and University Center (365 Fifth Avenue, New York, NY 10016; 212.817.7470; email: admissions@gc.cuny.edu; www.gc.cuny.edu) and are advised to consult Dr. Probal Banerjee (CSI) at banerjee@mail.csi.cuny.edu, 718.982.3938 or Dr. Andrzej Wieraszko (CSI) at wieraszko@postbox.csi.cuny.edu, 718.982.3941.

Doctoral Program in Computer Science
The College participates in the CUNY Graduate School and University Center’s PhD program in Computer Science. Students wishing to specialize in the areas of artificial intelligence and data mining, multimedia and image processing, software engineering, management information systems, networks, telecommunications, or related areas may do much of their coursework and research at the College of Staten Island. Students are admitted to the program by the Graduate School and University Center (365 Fifth Avenue, New York, NY 10016; 212.817.7470; email: admissions@gc.cuny.edu; www.gc.cuny.edu) and are advised to consult Dr. Anatoliy Gordonov, Department of Computer Science at CSI (718.982.2852; email gordonov@mail.csi.cuny.edu).

Doctoral Program in Physics
The College participates in the CUNY Doctoral program in Physics. Students in this program are admitted through the Graduate School and University Center (365 Fifth Avenue, New York, NY 10016; 212.817.7470; email: admissions@gc.cuny.edu; www.gc.cuny.edu) under the auspices of the College. Courses are taken at the Graduate Center together with students associated with other participating CUNY colleges. Dissertation research is done at CSI. The department has a well-equipped laser and photonics laboratory. Current research interests include experimental and theoretical optics, condensed matter physics, quantum systems, particle physics, polymer physics, material science, and astrophysics. Students interested in the program are advised to consult Professor William Schreiber, Department of Engineering Science and Physics at CSI (718.982.2810; email: schreiber-w@mail.csi.cuny.edu).

Doctoral Program in Polymer Chemistry
The College participates with the Graduate School and University Center and Brooklyn College in offering a PhD program in Polymer Chemistry. Interested students may also study for the master’s degree while in the doctoral program. The program is designed to give the student a broad background in chemistry along with an interdisciplinary approach to polymer science. Emphasis is placed on the relationship between the synthesis, structure, properties, and utilization of natural and synthetic polymers. Students are admitted to the program by the Graduate School and University Center (365 Fifth Avenue, New York, NY 10016; 212.817.7470; email: admissions@gc.cuny.edu; www.gc.cuny.edu) and are advised to consult Dr. Nan-Loh Yang, Department of Chemistry at CSI (718.982.5873; email: yang-n@mail.csi.cuny.edu).

Doctoral Program Courses
CHM 710 Applied Polymer Chemistry
3 hours; 3 credits
A study of the relationship of polymer structure and properties to the applications of polymeric materials.
The chemical and structural requirements of fibers, elastomers, and plastics. Processing of polymers. A survey of the more important polymers. Synthesis of monomers and polymers. Prerequisite: U 730

CHM 795 Research
2-30 hours; 1-15 credits
A course of research in polymer science under the direction of a faculty member.

CHM 820 Seminar in Polymer Chemistry
1 hour; 1 credit
Students, staff, and visitors present seminars dealing with current research and literature reviews on selected topics in polymer chemistry. Prerequisite: U 730

CHM 830 Topics in Polymer Chemistry
3 hours; 3 credits
Advanced aspects of polymer chemistry are intensively explored. The course is rotated among staff members in the program.

Additional Courses
CHM 800-890 (1-3 hours; 1-3 credits),
Graduate Topics in Chemistry

CHM 891 (1 credit), CHM 892 (2 credits),

CHM 893 (3 credits), CHM 894 (4 credits)

Graduate Independent Study in Chemistry
Study and research under the supervision of a staff member, which may include literature and/or experimental work.

For a listing of additional doctoral courses in chemistry consult the CUNY Graduate School Catalog.

Clinical Doctorate in Physical Therapy (DPT)
The Graduate School and University Center (GSUC), Hunter College, and the College of Staten Island offer jointly a Clinical Doctoral program in Physical Therapy leading to the DPT degree. (The GSUC will award the degree). The DPT program is in keeping with the American Physical Therapy Association (APTA) recommendation that physical therapists be doctorally credentialed. The program conforms to curriculum guidelines set by the Commission on Accreditation in Physical Therapy Education (CAPTE). Graduates will be eligible for the National Physical Therapy Examination. Results from this examination will be used to apply for state licensure.

Program Goals
The DPT program prepares students to become clinician-scientists who can competently apply research to clinical practice, perform all aspects of physical therapy (PT) practice, and perform clinical research. It will prepare graduates to examine, evaluate, diagnose, and intervene in the management of impairments, functional limitations, and disabilities of the cardiopulmonary, musculoskeletal, neurovascular, and integumentary systems. The program meets changing national standards as well as community needs for physical therapists working in a multitude of settings.

Admissions Requirements
The academic and clinical requirements for admissions are as follows:

1. Students must have completed a baccalaureate degree from a regionally accredited four-year institution by the end of the semester prior to entry
2. Two semesters of anatomy and physiology for science majors, with laboratories
3. Two semesters of physics for science majors, with laboratories
4. Two semesters of chemistry for science majors, with laboratories
5. Two semesters of psychology (including one semester of developmental psychology or child psychology)
6. One semester of mathematics (precalculus or college algebra and trigonometry)
7. One semester of statistics (we recommend a course that includes computer applications)
8. One semester of English composition (e.g., expository writing)
9. CPR certification by the American Health Association or Red Cross
10. For applicants who have not studied in English-speaking countries, a score of at least 550 (paper), 213 (computer), or 79-80 (Internet) on the TOEFL examination
11. Documented clinical experience of at least 100 hours in the United States under the supervision of a licensed physical therapist, with a minimum of 50 hours in one or more different practice settings (e.g., private practice, nursing home, pediatric or school setting, outpatient setting). The potential applicant may inquire at any hospital or other facility about volunteering in its physical therapy department as a means of gaining access to clinical experience. A Clinical Experience Form must be provided by the physical therapist by the deadline of November 1 for each program
12. All prerequisite requirements must be met prior to the starting date of the program in which the applicant is seeking admission
13. An undergraduate grade point average (GPA) of 3.0 calculated from all college courses
14. Filing of a Graduate Center (GSUC) Application for Admission
15. GRE scores (Graduate Center Code is 2113)
16. Application checklist

For Applications Contact:
Admissions Office
The Graduate Center of CUNY
365 Fifth Avenue, Room 7201
New York, NY 10016-4309
admissions@gc.cuny.edu

Please note that the DPT program at the College of Staten Island begins in the spring semester.

Deadlines:
Application Deadline:
College of Staten Island
Deadline for spring 2009 admissions: November 1, 2008

For Inquiries about the Program, Please Contact:
Dr. Jeffrey Rothman
Chair, Department of Physical Therapy
College of Staten Island/Graduate Center
2800 Victory Blvd
Staten Island, NY 10314
Phone: 718.982.3153
Fax: 718.982.2984
email: rothmanj@mail.csi.cuny.edu

Academic Requirements

The curriculum is 105 credits and can be completed over a three-year period. In addition to course and program requirements and clinical internship performance, students will be required to pass comprehensive examinations, clinical internships, and a research project.

The First Examination will be a written comprehensive exam of first-year course work as well as successful completion of the students' first clinical affiliation (the assessment tool for the clinical affiliations is the Clinical Performance Instrument (CPI) which includes specific details and objectives that must be successfully achieved) and will be required after completion of the first year. The First Examination will be administered in late January or early February of the second year.

The Second Examination will be a written comprehensive exam of second-year course work as well as successful completion of the second clinical affiliation (the assessment tool for the clinical affiliations is the Clinical Performance Instrument (CPI) which includes specific details and objectives that must be successfully achieved) and will be required after completion of the second year. The Second Examination will be administered in late January or early February of the third year.

The research requirement includes a series of research courses leading toward the completion of student group research projects. Successful completion of this research requirement includes a manuscript acceptable for submission for publication. Upon graduation, each degree candidate will qualify for the National Physical Therapy Examination and state licenser.

In sum: each student is expected to satisfactorily complete:
- 105 credits
- First Examination
- Second Examination
- Four Clinical Affiliations
- Publishable Research Project

Physical Therapy DPT Curriculum at the College of Staten Island

<table>
<thead>
<tr>
<th>Spring Semester, Year 1 (15 weeks)</th>
<th>Credits</th>
<th>Class Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHT 70100 Clinical Anatomy</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>PHT 70200 Medical Terminology</td>
<td>1</td>
<td>Online</td>
</tr>
<tr>
<td>PHT 70300 Foundations of PT Care</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PHT 70400 Introduction to PT Practice</td>
<td>2</td>
<td>2</td>
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<tr>
<td>PHT 70500 Upper Extremity Kinesiology &amp; Assessment</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PHT 70600 Physiological Aspects of Clinical Practice</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>13</td>
<td>21 + Online</td>
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<table>
<thead>
<tr>
<th>Summer Semester, Year 1 (8 weeks)</th>
<th>Credits</th>
<th>Class Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHT 72000 Human Physiology &amp; Exercise Physiology</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>PHT 71000 Research Design</td>
<td>2</td>
<td>2</td>
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<td><strong>Total</strong></td>
<td>6</td>
<td>6</td>
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<table>
<thead>
<tr>
<th>Fall Semester, Year 1 (15 weeks)</th>
<th>Credits</th>
<th>Class Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHT 73000 Structure and Function of the Nervous System</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>PHT 74000 PT Prevention &amp; Intervention</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>PHT 75000 Physical Modalities</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>PHT 76000 Lower Extremity Kinesiology &amp; Assessment</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>PHT 77000 Directed Research I</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>PHT 78000 Clinical Medicine for PT</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>PHT 79500 Integumentary System: Assessment and Intervention &amp; Electrotherapy</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Course Name</td>
<td>Credits</td>
<td>Class Hours</td>
</tr>
<tr>
<td>-------------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>PHT 80100 Pulmonary PT</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PHT 80200 Clinical Education: Education Theories</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PHT 81100 Cardiac Rehabilitation</td>
<td>2</td>
<td>5</td>
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<tr>
<td>PHT 80300 Differential Diagnosis &amp; Intervention in Clinical Orthopedics I</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PHT 80400 Introduction to Neurological PT</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>PHT 80500 Musculoskeletal Examination I</td>
<td>3</td>
<td>6</td>
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<tr>
<td>PHT 80700 PNF</td>
<td>1</td>
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<tr>
<td>PHT 80800 Differential Diagnosis in Neurological Evaluation</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>PHT 80900 Directed Research II</td>
<td>1 hr. arr.</td>
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<td><strong>Total</strong></td>
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**SECOND EXAMINATION TO PROGRESS TO THE NEXT SEMESTER**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
<th>Class Hours</th>
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<tbody>
<tr>
<td>PHT 88000 Neurological</td>
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<td>4</td>
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*Interventions II*

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
<th>Class Hours</th>
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<tbody>
<tr>
<td>PHT 88100 Seminar in Departmental Organization &amp; Management</td>
<td>3</td>
<td>3</td>
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<tr>
<td>PHT 88200 Pediatrics</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>PHT 88300 Pharmacology &amp; Systems Review</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>PHT 88400 Musculoskeletal Examination &amp; Intervention III</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>PHT 88600 Clinical Affiliation II</td>
<td>5</td>
<td>10 weeks</td>
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<tr>
<td><strong>Total</strong></td>
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**Summer Semester, Year 3 (10 weeks)**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
<th>Class Hours</th>
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</thead>
<tbody>
<tr>
<td>PHT 88800 Directed Research IV</td>
<td>1 hr. arr.</td>
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</tbody>
</table>

**Total**

**Fall Semester, Year 3 (15 weeks)**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
<th>Class Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHT 88500 Electroneuromyography &amp; Motion Analysis</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>PHT 88700 Clinical Decision Making</td>
<td>1</td>
<td>Online</td>
</tr>
<tr>
<td>PHT 88900 Colloquium elective (Online or continued ed., ex: IPA, APTA)**</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td>PHT 88950 Clinical Affiliation III</td>
<td>4.5</td>
<td>9 weeks</td>
</tr>
<tr>
<td>PHT 90000 Directed Research V</td>
<td>2</td>
<td>Hr. Arr.</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
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</table>

**Credits**

- 1st Year: 35
- 2nd Year: 36
- 3rd Year: 34

**Total Credits:** 105

**Notes:**

- IPA refers to the Institute of Physical Art.
- APTA is the American Physical Therapy Association.
- Advanced Clinical Practice Courses.

**Coursework**

- **PHT 70100 Clinical Anatomy**
  90 hours; 4 credits
  This course is an in-depth study of the human body, with emphasis on the neuromuscular and musculoskeletal systems.

- **PHT 70200 Medical Terminology**
  Online; 1 credit
  This programmed computerized self-study will provide students with the ability to analyze medical terms,
define basic terms and abbreviations used in documenting health records, and identify common terms related to diagnosis, therapies, and diagnostic tests.

**PHT 70300 Foundations of Patient Care**
60 hours; 2 credits
This course serves as an introduction to the physical therapy profession and includes the history and scope of physical therapy practice.

**PHT 70400 Introduction to Physical Therapy Practice & Ethics**
30 hours; 2 credits
This course examines the multifaceted role of the physical therapist in the health care delivery system. This required course provides a foundation that is designed to provide the student with educational theory and methodology, written and oral communication skills, code of ethics, and evidence-based practice.

**PHT 70500 Upper Extremity Kinesiology & Assessment**
45 hours; 2 credits
This course is an introduction to the application of anatomy for human movement, providing a foundation that is designed to provide the student with biomechanics, manual muscle testing, and goniometry of the upper extremities.

**PHT 70600 Psychosocial Aspects of Clinical Practice**
30 hours; 2 credits
This course is designed to increase understanding of the profound psychological and social impact that illness and disability can have on people with chronic illness and traumatic injury, providing a foundation that is designed to provide the student with an understanding of illness and disability within the psychosocial context.

**PHT 71000 Research Design**
30 hours; 2 credits
Introduction to the scientific methods of inquiry used in research and their meaning in physical therapy practice. This required course provides a foundation that is designed to provide the student with the basic understanding of the scientific method and research design as it relates to rehabilitation. Computer application to statistics will be addressed. Prerequisites: PHT 70100, PHT 70200, PHT 70300, PHT 70400

**PHT 72000 Human Physiology and Exercise Physiology**
60 hours; 4 credits
This course provides an overview of cellular structures and functions that regulate the body homeostasis from the point of cell division and genetic control of protein synthesis. This required course provides a foundation that is designed to provide the student with the knowledge of the physiological response at the molecular, cellular, and subcellular levels, and effects of exercise on the human body. Prerequisites: PHT 70100, PHT 70200, PHT 70300, PHT 70400

**PHT 73000 Structure and Function of the Nervous System**
45 hours; 3 credits
This course provides an overview of microscopic, gross, and developmental anatomy of the human nervous system with emphasis on neurological process, and structural and functional relationships. It will provide the student with information related to organization and relationship within the nervous system, and establishes a background for later understanding of different neurological disorders. Prerequisites: PHT 70100, PHT 70200

**PHT 74000PT Interventions and Preventions**
90 hours; 4 credits
Basic concepts of mobility and exercise for prevention and restoration of function. This required course provides a foundation that is designed to provide the student with competency in therapeutic exercises. Prerequisites: PHT 70100, PHT 70200

**PHT 75000 Physical Modalities - Clinical Decision Making and Application**
75 hours; 3 credits
Principles and practical application of thermal, mechanical, electromagnetic, and other energies in physical therapy are presented. This required course provides a foundation that is designed to provide the student with competency in the area of therapeutic modalities. Prerequisites: PHT 70100, PHT 70200

**PHT 76000 Lower Extremity Kinesiology & Assessment**
45 hours; 2 credits
The structure and function of joints and muscles will be reviewed for the lower extremities and trunk. This required course provides a foundation that is designed to provide the student with competency in the area of joint motion, muscle function analysis, and performance of manual muscle testing and goniometry. Prerequisites: PHT 70100, PHT 70200

**PHT 77000 Directed Research I**
30 hours; 2 credits
To provide students with the basic patterns of research from review of the literature to the design of multiple variable research involved in the clinical physical therapy environment. This required course provides a foundation that is designed to provide the student with the tools necessary to formulate a research proposal and prepare a proposal for IRB review. Prerequisites: PHT 70100, PHT 70200
PHT 78000 Clinical Medicine
45 hours; 3 credits
This course provides an overview of disease and injury with an emphasis on conditions encountered in physical therapy. This required course provides a foundation that is designed to provide the student with information related to etiology, development, clinical manifestations, and consequences of the disease in the area of clinical medicine.
Prerequisites: PHT 70100, PHT 70200

PHT 79500 Integumentary System: Assessment & Intervention
15 hours; 1 credit
The course focuses on evaluation and management of individuals with integumentary dysfunction. This required course provides a foundation that is designed to provide the student with competency in the area of integumentary care.
Prerequisites: PHT 70100, PHT 70200

PHT 79700 Colloquium Elective
TBA hours; 1 credit
This elective will provide students with the opportunity to enroll in an intense clinically based course presented by an expert in physical therapy. This course will complement the required curriculum in an area of physical therapy practice.
Prerequisites: PHT 70100, PHT 70200

PHT 80100 Pulmonary Evaluation and Interventions
60 hours; 2 credits
The course is designed to promote clinical reasoning skills in the examination, assessment, and intervention of patients with pulmonary dysfunctions. This required course provides a foundation for evaluation and intervention for patients with respiratory conditions.
Prerequisites: PHT 70100, PHT 70200

PHT 80200 Clinical Education: Education Theories
30 hours; 2 credits
The course is designed to introduce the student to the principles and theories of educational strategies. This required course provides a foundation for clinical internship experiences.
Prerequisites: PHT 70100, PHT 70200

PHT 80300 Differential Diagnosis & Intervention in Clinical Orthopedics
45 hours; 2 credits
The course is designed to promote clinical reasoning skills in the assessment and intervention of patients with orthopedic dysfunctions. This required course is one of a sequence of courses that provides an advanced component of the sequential curriculum that is designed to provide the student with competency in the treatment of patients' orthopedic dysfunctions.
Prerequisites: PHT 73000, PHT 76000, PHT 79000

PHT 80400 Introduction to Neurological PT
60 hours; 2 credits
Foundations, examination, and interventions for the treatment of disorders of the central nervous system. This required course is one of a sequence of courses that provides an advanced component of the sequential curriculum that is designed to provide the student with competency in the treatment of patients with CNS movement dysfunctions.
Prerequisites: PHT 73000, PHT 76000

PHT 80500 Musculoskeletal Examination I
75 hours; 3 credits
Basic examination techniques utilizing selective tissue tension tests will be applied to clarify common lower-extremity orthopedic diagnoses. This required course is the first in a series of three courses for musculoskeletal examination and intervention that is designed to provide the student to evaluate musculoskeletal disorders.
Prerequisites: PHT 74000, PHT 76000, PHT 78000

PHT 80600 Clinical Affiliation I
6 weeks full-time; 3 credits
A clinical internship in an acute-care hospital setting. Under the supervision of a licensed physical therapist, the student will integrate and apply coursework to provide quality care in the evaluation and treatment of patients with a variety of diagnoses. This required course provides a foundation that is to provide the student with clinical experience.
Prerequisites: PHT 80400, PHT 80500

PHT 80700 Proprioceptive Neuromuscular Facilitation
45 hours; 1 credit
The historical and theoretical framework of Proprioceptive Neuromuscular Facilitation (PNF) will serve as the foundation for learning these special exercise techniques. This required course is one in a sequence of courses that provides an advanced component in the area of therapeutic exercises.
Prerequisite: PHT 80600

PHT 80800 Differential Diagnosis in Neurological Evaluation
45 hours; 1 credit
A system of testing peripheral, central, and autonomic nervous system function will be presented with an emphasis on specificity and sensitivity of the tests. This required course provides the student with the competency in the area of testing individuals with peripheral and/or central nervous dysfunctions.
Prerequisite: PHT 80600

PHT 80900 Directed Research II
1 hour/week independent study; 1 credit
Complete the application needs for the Institutional Review Board of Hunter College or the College of Staten Island. Data collected and completion or research results. This required course provides the student with the ability to implement the proposed research project.
Prerequisite: PHT 80600
PHT 81000 Neurological Interventions I
75 hours; 3 credits
This course includes a description of the principles of rehabilitation, etiology of spinal cord injury and traumatic brain injury, anatomical and physiological considerations, and understanding of special problems faced by adults with physical disabilities, evaluation and treatment techniques, an understanding of adapted equipment and wheelchairs, evaluation of the home environment, and appropriate modifications. This required course provides a foundation that is designed to provide the student with the ability to perform examination, evaluation, and intervention for patients with spinal cord injuries and traumatic brain injuries. Prerequisites: PHT 80800, PHT 80900

PHT 81100 Cardiac Rehabilitation
60 hours; 2 credits
The physical therapy management of individuals with cardiovascular dysfunction is covered in this course. Physical therapy evaluations and treatment approaches for cardiac patients. This required course provides continuation of the sequence of evaluation and intervention for patients with cardiorespiratory conditions. Prerequisites: PHT 72000, PHT 71000

PHT 82000 Clinical Orthopedics II/Radiology and Imaging
30 hours; 2 credits
Etiology and therapeutic management of selected orthopedic conditions of the upper extremity and introduction to radiology and imaging. This course provides a foundation that is designed to provide the student with the ability to perform examination, evaluation, and intervention for upper extremity joints in the musculoskeletal system, and an introduction to radiology and imaging. Prerequisites: PHT 80800, PHT 80900

PHT 83000 Orthotics & Prosthetics
30 hours; 2 credits
This course is designed to orient the student to the role and responsibilities of the physical therapist in the field of prosthetics and orthotics. This required course is designed to provide the student with competency in the postoperative management of the amputee and prosthetic and orthotic application in individuals requiring rehabilitation. Prerequisites: PHT 80600, PHT 80700, PHT 80800

PHT 84000 Differential Diagnosis & Intervention in Clinical Neurology
45 hours; 3 credits
This course describes specific neurological systems and presents the clinical implications of disease or injury on each of these systems. This required course provides a foundation that is designed to provide the student with the competency to evaluate and treat neurological impairments. Prerequisites: PHT 80600, PHT 80700, PHT 80800

PHT 85000 Musculoskeletal Examination II
75 hours; 3 credits
Basic examination techniques utilizing selective tissue tension tests will be applied to clarify common upper extremity orthopedic diagnoses. This course is the second in a series of three courses for musculoskeletal examination and intervention. Prerequisites: PHT 80600, PHT 80700

PHT 86000 Directed Research III
15 hours; 1 credit
Students will complete a research project and prepare for a publishable manuscript following protocol in the Guide for Authors. Progress toward completion of a publishable research project. This required course provides a foundation that is designed to provide the student with the ability to complete a research project and prepare a publishable research manuscript. Prerequisite: PHT 80900

PHT 87000 Health Promotion through the Life Span
30 hours; 2 credits
This course defines the role of physical therapy in health prevention, promotion, and wellness. This required course provides competency in the area of health promotions and wellness. Prerequisites: PHT 80600, PHT 80700, PHT 80900

PHT 88000 Neurological Interventions II
60 hours; 2 credits
Foundations, assessment procedures, and application of the classical therapeutic exercise with a neurophysiological basis for the treatment of adult and pediatric disorders of the central nervous system, with emphasis on the techniques taught by the Bobaths (NDT). This required course is one in a sequence of courses designed to provide the student with competency in the area of treating clients with CNS movement dysfunctions. Prerequisite: PHT 81000

PHT 88100 Seminar on Organization and Management
45 hours; 3 credits
This course is designed to provide information and develop skills to manage an organized physical therapy service. This required course provides a foundation that is designed to provide the student with the skills and knowledge necessary to manage a physical therapy service. Prerequisites: PHT 81000, PHT 86000, PHT 87000

PHT 88200 Pediatric Development and Assessment
45 hours; 2 credits
Through lectures, laboratory experiences, discussions, videos, and assigned readings, the student will be able to examine and understand normal and abnormal human development, and theory and practice of physical therapy intervention in developmental disabilities. This required course provides a foundation that is designed to provide the student with the
competency and skills to evaluate and treat an infant or child with motor dysfunction.
Prerequisites: PHT 81000, PHT 84000

**PHT 88300 Pharmacology and Systems Review**
45 hours; 3 credits
This course provides an overview of previously covered physiology and pathophysiology of different body systems and provides a rationale for the use of drugs and other available treatment in different diseases. This required course provides a foundation that is designed to provide the student with competency in the area of pharmacology.
Prerequisites: PHT 81000, PHT 85000

**PHT 88400 Musculoskeletal Examination III**
75 hours; 3 credits
Advanced management of the spine, including selective tissue testing techniques. This required course is the third in a series of three courses for musculoskeletal examination and intervention.
Prerequisites: PHT 84000, PHT 85200

**PHT 88500 Electroneuromyography and Motion Analysis**
30 hours; 2 credits
This course provides the student with the physiological basis and techniques of the electrodiagnostic evaluation of the neuromuscular system through the use of nerve conduction studies and needle electromyography. This required course is one in the sequence of required courses that provides an advanced component of the sequential curriculum to provide the student with competency in neurological evaluations.
Prerequisites: PHT 81000, PHT 84000

**PHT 88600 Clinical Affiliation II**
10 weeks; 5 credits
A ten-week affiliation at a facility that will serve to further refine and enhance student's skills while building on past clinical experiences. This required course provides a foundation that is designed to provide the student with competent clinical skills.
Prerequisites: PHT 88000, and PHT 88200

**PHT 88700 Clinical Decision Making**
1 week; 1 credit
This seminar will bring students together to integrate clinical decision making through case studies, case scenarios, administrative issues, and the resolution of conflict within the workplace. This required course provides a foundation for the student to resolve conflict, and plan effective critical decisions in the clinic and administrative environments.
Prerequisite: PHT 88000

**PHT 88800 Directed Research IV**
1 week; 1 credit
Implement the research project at the locations designated and start data collection once all IRB approval(s) are in hand. This required course provides a foundation that is designed to provide the student with the skills necessary to plan and implement clinical research.
Prerequisite: PHT 88600

**PHT 88900 Colloquium Elective in Physical Therapy**
30 hours; 2 credits
This colloquium will provide students with the opportunity to interact with a renowned expert in physical therapy. This required course provides a foundation that is designed to provide the student with expertise on evidence-based practice from a leading authority in the field.
Prerequisites: PHT 79700, PHT 88900

**PHT 88950 Clinical Affiliation III**
10 weeks; 4.5 credits
This is the third of four clinical internship placements throughout the curriculum. This course provides a foundation that is designed to provide the student with competent clinical skills.
Prerequisites: PHT 88600, PHT 88000

**PHT 89000 Clinical Affiliation IV**
9 weeks; 4.5 credits
This is the fourth of four clinical internship placements throughout the curriculum. This course provides a foundation that is designed to provide the student with competent clinical skills.
Prerequisite: PHT 88950

**PHT 90000 Directed Research V**
1 hr/week; 1 credit
Implement the research project at the locations designated and start data collection once all IRB approval(s) are in hand. This required course provides a foundation that is designed to provide the student with skills to conduct and report research, both written and orally.
Prerequisite: PHT 88000
GRADUATE PROGRAMS, DISCIPLINES, AND COURSE OFFERINGS

Master of Science in Biology (MS)
Program Coordinator: Professor Richard Veit
Biological Sciences/Chemical Sciences Building (6S), Room 129
Email: biologymasters@mail.csi.cuny.edu
Telephone: 718.982.3862
(See section Graduate Courses in Selected Disciplines for biology courses for teachers.)
The Master of Science degree program in Biology is designed to provide research training and experience in the discipline of biology and allow students to specialize in such areas as molecular/cellular experimentation and ecology. The program is an appropriate foundation for students whose current goal is a terminal master’s degree as a credential for laboratory or field research and for students who intend to continue to study toward the doctorate.

The program prepares students for careers in the expanding fields of molecular biology, genetic engineering, and conservation biology. Graduates of the program will be prepared to conduct research, to evaluate the research of others, and to write and speak effectively in scientific fields. The program opens the door to careers in clinical and research laboratories, industry, teaching, science writing, and in governmental agencies in the fields of health, environment, and parks.

Students with initial certification in Adolescence Education* (Biology) wishing to obtain professional certification in Biology will complete a program of 33 graduate credits. Students in the program enroll in ESC 601 (3 credits) and BIO 799 (6 credits) with others in their cohort. In addition to the courses listed above, they are required to take EDS 694 Advanced Studies in Teaching Secondary School Science (3 credits). Students who choose this program of study will complete a thesis with guidance from faculty of the Departments of Biology and Education.

*Approved by University Governance; pending NYSED approval.

Biology Admissions Requirements
The Department of Biology Graduate Admissions Committee makes all decisions regarding admission to the program as a matriculated or non-matriculated student. Applicants are required to submit a CSI Graduate Admissions Application and a Department of Biology application.

1. BS in Biology degree from an accredited college (students in the last semester of undergraduate study and students with a baccalaureate in another discipline may also be considered for admission).
2. Overall GPA of 2.75 (B-) and a GPA of 3.0 (B) in undergraduate science and mathematics courses.
3. Two letters of recommendation testifying to the applicant’s ability to complete successfully the program of graduate study.
4. General Aptitude Test and the Advanced Test in Biology of the Graduate Record Examination.
5. A grade of 550 on the TOEFL test is required of all applicants for whom English is a second language.

Non-matriculated status: Applicants who meet most, but not all, of the admissions requirements may be considered for admission with non-matriculated status.

Retention in the Program
A minimum GPA of 3.0 (B) is required for the 30 credits of required courses, of which six credits may be allocated to thesis research. Four courses are required of all candidates: BIO 603, BIO 604, BIO 605, and ESC 601. The remaining courses, 11 credits, will be chosen according to the student’s career goals.

Prior to the completion of 15 credits, students are required to present their research proposal to their Thesis Committee. The student’s Committee will consist of at least three members, two of whom must be faculty in the Biology Department, including the student’s adviser.

Prior to the completion of 15 credits, students must provide evidence of proficiency in writing and speaking, computer skills, and statistics.

Transfer Credits
Acceptance of any graduate course taken elsewhere toward the requirements of a CSI degree is at the discretion of the coordinator of the graduate program. A maximum of nine credits of courses taken elsewhere in The City University may be applied to the MS in Biology, and a maximum of six credits of courses taken at colleges outside The University may be accepted for transfer. A grade of 3.0 (B) is the minimum grade accepted for transfer credit.

Biology Degree Requirements:

30 credits
Four required courses: (13 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 603</td>
<td>Scientific Communication I</td>
<td>3 credits</td>
</tr>
<tr>
<td>BIO 604</td>
<td>Scientific Communication II</td>
<td>3 credits</td>
</tr>
<tr>
<td>BIO 605</td>
<td>Statistical Analysis</td>
<td>4 credits</td>
</tr>
</tbody>
</table>
ESC 601 The Biosphere and Our Species 3 credits

Ecology, Evolution, and Behavioral Biology;
Molecular, Cellular, and Developmental Biology;
Multidisciplinary; and Physiology courses chosen from the following lists: (11 credits)

Ecology, Evolution, and Behavioral Biology
BIO 720 Entomology
BIO 721 Evolution of Primates
ESC 722/ BIO 722 Marine Ecology
BIO 723 Ornithology
BIO 724 Plant Population Biology
BIO 727/ ESC 727 Conservation Biology
BIO 730 Principles and Methods of Systematics, Evolution, and Phylogeny
BIO 735 Biogeography
BIO 736 The Mammals

Molecular, Cellular, and Developmental Biology
BIO 740 Advanced Microscopy
BIO 741 Cell Culture Techniques
BIO 742 Cell Physiology
ESC 743/ BIO 743 Cellular Toxicology
BIO 744 Laboratory Methods in Cell Biology
BIO 750 Laboratory Methods in Molecular Genetics
BIO 751 Molecular Genetics

Multidisciplinary
BIO 760 Introduction to Bioinformatics and Genomics
BIO 761 Mathematical Methods in Biology
BIO 771 Principles of Epidemiology

Physiology
BIO 780 Comparative Physiology
BIO 781 Laboratory Methods in Physiology
BIO 782 Vertebrate Endocrinology
BIO 783 Environmental and Evolutionary Physiology

In satisfying these 11 credits, students may take up to nine credits in other departments at CSI, at other senior colleges in CUNY, or at the Graduate School.

Research
BIO 799 Thesis Research 1 – 6 credits

Biology Courses

BIO 603 Scientific Communication I
3 hours; 3 credits
The course focuses on scientific writing, with emphasis on the preparation, editing, and evaluation of scientific manuscripts and grant proposals. The student will critique current literature, prepare manuscripts, and review and author grant proposals.

BIO 604 Scientific Communication II
3 hours; 3 credits
This course is a continuation of BIO 603 and emphasis will be placed on public speaking. The student will prepare materials for oral presentation, including making slides and transparencies, and for poster presentations for delivery at scientific meetings. Students will also make oral and poster presentations to an audience of faculty and fellow students.
Prerequisite: BIO 603

BIO 605 Statistical Analysis
3 lecture hours, 3 laboratory hours; 4 credits
Statistical analysis as applied to all biological fields; the course will emphasize analysis of students’ own data. ANOVA, regression, time series, and randomization tests will be included. Students must learn SPSS statistical program.
Prerequisite: CSC 126 recommended; or equivalent psychology courses

BIO 720 Entomology
Also MTH 704
3 hours, 3 credits
This course teaches statistical analysis using the concept of Likelihood to drive Model Selection. The subject matter differs from other statistical methods in that a single model is chosen from multiple alternatives based on data. To enroll in this courses students must have taken an undergraduate course in statistics and calculus.

BIO 721 Evolution of Primates
3 hours; 3 credits
Examines the evolution of primates from tree shrews to apes. Adaptations of morphology, physiology, locomotion, diet, foraging behavior, ability to learn, tool use, territoriality, aggressive behavior, dominance hierarchies, mating systems, dispersal, social structure, and communication systems in Old and New World species to their environment. The sociobiology and ecology of selected species will be treated in greater detail.
Prerequisite: BIO 322 or BIO 338 or BIO 360 or equivalent, or permission of the instructor

**BIO 722 Marine Ecology**  
(Also ESC 722)  
3 hours; 3 credits  
Field-oriented study of estuarine and pelagic ecosystems. This course will emphasize how spatial and temporal scales are critically important in the study of marine organisms. Students will learn specialized sampling and analytical techniques necessary for the study of marine systems. Topics will include comparisons of “rate-based” versus “abundance-based” studies of population dynamics plus comparisons of individual, population, and community levels of analysis.  
Prerequisite: BIO 360 or equivalent

**BIO 723 Ornithology**  
3 lecture hours, 3 laboratory hours; 4 credits  
A comprehensive introduction to ornithology. Lecture will introduce bird structure and behavior with emphasis on (1) anatomical and physiological adaptations for flight, (2) ecology and reproductive behavior, (3) song and its function, and (4) migration and distribution. Most laboratory sessions will be field trips for locating and identifying birds, observation of bird behavior, and recording bird songs. One or more laboratory sessions will include anatomical dissection and behavior of captive birds. There will be at least one overnight field trip to study nocturnal migration.  
Prerequisite: BIO 322 or BIO 338 or BIO 360 or equivalent, or permission of the instructor

**BIO 724 Plant Population Biology**  
3 hours; 3 credits  
Ecological and evolutionary perspectives on the dynamics of plant populations. Topics include demography, life-history evolution, ecological genetics, phenotypic and genotypic variation within and between populations, competition, reproduction and breeding systems, pollination ecology, seed dispersal and germination, symbioses, clonality, and coevolution. In addition, the application of population concepts to environmental and conservation problems will be covered.  
Prerequisites: BIO 228 and BIO 312 and BIO 360 or equivalents

**BIO 727 Conservation Biology**  
(Also ESC 727)  
3 hours; 3 credits  
Conservation biology is a multidisciplinary field of environmental science. The objectives of this course are: (1) to understand global biodiversity in its historical context; (2) to learn how human impacts are endangering ecosystems around the world; (3) to identify the biological properties of organisms, populations, species, and systems that render them vulnerable; and (4) to explore means of protecting biodiversity and the ecological processes on which it depends.  
Prerequisite: ESC 601

**BIO 730 Principles and Methods of Systematics, Evolution, and Phylogeny**  
3 lecture hours, 3 laboratory hours; 4 credits  
Species concepts and the history of evolutionary thought. Mechanisms of evolutionary change. The history of life.  
Prerequisite: BIO 322 or equivalent

**BIO 735 Biogeography**  
4 hours; 4 credits  
An introduction to the distribution of both terrestrial and aquatic animals and plants with emphasis on their prehistoric, historic, and present distributions and how these relate to the ecological conditions of the periods, methods of dispersal, and movement across the planet. Historical changes in scientific thought concerning the means of movement (e.g., land bridges, rafting, plate tectonics) are presented. The flora and fauna of unique regions of the Earth (e.g., Madagascar, Australia, South America, and Antarctica) will be examined for similarities and differences in their compositions. The effects of humans, early and present, on distribution are discussed.  
Prerequisite: BIO 322 or BIO 338 or BIO 360 or equivalent, or permission of the instructor. NOTE: ESC 735 may substitute for this course

**BIO 736 The Mammals**  
3 hours; 3 credits  
The evolution of the various orders of mammals from monotreme to marsupial to placental. Studies of the various morphological, physiological, and behavioral characteristics that define each order. Emphasis on adaptations of behavior, social structure, and mating systems to environmental conditions.  
Prerequisite: BIO 322 or BIO 338 or BIO 360 or equivalent, or permission of the instructor

**BIO 740 Advanced Microscopy**  
6 laboratory hours; 3 credits  
Preparations of biological specimens for use in confocal laser scanning microscopy, scanning and transmission of electron microscopy, image analysis of micrographs.  
Prerequisite: BIO 272 or equivalent

**BIO 741 Cell Culture Techniques**  
6 laboratory hours; 3 credits  
Preparation and propagation of eukaryotic cell lines from primary tissue isolates.  
Prerequisite: BIO 352 or equivalent

**BIO 742 Cell Physiology**  
3 lecture hours, 3 laboratory hours; 4 credits  
The function of living cells, including examination of membrane composition and biogenesis, membrane transport proteins, electrical properties of membranes,
and interaction between cells and extracellular matrix and cell-cell interactions.
Prerequisite: BIO 352 or equivalent

**BIO 743 Cellular Toxicology**  
(Also ESC 743)  
4 hours; 4 credits  
Toxicology is the overview of the mechanisms by which exogenous agents produce deleterious effects in biological systems. An overview of the sensitive analytical techniques that have facilitated studies on the metabolism and biotransformation of xenobiotics and have contributed to interpretation of the biological and toxicological effects of xenobiotics will be presented. Since the action of toxins is ultimately exerted at the cellular level, emphasis will be placed on the description of representative model cell systems that play an important role in the identification and assessment of potential environmental hazards. A variety of prokaryotic and eukaryotic cell systems are currently in use for the study of different toxic effects including cytotoxicity, genotoxicity, and mutagenesis.  
Prerequisites: CHM 256 and BIO 314 and BIO 352 or equivalent

**BIO 744 Laboratory Methods in Cell Biology**  
6 laboratory hours; 3 credits  
Use of current cell biology techniques available. Techniques will include subcellular fractionation, polyacrylamide gel electrophoresis, immunoblot techniques, polymerase chain reaction, and in situ hybridization. Use of confocal laser scanning and electron microscopes will be included.  
Prerequisite: BIO 352 or equivalent

**BIO 750 Laboratory Methods in Molecular Genetics**  
6 laboratory hours; 3 credits  
Techniques needed to form, recover, and analyze recombinant DNA will be performed. Southern analysis and PCR will also be included.  
Prerequisites: BIO 312 and BIO 352 or equivalent

**BIO 751 Molecular Genetics**  
4 hours; 4 credits  
Topics will include nucleic acid and chromosome structure, transcription, translation, protein localization, and regulation of gene expression, DNA replication and repair, biotechnology, signal transduction, regulation of the cell cycle, and oncogenes. Both prokaryotic and eukaryotic systems will be discussed.  
Prerequisites: BIO 312 and BIO 352 or equivalent

**BIO 760 Introduction to Bioinformatics and Genomics**  
4 hours; 4 credits  
Introduction to the representation and analysis of biological sequence and structural information. Description and use of nucleic acid, protein, structure, sequence motif, genome, literature, and other relevant databases. Overview and discussion of basic sequence manipulations and analyses including sequence assembly and editing, restriction and protease analysis, coding region identification, gene prediction, database searching and similarity analysis, pairwise and multiple sequence alignment, PCR primer design, phylogenetic analyses, protein structure and property prediction, RNA structure prediction, and microarray analyses. Course format includes lectures and sequence analysis exercises.  
Prerequisite: BIO 312 or equivalent. Recommended: BIO 370 or BIO 352 or equivalent and BIO 751 or equivalent. Not open to students who have taken BIO 326

**BIO 761 Mathematical Models in Biology**  
3 lecture hours, 3 laboratory hours; 4 credits  
Prerequisites: MTH 230 or equivalent plus at least one advanced course in biology (300 level or above)

**BIO 771 Principles of Epidemiology**  
3 hours; 3 credits  
Introduction to principles and methods of epidemiological investigation of both infectious and noninfectious diseases. How studies of the distribution and dynamics of diseases in communities and populations contribute to an understanding of their etiology, modes of transmission, and pathogenesis. Clinical examples of the evaluation of treatment, prevention, costs, and policy implications of disease.  
Prerequisites: BIO 272 and basic computer knowledge

**BIO 780 Comparative Physiology**  
4 hours; 4 credits  
Survey of major taxonomic groups to identify diverse solutions to universal problems of nutrient acquisition and transport, osmoregulation, movement and maintenance of homeostasis.  
Prerequisites: BIO 205 and BIO 213 or BIO 215

**BIO 781 Laboratory Methods in Physiology**  
6 laboratory hours; 3 credits  
Diverse topics of physiological techniques, including respirometry, enzyme and metabolite assays, and analysis of osmolarity and osmolytes, will be addressed depending upon the research requirements of specific students.  
Prerequisites: BIO 205, BIO 370 or equivalents

**BIO 782 Vertebrate Endocrinology**  
6 laboratory hours; 3 credits  
Focus will be on the role of chemical messengers of endocrine and neural origin in the control of vertebrate physiological processes (i.e., growth and regulation of cellular function). In addition, the cellular source, biosynthesis, chemistry and storage of the messengers, the factors and mechanisms controlling messenger secretion, and the cellular mechanisms of messenger actions will be emphasized.  
Prerequisites: BIO 205, BIO 332, CHM 256 or equivalent
**Offerings**

**BIO 783 Environmental and Evolutionary Physiology**

3 hours; 3 credits

Focus on questions in ecological and evolutionary physiology, including examination of specific examples of environmental adaptation, especially to extreme environments. Discussion of methodological approaches and current philosophical debates on identifying adaptation in physiological processes and critiques of primary literature.

Prerequisites: BIO 434 or equivalent and BIO 605

Recommended: BIO 370 or equivalent

**BIO 799 Thesis Research**

Hours and credits vary, maximum six credits with no less than three credits in one semester. This course may be repeated. No student may apply more than a total of six credits of thesis research toward the degree.

**ESC 601 The Biosphere and Our Species**

3 hours; 3 credits

A required course that covers the structure and function of the biospheric ecosystem on the planet Earth, and the impacts of our species upon it in terms of ecology, resource use and exploitation, sociopolitical aspects, economics, environmental ethics, and related topics.

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**Master of Science in Business Management (MS)**

Program Coordinator: John Sandler

Business Building (3N), Room 238

Telephone: 718.982.2921

The College of Staten Island offers a program leading to the degree of Master of Science in Business Management. Designed for a broad spectrum of students with undergraduate degrees in business and related fields, it is focused on strategic management skills with required courses in major decision making areas. Students will study advanced analytical methods and theory and acquire experience with new technology.

The Department of Business at CSI offers Baccalaureate degrees in Accounting and in Business with concentrations in Finance, International Business, Management, and Marketing, and, in conjunction with the Department of Computer Science, a Baccalaureate degree in Information Systems. The Department of Media Culture offers degrees in Corporate Communications; the Department of Political Science, Economics, and Philosophy offers degrees in Economics. Graduates in all of these disciplines are potential candidates for the Master’s degree program in Business Management.

In addition, the program serves Accounting graduates who will need 150 hours of baccalaureate and post-baccalaureate education to sit for the Certified Public Accountant examination.

The Master’s degree program in Business Management at CSI is unique in CUNY. It specializes in management decision making and is thus appropriate for both accounting and non-accounting student populations.

Objectives of the Master’s degree program in Business Management include:

- Graduates will have learned the analytical methods currently used to assess businesses and non-profit organizations, planning and implementation processes, and control methods.
- Graduates will have updated and honed their skills in decision making, analysis, and technology.
- Graduates will understand current theories and issues of business ethics, ethical dilemmas, and the role of ethics in decision making.
- Graduates will be familiar with the global marketplace and its implications for business.
- Graduates with a background in accounting will acquire the credentials to sit for the CPA examination.

**Business Management Admission Requirements**

Admission Requirements

Students may apply for admission to the program for the fall or spring semesters. A graduate Management Steering Committee comprised of the coordinator of the program and deputy area coordinators from accounting, finance, information systems, international business, management, and marketing will determine admissions using the following criteria:

- Successful applicants must have a Baccalaureate degree in Business or related fields such as corporate communications or Economics (Group 1) or an Accounting degree from CSI (Group 2) and a grade point average of 3.0 or higher. CSI Business faculty will evaluate the records of students with accounting degrees from accredited institutions other than CSI. Potential students may apply after taking proficiency courses.
- They must take the GMAT examination. Students with degrees in corporate communications may choose to take the GRE examination.
- Those with baccalaureate degrees from non-English-speaking universities must also take the TOEFL examination and achieve a score of 600 on the paper-based version or 250 on the computer-based version.
- They must supply two letters of recommendation from instructors or employers. One letter, whenever possible, should come from a current or former employer.
- The Steering Committee may request an interview.

Group 2:
Students in Group 2 are required to have an undergraduate degree in accounting from CSI. CSI faculty will evaluate the records of students with accounting degrees from accredited institutions other than CSI.

All applicants must demonstrate proficiency in business fundamentals by having completed the following undergraduate coursework before starting the MS:

2 courses in accounting**
1 course in communications (may be a communications course or a business course with a strong emphasis on business presentations)
1 course in computer fundamentals (i.e. MS Windows, Office, Internet skills)
2 courses in economics (microeconomics and macroeconomics)
2 courses in quantitative methods (minimum of pre-calculus and statistics)
1 course in management
1 course in marketing

Students may substitute a passing score on the CLEP examination for any of the proficiency requirements.

Students must complete an essay as part of the enrollment application.

**CSI offers a graduate proficiency accounting course (ACC 600)

Business Management Degree Requirements
Students in the Master’s degree program in Business Management are required to take 30 credit hours, or ten courses at three credits each, at the graduate level. Most students will have satisfied prerequisites in accounting (2 courses), communications (through a communications course or through business classes with major presentation requirements such as upper-level courses in management and marketing), computer fundamentals (one course equivalent to BUS 150), economics (two courses equivalent to microeconomics and macroeconomics and quantitative methods (minimum of pre-calculus and statistics) as undergraduates. Those who have not may be permitted to remedy undergraduate deficiencies, but courses taken to remove the deficiencies must be in addition to their regular coursework.

With prerequisites satisfied, all students are required to take four core courses:

- MGT 600 The Administrative Process
- MGT 605 Business, Government, and Society
- MKT 600 Strategic Marketing Management
- FNC 600 Financial Management

These courses, as well as later courses, may involve case studies, computer simulations, formal presentations and projects, and exploring the Internet.

Once these core courses have been completed, students are required to take four more advanced courses:

- MGT 710 Leadership and Organizational Effectiveness
- MGT 720 Global Business Strategy
- MGT 730 Strategic Human Resource Management
- MGT 770 Managerial Decision Making and Applications

The capstone course, Managerial Decision Making and Applications, involves a comprehensive and integrative approach to managing an organization over time through computer simulation. There is a significant quantitative and financial aspect to the course complemented by a qualitative analysis of business policy and strategy over time. While not a thesis per se, a significant written assignment is required at the culmination of the course in addition to smaller papers during the term. This capstone course is comparable to those offered at many business schools worldwide. It is a very rigorous experience designed to bolster the program’s intent of training decision makers.

In addition, students will elect two courses from a group of seven:

- ACC 730 Accounting/Management Information Systems
- ACC 740 Tax Strategies and Business Decisions
- FNC 730 Financial Statement Analysis
- FNC 740 Financial Planning
- MKT 730 Services Marketing and Management
- MKT 740 Business-to-Business Marketing
- MGT 790 Seminar in Contemporary Business Topics (including topics in Information Systems, Internet Marketing, Entrepreneurship, etc.)

Business Management Courses

ACC 600 Introduction to Financial and Managerial Accounting
3 hours; 3 credits
This course prepares students to work with financial statements and other accounting information. Topics include introduction to the accounting system, understanding how key accounting alternatives can influence interpretation of financial information, and identification and analysis of key disclosures. Coverage of managerial accounting includes analysis of variable
45 Graduate Programs, Disciplines, and Course Offerings

and fixed costs, period costs, product costs, investment decisions, and budget preparation.

**ACC 730 Accounting/Management Information Systems** 3 hours; 3 credits
This course covers requirements of corporate accounting for managerial and external use and the system design methods to satisfy these needs. The integration of accounting information system with corporate operational systems and with the systems of vendors and customers is a major focus. Other topics include integrity, security, and accuracy of the information processed.
Prerequisite: ACC 600 or undergraduate credits in accounting

**ACC 740 Tax Strategies and Business Decisions** 3 hours; 3 credits
This course examines timely topics in tax at an advanced level. Particular emphasis is placed on tax strategy and planning, as well as compliance and procedural considerations. Students will be required to read scholarly articles and official pronouncements on current issues and developments. Research papers and oral presentations on timely topics are required.
Prerequisite: ACC 600 or undergraduate credits in accounting

**FNC 600 Financial Management** 3 hours; 3 credits
Topics presented in this course include an examination of analytical issues that surround long-term and short-term financing, financial ratio analysis, current asset management, capital budgeting, present value concepts, the cost of capital, mergers/acquisitions, and new ventures. Material related to for-profit, not-for-profit, and global environments is presented.

**FNC 730 Financial Statement Analysis** 3 hours; 3 credits
Income statements, balance sheets, and statements of cash flows will be studied from the point of view of financial managers. Ratio analysis, such as profitability, liquidity, debt, asset utilization, and market value ratios will be discussed. Cross-sectional and time series analysis of financial metrics will be examined. The focus of this course will not be the construction of financial statements; instead, we will try to understand the value of a firm.
Prerequisites: FNC 600, ACC 600 or undergraduate credits in accounting

**FNC 740 Financial Planning** 3 hours; 3 credits
This course will cover topics in budgeting, investments, income tax planning, insurance, retirement planning, and estate tax and trusts from the perspective of the individual.
Prerequisite: FNC 600

**MGT 600 The Administrative Process** 3 hours; 3 credits
This course introduces students to the key issues involved in the management of organizations. Major topics include the nature of management and the skills required for success, the organization’s internal and external environment, organizational ethics, and the functions of managers (planning, organizing, leading/motivating, and controlling).

**MGT 605 Business, Government, and Society** 3 hours; 3 credits
This course proposes to: (1) examine the roles and responsibilities of business in today’s complex global economy, including the interests of various stakeholders; explores social, legislative, regulatory, and judicial processes as expressed in public policy and the options open to business management in anticipating and responding to these forces; (2) integrate concepts of ethical behavior with corporate responsibility; and (3) examine managerial values and corporate culture and the resulting corporate governance as driving forces in the modern business organization. Particular focus on the differences between policy formation in the U.S. as compared to other nations.

**MGT 710 Leadership and Organizational Effectiveness** 3 hours; 3 credits
A systematic analytical approach to understanding, predicting, and controlling human behavior in organizations is presented in this course. Special consideration is given to the relationship of the individual and the organization, groups and the organization, and organizational development. The course is presented within the framework of providing leadership for the organization and its employees.
Prerequisites: MGT 600, MGT 605

**MGT 720 Global Business Strategy** 3 hours; 3 credits
This course introduces students to the key issues involved in developing long-term global strategy for organizations. Major topics include analysis of the organization’s internal and external environments and planning strategy at the corporate, business, and functional levels. Consideration will be given to strategic planning for international and non-profit organizations. Case studies will be used to develop an understanding of top management’s role in all phases of global strategy formulation management.
Prerequisites: MGT 600, MGT 605

**MGT 730 Strategic Human Resource Management** 3 hours; 3 credits
The course addresses the functions of a human resource manager, with emphasis placed upon the technical, analytical, and legal skills required for effective job
performance. Special topics include: recruiting, selecting, training and development, performance appraisal, components of compensation, and compliance with legal mandates.

**Prerequisites:** MGT 600, MGT 605

**MGT 770 Managerial Decision Making and Applications**
3 hours; 3 credits
This capstone course requires the application of all business education. It is an integrative course that places students in the role of top/middle management facing the myriad decisions involved with running a business. The heart of the course is participation in a computer-based business simulation. The emphasis is on team interpersonal dynamics, use of financial statements, and decision making skills in business situations that involve the organization as a whole.

**Prerequisites:** MGT 600, MGT 605, MKT 600, FNC 600, MGT 710, MGT 720

**MGT 790 Seminar in Contemporary Business Topics**
3 hours; 3 credits
This course examines timely topics in business. Topics will rotate by semester and may focus on information systems, marketing research, venture capital and business valuation, and advanced accounting issues, for example. Opportunities for individual research are integral to the course.

**Prerequisite:** Instructor permission

**MKT 600 Strategic Marketing Management**
3 hours; 3 credits
This course is designed to expose graduate students to key aspects of the marketing function in for-profit and non-profit organizations. All elements of the marketing mix including product decisions, pricing, distribution, and communication are discussed. Students are introduced to marketing theories and concepts, encouraged to develop analytical and decision making skills, and provided the opportunity to execute managerial actions in varied market settings. The applied course format requires the student to utilize and communicate marketing concepts through case analyses.

**MKT 730 Services Marketing and Management**
3 hours; 3 credits
This course applies marketing and management principles to the unique requirements of service industries (financial, legal, accounting, medical, etc.). The special roles of the marketer, service provider, and customer in the process of creating and delivering value are considered. Emphasis is given to the utility of the Internet for identifying prospects, delivering services, enhancing value, and strengthening relational bonds. The course employs text readings, case analysis, and other exercises to build key themes.

**Prerequisite:** MKT 600

**MKT 740 Business-to-Business Marketing**
3 hours; 3 credits
This course explores the differences between business and consumer marketing. It examines business/institutional buyer behavior and marketing strategy including market research, product planning, pricing, promotion, and management of the sales force. Extensive use of the Internet is required for case studies and other assignments.

**Prerequisite:** MKT 600

**Master of Arts in Cinema and Media Studies (MA)**

**Program Coordinator:** Associate Professor Matthew Solomon

**Center for the Arts (1P), Room 226**

**Email:** cinemamasters@mail.csi.cuny.edu

**Telephone:** 718.982.2548 or 718.982.2541

(See section Graduate Courses in Selected Disciplines for cinema and media studies courses for teachers.)

The Master of Arts Program in Cinema and Media Studies at the College of Staten Island is uniquely situated in the most vibrant media capital in the world. Our select and markedly international student body thus has direct access to New York City's extraordinary media archives, museums, theaters, galleries, and libraries, enriching and extending what is learned in the classroom.

Students accepted into the program undertake a challenging two-year curriculum that spans core knowledge in media history, theory, criticism, and production to develop research, writing, and media-making skills in preparation for careers in academia, the arts, or media-related professions.

Students are encouraged to work one-on-one with an engaged, diverse faculty composed of active distinguished film scholars and historians, and prominent film, video, and digital media artists. In addition, our students have the rare opportunity to combine coursework in both theory and practice, completing either a written or media production thesis, with resources including a digital media lab and a television studio.

Our growing program is intended to usher cinema and media studies into a new era of global intellectual and creative exchange.

**Cinema and Media Studies Admission Requirements**

**Admission Requirements**
Applicants to the program are expected to have the Bachelor of Arts or Bachelor of Science degree in a liberal arts and sciences major and to have completed with a B average the undergraduate courses required for the BA in Cinema Studies or Bachelor of Science in Communications at the College of Staten Island, or
their equivalent. Applicants must also submit a one- to two-page statement of intent detailing interest in the field, background in film and media studies, and/or research interests; a ten- to 12-page writing sample (a short critical essay on a film topic or other related media); and three letters of recommendation. The priority deadline for receipt of applications for admission for the fall semester is April 15. Late applications for fall semester will be accepted until May 1. The priority deadline for receipt of applications for the spring semester is November 15. Late applications for spring semester will be accepted until December 1. The department admissions committee will give full consideration to applications received after these respective dates, spaces permitting.

**Cinema and Media Studies Degree Requirements**

36 credits in graduate cinema and media studies courses that must include the following core requirements*:

- CMC 700 History of Media
- CMC 705 Film and Media Research
- Analysis
- CMC 710 Studies in Film and Media Theory

All remaining credits are to be fulfilled, following advisement, through electives offered in the graduate program in Cinema and Media Studies.

*Students who choose to complete a written or production thesis must apply to the departmental graduate studies committee for approval. Please see Options A and B below for thesis procedures and guidelines.

Note on production courses: A maximum of nine credits in film or media production may be counted toward the degree, with the approval of the candidate’s graduate adviser. Graduate independent study in film production is only granted with permission of the instructor and program coordinator.

Note: Students who elect Option A or B below should maintain a 3.7 GPA or higher. Satisfactory completion of one of the following three options:

**Option A: Written Thesis**

Topics suitable for the master’s thesis span the entire range of cinema and media theory, history, and practice. Possible topics include studies of media producers, history of media production and its institutions, media and spectatorship, ideology and production of film and media works, and media in relationship to issues of race, gender, class, and nation. The thesis length should run approximately 70-80 pages. Whenever possible, the topic of the thesis should extend or at least reflect the candidate’s graduate coursework. Candidates should be aware of the following steps to be taken in completing the thesis option:

**Written Thesis Procedures and Guidelines**

1. Each candidate is strongly advised to take CMC 705 (Film and Media Research) before undertaking the MA thesis. The course prepares students for the process of researching and writing the master’s thesis. The student may also prepare the thesis proposal with faculty supervision through CMC 894 (Independent Study) or independently.

2. Each candidate must submit a comprehensive proposal to the graduate studies committee before beginning the actual thesis. The committee must approve this proposal and may request revisions and/or a meeting with the candidate to discuss it. If the committee does not approve the thesis proposal, the candidate is required to take the MA comprehensive examination. A student seeking to appeal the committee’s decision regarding the thesis may appeal in writing to the graduate studies coordinator.

3. Once approved, each candidate must choose a thesis committee comprised of three members of the full-time faculty of the Department of Media Culture. The chair of the thesis committee will direct the researching of the thesis and preparation of the manuscript through CMC 799 (Thesis Research), which may be repeated once for credit (maximum 8 credits). The other two members of the thesis committee will evaluate the thesis proposal, the completed thesis, and suggest revisions. The thesis committee may request a meeting with the candidate at any time during the process.

4. A copy of the completed thesis is submitted to each member of the thesis committee. Successful completion of the MA thesis requires the approval of all thesis committee members, who will sign the signature page if the thesis is satisfactory. The candidate will then submit two copies of the approved thesis (with signature pages) to the CSI Library for binding and cataloging. MA thesis are available for consultation in the CSI Library and through interlibrary loan.

**Option B: Original Film or Media Production Thesis**

For this option, students may submit an original film or media work. Students who elect this option must also fulfill the requirements of Option C, item (1), Film and Media History. The examination will be a take-home exam and must be completed in five days. Students choosing the production thesis option may, under the advisement of the graduate faculty, need to complete an undergraduate production course(s). Production Thesis Guidelines:

1. A film or video production thesis, whether undertaken in the fictional, nonfictional, or experimental genres, should run 20 to 45 minutes
2. The candidate must submit a comprehensive thesis proposal to the graduate studies committee before beginning the actual thesis. This proposal should be in the form of an extended written treatment, which should include, at minimum, a description of the project, a specific timeline for the stages of production and post-production, and an account of the research undertaken for the project’s development, where appropriate. The student should plan to prepare the thesis proposal with faculty supervision through CMC 894 (Independent Study).

3. If approved, each candidate must choose a thesis committee composed of three members of the full-time faculty of the Department of Media Culture. The chair of the committee will direct and monitor the stages of thesis production through CMC 799 (Thesis Research), which may be repeated once for credit (maximum 8 credits). Before completion of the production thesis, two informal reviews take place. First, the candidate must submit to the thesis committee an emended proposal, which fully details the style and mode of production and provides as much as possible a shooting script. Second, a rough cut of the film or video must be made available to the committee at an early stage of post-production. In both instances the committee will have an opportunity to suggest revisions and improvements before the thesis can be completed.

A copy of the competed thesis in the form of a DVD or VHS dub is to be submitted to each member of the thesis committee. Successful completion of the MA production thesis requires the approval of all thesis committee members.

**Option C: Examinations**

This option consists of a comprehensive take-home written examination. This examination will be divided into two parts:

1. **Film and Media History:** this section includes the following subject areas: periods, genres, authorship, international cinema, and media practices.

2. **Film and Media Theory:** this section includes critical and theoretical writings on cinema and media, including such theoretical models as formalism, semiotics, psychoanalysis, gender and feminism, and cultural studies approaches.

3. Each section will comprise two questions. Students must answer one question in essay form from each section.

4. The examination will be taken only upon completion of coursework. It will be given once a year, in May. Applications to take the examination must be made no later than March 15 of the year the examination is to be taken.

5. The questions on the examination will take into account the specific areas of knowledge covered in the required core seminars and selected elective courses. Selected bibliography as well as a list of media works will be made available to the students once the department receives notice of application for the exam. Answers to the questions should each be ten double-spaced, typed pages minimum. Completed examinations will be due ten days after issuance.

The complete examination will be read by members of the graduate Cinema and Media Studies faculty who may request a meeting with the candidate to discuss it. When the faculty approves the examination, it will be retained in the Department files, although the candidate may retain a copy.

**Maintenance of Candidacy**

To maintain candidacy for the MA degree, full-time students must maintain a B (3.0) average in each 12-credit semester. Part-time students must maintain a B average in each successive 12-credit sequence of courses taken.

Note: All candidates should be aware that they must pay the maintenance of matriculation fee during any semester in which they are not enrolled, unless they are not using College facilities (including the Library and screening facilities) during this period. In this case, they may pay the reinstatement fee and the maintenance fee for the semester in which they are graduating. If the candidate has not paid for each semester, the reinstatement and maintenance fee for one semester may be paid, provided that the candidate has not used the College facilities and that the request is supported by a written statement from the committee chair.

**Cinema and Media Studies Courses**

**CMC 700 History of Media**

4 hours; 4 credits

The class provides students with a comprehensive history of media practices and debates in media studies. Students are introduced to the relationships linking social and economic history, the development of new media technologies, forms of “texts,” and the dissemination and impacts of mass media. This course, as well, examines the history of the field of media studies, allowing students to think about their future research for the MA thesis.

Prerequisite: Matriculation in the graduate Cinema and Media Studies program or permission of instructor;
required of all matriculated candidates for the MA degree in Cinema and Media Studies

CMC 705 Film and Media Research Analysis
4 hours; 4 credits
This course provides an overview of methodological research practices for film and the other media arts. Research skills and tools are developed in order to prepare for the master’s written thesis, media production thesis, or for the examination.
Prerequisite: Matriculation in the graduate Cinema and Media Studies program or permission of instructor; required of all candidates for the MA degree in Cinema and Media Studies
Students are encouraged to enroll in the class during their first semester.

CMC 710 Studies in Film and Media Theory
4 hours; 4 credits
This course considers theories of media and film in relationship to issues of social, institutional, and cultural production. This course may be repeated for credit; see Degree Requirements.
Prerequisite: Matriculation in the graduate Cinema and Media Studies program or permission of instructor; required of all matriculated candidates for the MA degree in Cinema and Media Studies

CMC 711 Film and Video Workshop
4 hours; 4 credits
Research and production of thesis-level films and videos, especially for students pursuing the production thesis option.
Prerequisites: Matriculation in the graduate Cinema and Media Studies program and permission of instructor

CMC 712 Non-Linear and Multimedia Production
4 hours; 4 credits
Intensive study of the techniques and aesthetics in contemporary media technologies. Students are encouraged to develop their own thesis-level projects and to apply the technologies covered directly to their own creative work. The course also examines the contemporary artistic field, especially through the effect of evolving technologies on distinct genres such as documentary, personal essay, and fine-art approaches to film, video, and multimedia.
Prerequisite: Matriculation in the graduate Cinema and Media Studies program or permission of the instructor

CMC 713 Studies in Authorship
4 hours; 4 credits
Intensive study of the works of one or more media author(s), with attention to theories of media authorship. This course may be repeated for credit; see Degree Requirements.
Prerequisite: Matriculation in the graduate Cinema and Media Studies program or permission of instructor

CMC 725 Contemporary Media Practices
4 hours; 4 credits
This seminar introduces the terms and techniques of contemporary media arts production and analysis. Students are encouraged to write criticism about contemporary activity in the field or produce a media-based work (with permission of instructor).
Prerequisite: Matriculation in the graduate Cinema and Media Studies program or permission of instructor

CMC 731 Studies in International Cinema
4 hours; 4 credits
Intensive study of world cinema from geolinguistic, geopolitical, and geoaesthetic perspectives, highlighting cinemas of various cultural origins and traditions as well as major cinematic events, movements, and developments across time and space. This course may be repeated for credit; see Degree Requirements.
Prerequisite: Matriculation in the graduate Cinema and Media Studies program or permission of instructor

CMC 741 Experimental Film and Video
4 hours; 4 credits
The history and theory of alternative visions expressed in the cinema, single-channel video, and digital domains. A range of historical material and theoretical issues is considered, from the visual and counter-narrative experiments of avant-garde film to video’s deployment as both a fine-art medium and critical outlet.
Prerequisite: Matriculation in the graduate Cinema and Media Studies program or permission of instructor

CMC 742 Studies in Media Genres
4 hours; 4 credits
Historical, theoretical, and critical studies of major program formats across various media (film and television genres, book and magazine genres, musical genres, etc.). This course may be repeated for credit; see Degree Requirements.
Prerequisite: Matriculation in the graduate Cinema and Media Studies program or permission of instructor

CMC 743 Nonfiction Media
4 hours; 4 credits
Historical, theoretical, and critical study of nonfiction, documentary, and reality-based media.
Prerequisite: Matriculation in the graduate Cinema and Media Studies program or permission of instructor

CMC 744 Media and Ideology
4 hours; 4 credits
This course explores the various issues of media and ideology involving media texts, audiences, fields of production, and institutions.
Prerequisite: Matriculation in the graduate Cinema and Media Studies program or permission of instructor

CMC 745 Global Media
4 hours; 4 credits
This seminar examines contemporary media as global phenomena, stressing the multidirectionality of media flow, influence, power, and practices.
Prerequisite: Matriculation in the graduate Cinema and Media Studies program or permission of instructor

**CMC 746 Cinema and Gender**
4 hours; 4 credits
Intensive study of the representation and spectator-position of gender in relationship to the cinema. There will also be an emphasis on the making of film by those groups and genres not traditionally categorized with dominant forms of filmmaking. Students will become acquainted with the tradition of feminist and gender theory as it has informed critical film studies.
Prerequisite: Matriculation in the graduate Cinema and Media Studies program or permission of instructor

**CMC 749 Interdisciplinary Media Arts**
4 hours; 4 credits
This course provides a forum to discuss media in an interdisciplinary model and through the filter of one or more alternative scholarly disciplines. The scope of the course includes, but is not exclusive to, painting, literature, dance, historical period studies.
Prerequisite: Matriculation in the graduate Cinema and Media Studies program or permission of instructor

**CMC 799 Thesis Research**
Vary; 1-8 credits
This course may be repeated. No student may apply for more than a total of eight credits of Thesis Research toward the degree. Please see Options A and B for details.

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**Master of Science in Computer Science (MS)**
Program Coordinator: Associate Professor Anatoliy Gordonov
Computer Science/Engineering Science and Physics Building (1N), Room 204
Email: gordonov@mail.csi.cuny.edu
Telephone: 718.982.2852
Website: www.cs.csi.cuny.edu/grad
(See section Graduate Courses in Selected Disciplines for computer courses for teachers.)
The program is designed to provide advanced education in this rapidly evolving and challenging discipline. It serves those students who wish to increase their professional competence for business, industry, and research and development laboratories, as well as those students who wish to enter careers in research and teaching. Students may continue in Doctoral programs in Computer Science including The City University program in which CSI participates.
All students are required to take ten graduate courses (30 credits). These include four foundation courses, and six additional computer science graduate courses. The four foundation courses cover theoretical computer science, advanced operating systems, computer architecture, and programming methodology. Courses to meet the remaining requirements are chosen in consultation with a graduate program advisor to create a program that meets the needs of the individual student.
Any other registered CSI graduate course in computer science shall be counted as an elective for the purposes of fulfilling the MS in Computer Science degree requirements, with the exceptions: those courses specifically identified as computing for teachers or other computer science teacher education courses or those courses identified as graduate proficiency courses.

**Computer Science Admission Requirements**
1. A Bachelor of Science degree in Computer Science or related area with a B average (3.0 out of 4.0) overall and in the major
2. Graduate Record Examination
3. Demonstrable Knowledge of:
   - High-Level Language
   - Computers and Programming
   - Discrete Mathematics
   - Information Structures
   - Object-Oriented Software Design
   - Switching Theory
   - Calculus
   - Probability
   - Linear Algebra

   See the CSI Undergraduate Catalog for descriptions of these courses.
4. Students who satisfy the requirements listed above but who are missing CSC 632 (Operating Systems) or its equivalent in their undergraduate preparation will be admitted as matriculated graduate students but will be required to take the graduate proficiency course CSC 632 (Operating Systems)
5. Students transferring from other related majors or entering from other colleges will be permitted to remedy upper-level undergraduate course deficiencies as follows: students missing any of the following undergraduate course(s): the required undergraduate mathematics course(s), CSC 228, CSC 326, CSC 330, and/or CSC 346, must take these undergraduate courses as non-matriculated graduate students. No more than
nine graduate credits may be completed before deficiencies in mathematics, CSC 228, CSC 326, CSC 330, and/or CSC 346 have been remedied. Students who are missing CSC 332 (Operating Systems) in their undergraduate background must take the graduate proficiency course CSC 632 (Operating Systems Design and Implementation). Undergraduate courses taken to remove deficiencies and graduate proficiency courses must be in addition to the regular coursework for the MS degree.

**Computer Science Degree Requirements**

1. Matriculated status
2. A program of 10 courses (30 credits) with at least a 3.0 (B) average. The following core courses are required of all students:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CSC 716</td>
<td>Advanced Operating Systems</td>
</tr>
<tr>
<td>CSC 722</td>
<td>Computability</td>
</tr>
<tr>
<td>or</td>
<td>Formal Language Theory</td>
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<tr>
<td>CSC 724</td>
<td>Algorithms and Information Structures</td>
</tr>
<tr>
<td>CSC 727</td>
<td>Computer Systems Design</td>
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<tr>
<td>CSC 740</td>
<td>Computer Systems Design</td>
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<tr>
<td>CSC 755</td>
<td>Advanced Mathematics for Computer Science</td>
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<tr>
<td>or</td>
<td>Graduate Research Laboratory</td>
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<tr>
<td>CSC 759</td>
<td>Management Information Systems</td>
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</tbody>
</table>

The remaining six courses will be chosen from any of the following: courses listed below under specialization areas; CSC 755 (Applied Mathematics for Computer Science) and/or CSC 759 (Graduate Research Laboratory).

Exceptional students may be permitted to satisfy six credits of the total credit requirement with a master’s thesis.

**Specialization Areas**

Certain specialization areas within computer science are well represented by the department faculty research interests. Students interested in specializing in an area specified below are advised to select courses from the courses listed in that area. Students who are interested in doing research are also advised to take CSC 755 and/or CSC 759. For additional CUNY Graduate Center courses in a specialization area, consult the graduate program coordinator.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CSC 710</td>
<td>Software Engineering</td>
</tr>
<tr>
<td>CSC 712</td>
<td>Compiler Construction</td>
</tr>
<tr>
<td>CSC 713</td>
<td>Advanced Systems Programming</td>
</tr>
<tr>
<td>CSC 714</td>
<td>Software Systems Analysis and Design</td>
</tr>
<tr>
<td>CSC 715</td>
<td>Database Theory</td>
</tr>
<tr>
<td>CSC 744</td>
<td>Computer Performance Evaluation</td>
</tr>
<tr>
<td>CSC 750</td>
<td>Management Information Systems</td>
</tr>
<tr>
<td>CSC 752</td>
<td>Computer Graphics</td>
</tr>
<tr>
<td>CSC 756</td>
<td>Communication Networks</td>
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<tr>
<td>CSC 757</td>
<td>High-speed LAN and WAN</td>
</tr>
<tr>
<td>CSC 760</td>
<td>Fundamental Networks</td>
</tr>
<tr>
<td>CSC 764</td>
<td>Intelligent Networks</td>
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<tr>
<td>CSC 766</td>
<td>Broadband and SONET Networks</td>
</tr>
<tr>
<td>CSC 770</td>
<td>Parallel Computing</td>
</tr>
</tbody>
</table>

**Computer Science Courses**

**CSC 632 Operating Systems Design and Implementation**

3 hours; 3 credits

To convey a thorough understanding of the basics of an operating system. Topics include CPU scheduling; process management and scheduling; interrupts; I/O, device handling; memory and virtual memory management and file management. Case studies of typical modern operating systems.

**CSC 705 Advanced Microcomputer Systems Design**

3 hours; 3 credits

Introduction to microcomputer development systems, simultaneous hardware and software development. In-circuit emulation for debugging hardware and software. Interfacing details. Interrupt handling. Laboratory work in the design and implementation of actual systems. Prerequisites: CSC 460 and 461 or equivalent.
CSC 706  Computer Graphics
3 hours; 3 credits
Display memory, generation points, vectors, etc. Interactive versus passive graphics. Analog storage of images in microfilm, etc. Digitizing and digital storage. Pattern recognition by features, syntax tables, random nets, etc. Data structures and graphics software. The mathematics of three dimensions, projections, and the hidden-line problem. “Graphical programs,” computer-aided design and instruction, and animated movies.

CSC 710  Software Engineering
3 hours; 3 credits
Developing large-scale reliable software systems. Modeling tools and techniques. Performance analysis and tradeoffs, debugging techniques. Documentation, testing, and management of software. Study and practical application of principles of good program development. A significant project will be required.

CSC 712  Compiler Construction
3 hours; 3 credits
The grammars of programming languages: lexical analyzers, parsers, code emitters, and interpretation; global and peephole optimization; run-time support; error management; translatory writing systems.
Prerequisite: CSC 727

CSC 713  Advanced Systems Programming
3 hours; 3 credits
System and program design for advanced software and hardware architectures. Pre- and post-analysis of system implementations. Topics may include Non-von Neumann Architectures.

CSC 714  Software Systems Analysis Design
3 hours; 3 credits

CSC 715  Database Theory
3 hours; 3 credits
In-depth review of database systems and extensive survey of the current literature on the topic.

CSC 716  Advanced Operating Systems
3 hours; 3 credits
Advanced topics in computer operating systems with a special emphasis on distributed computing, and the services provided by distributed operating systems and real-time operating systems. Topics may include: multithreading, real-time scheduling, synchronization, and concurrency; interaction of concurrent processes; network management and computer security; protection, remote procedure calls, transactions, shared memory, message passing, and scalability; other selected topics in state-of-the-art operating systems.
Prerequisite: CSC 632 or CSC 332 (undergraduate Operating Systems or equivalent)

CSC 722  Computability
3 hours; 3 credits

CSC 724  Formal Language Theory
3 hours; 3 credits
Classification of languages by grammars and automata. The Chomsky hierarchy: regular, context-free, context-sensitive, and recursively enumerable languages and their associated grammars and automata. Closure properties for families of languages. Decision problems for grammars and automata.

CSC 727  Algorithms and Information Structures
3 hours; 3 credits

CSC 731  Artificial Intelligence and Knowledge Engineering
3 hours; 3 credits
Formal reasoning, heuristics, and game playing. Planning, temporal and spatial reasoning. Knowledge representation and knowledge-based systems. Intelligent agents. Other topics may include robotics, comparative study of languages for artificial intelligence.

CSC 732  Pattern Recognition and Neural Networks
3 hours; 3 credits
Topics of the course will initially survey pattern recognition systems and components; decision theories and classification: discriminant functions: classical supervised and unsupervised learning methods, such as backpropagation, radial basis functions: clustering; feature extraction and dimensional reduction; sequential and hierarchical classification; Kohonen networks; Boltzman machines, principal components, and examples of applications. Modern concepts in learning will be introduced: nonparametric learning, reinforcement learning, mixtures models, belief networks, minimum description length, maximum likelihood, entropy methods, independent component analysis.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 733</td>
<td>Natural Language Processing</td>
<td>3 hours</td>
<td>Why natural language is amenable to computer analysis. Syntactic and semantic analysis of free-text sentences; immediate constituent analysis; string analysis; transformational analysis. Uniform representation of the information content of sentences. Discourse Analysis. Natural Language Databases. Implementation of a string grammar for English.</td>
</tr>
<tr>
<td>CSC 735</td>
<td>Machine Learning and Data Mining</td>
<td>3 hours</td>
<td>Topics in machine learning will be applied to data mining and image understanding. Topics may include: neural networks, decision trees, support vector machines, Bayesian learning, association rules, cluster analysis, fuzzy logic, linear regression, visualization methods, and additional current topics in this field. Prerequisite: CSC 731 or equivalent</td>
</tr>
<tr>
<td>CSC 740</td>
<td>Computer System Design</td>
<td>3 hours</td>
<td>Designs of systems using processors, memories, input/output (I/O) devices and I/O interfaces as building blocks. Computer system organization and architecture: accumulator, general-register, and stack machines, multiprocessors and other organizations. Memory and I/O buses, I/O interface design and typical I/O devices. Memory hierarchies.</td>
</tr>
<tr>
<td>CSC 742</td>
<td>Advanced Microcomputer Systems Design</td>
<td>3 hours</td>
<td>Introduction to microcomputer development systems, simultaneous hardware and software development. In-circuit emulation for debugging hardware and software. Interfacing details. Interrupt handling. Laboratory work in the design and implementation of actual systems. Prerequisite: CSC 740</td>
</tr>
<tr>
<td>CSC 744</td>
<td>Computer Performance Evaluation</td>
<td>3 hours</td>
<td>The system life cycle model and its impact on computer performance and capacity planning. Topics include load drivers and benchmarks, simulation and analytic queueing models, statistical methods, workload characterization, software and hardware monitors, performance triggering, bottleneck identification, load, service, and capacity relationships.</td>
</tr>
<tr>
<td>CSC 747</td>
<td>Digital Signal Processing</td>
<td>3 hours</td>
<td>Analysis and design of computer-based digital signal processors. Statement of the digital signal processing problem and its applications. Topics may include: Stochastic models of random signals; spectral factorization; linear estimation of random signals; Wiener, Kalman, and least squares estimation; linear prediction and related topics; adaptive filters; microcomputer implementation of digital signal processors. Discrete Fourier Transform, FFT parallel processing of discrete operation. Morphological signal processing. Prerequisite: CSC 755</td>
</tr>
<tr>
<td>CSC 748</td>
<td>Quantitative Analysis of Computer Architecture</td>
<td>3 hours</td>
<td>An advanced course in computer architecture covering a variety of classical computer architecture topics with heavy emphasis on the quantitative approach to analyzing computer architecture and evaluating design tradeoffs. Prerequisite: CSC 740 or strong undergraduate course in computer architecture.</td>
</tr>
<tr>
<td>CSC 752</td>
<td>Management Information Systems</td>
<td>3 hours</td>
<td>The role of computers in management information systems. Analysis of information requirements, design approaches, processing methods, data management control of operations. Planning and control systems; analytical and simulation models of decision making. Economics of information, implementation of integrated systems, organizational social implications of information technology.</td>
</tr>
<tr>
<td>CSC 754</td>
<td>Topics in System Simulation</td>
<td>3 hours</td>
<td>Techniques for the simulation of complex systems; simulation of computer systems. Statistical issues in simulation. Simulation methodology. Survey of simulation languages.</td>
</tr>
</tbody>
</table>
| CSC 755     | Applied Mathematics for Computer Science            | 3 hours | (Also MTH 626)  
3 hours; 3 credits |
Selected topics in mathematics and mathematical system areas that are essential for advanced studies in computer science. Topics are drawn from probability, statistics, queueing theory, numerical analysis, universal algebra, mathematical logic, general systems theory, and cybernetics.

**CSC 756 Network Security**
3 hours; 3 credits

**CSC 757 Telecommunication Networks**
3 hours; 3 credits
Motivations and objectives of computer networks; overview of layered architecture and the ISO Reference Model; network functions, circuit-switching and packet-switching; physical level protocols; data link protocols including HDLC and multi-access link control. Network control, transport, and session protocols including routing flow control; end-to-end communication and inter-networking. Presentation layer protocols including virtual terminal and file transfer protocols, cryptography, and text compression. Specific examples and standards will be cited throughout the course for point-to-point, satellite, packet radio, and local networks.
Prerequisite: CSC 740

**CSC 758 Media Transmission and Characteristics**
2 hours lecture and one hour conference; 3 credits
Basic requirements of transmission media, fiber-optic medium, typical attenuation and dispersion characteristics, mathematical treatment of the fiber medium. The copper medium, twisted wire pair, coaxial media, premises distribution system, role of new cables for high-speed digital systems, mathematical treatment of the copper medium. Limits of copper-based telecommunication systems. Role of fiber and coaxial system, characterization, and limitations.
Prerequisite: CSC 740 or CSC 757

**CSC 759 Graduate Research Laboratory**
3 hours; 3 credits
Students will choose a research topic in Computer Science and select two journal papers on the topic; the articles must be approved by the instructor. Students will write a seminar paper explaining and reviewing the research reported on from the journal papers and present the research topic to the entire seminar. All students will be required to write a short summary of each presentation.

**CSC 760 High-speed LAN and WAN**
3 hours; 3 credits
LAN topologies and access methods, medium access protocols, high-speed LANs, wireless LANs, analysis and efficiency of LAN protocols. Protocol basics, error control methods, flow control. WAN, circuit and packet switching, routing, congestion control, Internet protocols.

**CSC 762 Fundamentals of Wireless Communications**
(Also ENS 762)
3 hours; 3 credits

**CSC 764 Intelligent Networks**
(Also ENS 764)
3 hours; 3 credits

**CSC 766 Broadband and SONET Networks**
(Also ENS 766)
3 hours; 3 credits
Consideration of the principles, concepts, protocol, and interfaces for most broadband networks around the globe; principles and concepts are stressed and protocols and interfaces are discussed. The evolution of the broadband ISDN and SONET. Courses offered at the CUNY Graduate School and University Center may be taken by advanced graduate students by special arrangement.

**CSC 768 Parallel Distributed Computing**
3 hours; 3 credits
In this course students will learn about the foundations of parallel computing. The emphasis will be on algorithms that can be used on shared- and distributed-memory systems. The course will include both a theoretical component and a programming component. The topics covered will encompass on fundamentals of parallel computing, parallel computer architectures, performance, communication, decomposition techniques for parallel algorithms, parallel programming models such as Open MP and MPI models, analytical modeling of parallel programs, algorithms and languages. Appropriate examples of existing or proposed parallel architectures will be surveyed as well as recent advances in parallel algorithms for scientific computing. Specific parallel
algorithms for solving scientific problems and their implementation on parallel machines related to numerical analysis, scientific applications, runtime environments, performance analysis will be discussed. To enroll in this course, students must have knowledge in organization and processing of various types of information structures, storage allocation, sorting, and searching techniques.

Prerequisites: Permission of the Graduate Coordinator

Graduate Programs in Education
Department Chairperson: Associate Professor Kenneth Gold
Email: gold@mail.csi.cuny.edu
Telephone: 718.982.3737
Education Building (3S), Room 208
The Department of Education offers programs leading to the Master of Science in Education (MSEd) in Childhood Education, Adolescence Education, and Special Education; and the Post-Master’s Advanced Certificate for Leadership in Education. Education courses are identified according to the following ALPHA designations:
- EDA - Supervision and Administration
- EDC - Early Childhood
- EDD - General Education
- EDE - Childhood Education (Elementary Education)
- EDP - Special Education
- EDS - Adolescence Education (Secondary Education).

Students are also referred to the section on Graduate Courses in Selected Disciplines for courses of interest to teachers and courses designed especially for professionals in education. Graduate courses are available in American studies, biology, dramatic arts, environmental science, geography, history, mathematics, political science, and philosophy of science.

Policies
The following policies apply to students in the master’s degree programs:

Admission
Admission and degree requirements are shown under the program descriptions that follow.

Admission with Advanced Standing
1. Graduate courses taken within the last five years at an accredited college or university may be accepted at the discretion of the coordinator of the graduate program. A maximum of 12 graduate credits in graduate courses, with a minimum grade of 3.0 (B) in each course, may be applied toward a graduate degree from the College of Staten Island.

2. Acceptance of courses meeting the above requirements is not automatic. Acceptance of any course taken elsewhere toward the requirements for the CSI degree is at the discretion of the coordinator of the graduate program. Courses submitted must be equivalent to courses offered at CSI that meet the student’s programmatic needs. Therefore, students are urged to submit advanced standing requests prior to, or as soon as possible after, matriculation into the program. Forms are available at the Registrar’s Office.

Grade Point Average
Students must maintain a 3.0 (B) grade point average to receive a graduate degree in Education. Advanced students may be allowed to take one or two specific graduate courses at other institutions with prior approval of the graduate program coordinator and department chairperson.

Master of Science in Childhood Education (MSEd)
Program Coordinator for Sequence I: Professor Igor Arievitch
Education Building (3S), Room 215; telephone: 1.718.982.4006
Email: arievitch@mail.csi.cuny.edu
Program Coordinator for Sequence II: Assistant Professor Vivian Shulman
Education Building (3S), Room 223; telephone: 1.718.982.4086
Email: shulman@mail.csi.cuny.edu

The program will foster and enhance students’ competence in teaching, understanding of current educational research and theory, and knowledge in selected areas of the liberal arts and sciences. It is designed to serve dual functions through two distinct instructional sequences:

Sequence 1: This sequence is designed for those who have completed the course requirements for initial certification in childhood education from the New York State Department of Education. Upon satisfactory completion of the program, students will have met the academic requirements for professional certification in childhood education.

Sequence 2: This sequence is designed for college graduates who have not completed programs leading to initial certification in childhood education and wish to become elementary teachers. Upon satisfactory completion of the program, students will have met the academic requirements for initial certification in childhood education.

Childhood Education Admission Requirements
For Sequence 1, candidates must have completed the coursework leading to a New York State initial
certificate in childhood education. A copy of the certificate must be submitted to the program when it is granted by the New York State Education Department. Candidates must also possess a baccalaureate degree in a liberal arts and sciences major, or 36 credits in a liberal arts and sciences concentration, at least six credits each in English, history, mathematics, and science, and an overall grade point average (GPA) at or above 2.75.

For Sequence 2, candidates must possess a baccalaureate degree in a liberal arts and sciences major, or 36 approved credits in a liberal arts and sciences concentration, at least six approved credits each in English, history, mathematics, and science, and an overall grade point average (GPA) at or above 2.75.

For both sequences, applicants whose GPAs fall below the respective minimums may submit a letter of appeal to the appropriate program coordinator; however, such appeals will be granted only under extraordinary circumstances. Applicants appealing for admission must present documentation demonstrating their ability to succeed in the program and may be required to take up to 24 credits in undergraduate liberal arts and science courses, as prescribed by the program coordinator, in which they must earn grades no lower than 2.7 (B-).

Applications for Sequences 1 and 2 are accepted for fall and spring semesters. All applications must include two academic or professional letters of recommendation and a one- or two-page personal statement that discusses the academic, teaching, and/or work experiences that have led and prepared the applicant to pursue graduate study in education.

Childhood Education Degree Requirements
Sequence 1 consists of a minimum of 33-34 graduate credits. Sequence 2 consists of a minimum of 45-49 graduate credits. In both sequences, students are required to complete an acceptable educational research project, which is carried out under faculty supervision in EDD 631 Educational Seminar II.

Credit Distribution for Sequence 1 (33-34 credits)
1. Required Areas of Study 27-28 credits
   Educational Psychology: One course from the following:
   - EDD 611 Advanced Educational Psychology
   - EDD 612 Sociocultural Development during Childhood
   - EDD 613 Developmental Psychology: Childhood

   Social Foundations of Education: One course from the following:
   - EDD 606 History of Urban Education in the United States
   - EDD 616 Comparative and International Education

2. Capstone Sequence: Inquiry in Education 6 credits
   Both of the following:
   - EDD 630 Educational Seminar I
   - EDD 631 Educational Seminar II

Credit Distribution for Sequence 2 (45-49 credits)
1. Core Courses 18 credits
   - EDD 602 Studies in Urban and Metropolitan Education
   - EDD 609 Child Cognitive Development and Learning
   - EDE 601 Teaching and Learning Social
Graduate Programs, Disciplines, and Course Offerings

1. Studies in Elementary Education
   - EDE 602 Teaching and Learning Reading in Elementary Education
   - EDE 603 Teaching and Learning Mathematics in Elementary Education
   - EDE 604 Teaching and Learning Science in Elementary Education

2. Advanced Courses 18-19 credits
   - EDE 605 Teaching Students with Special Needs in the General Education Classroom
   - Foundations of Education: One course from the following:
     - EDD 606 History of Urban Education in the United States
     - EDD 611 Advanced Educational Psychology
     - EDD 612 Sociocultural Development during Childhood
     - EDD 613 Developmental Psychology: Childhood
     - EDD 616 Comparative and International Education
     - EDD 643 Sociology of Schools
   - Methods in Reading: One course from the following:
     - EDE 650 Advanced Study in Reading
     - EDE 651 Integrated Strategies for Underachieving Readers
   - Methods in Mathematics: One course from the following:
     - EDE 640 Advanced Mathematics Education, Grades 3-6
     - EDE 642 Advanced Mathematics Education, Grades 1-2
   - The Disciplines and Pedagogy: Two courses
     Students must take one course from Group A and one from Group B:
     - Group A:
       - DRA 601 Drama in the Schools
       - EDD 627/MTH 627 Historical Perspectives on Mathematics Topics
       - EDD 626/HST 626 Historical Themes and Interpretations
       - EDD 618 The Idea of the Contemporary University
       - EDD 628 Philosophy and Children
       - EDE 652 Children’s Literature
       - ESC 602 Environmental Science for Elementary School Teachers
       - GEG 601 Geography of Ordinary Landscapes
       - POL 636 The Judicial Process
       - POL 737 The United States Constitution
     - Group B:
       - EDC 600 Contemporary Curriculum in Early Childhood Education, Grades 1-2
   - EDD 620 The Teacher and Curriculum Improvement
   - EDD 642 New Media of Instruction
   - EDE 620 Advanced Social Studies Education
   - EDE 630 Advanced Science Education, Grades 3-6
   - EDE 631 Advanced Science Education, Grades 1-2
   - EDE 661 Music and Movement in Childhood Education
   - EDE 662 Advanced Art

3. Field-based Courses: One of the following alternatives: 3-6 credits
   - EDE 608 Teaching Practicum I (2 credits)
   - and
   - EDE 609 Teaching Practicum II (1 credit), or
   - EDE 610 Student Teaching (6 credits)

4. Capstone Sequence: Inquiry in Education 6 credits
   - Both of the following:
     - EDD 630 Educational Seminar I
     - EDD 631 Educational Seminar II

The following are considered courses in English language arts: DRA 601, EDC 600, EDE 650, EDE 651, EDE 652. The following are considered courses in mathematics: EDD 627/MTH 627, EDE 640, EDE 642. The following are considered courses in science and technology: EDD 642, EDE 630, EDE 631, ESC 602. The following are considered courses in social studies: EDD 620, EDD 626/HST 626, EDD 618, EDE 628, EDE 620, POL 636, POL 737.

Master of Science in Adolescence Education (MSEd)

Program Coordinator for Sequence I: Assistant Professor Brian Carolan
Education Building (3S), Room 218; telephone: 718.982.4132
Email: carolan@mail.csi.cuny.edu

Program Coordinator for Sequence II: Assistant Professor David Kritt
Education Building (3S), Room 213; telephone: 718.982.4085
Email: kritt@mail.csi.cuny.edu

Sequence 1: This sequence is designed for students who have completed the required coursework for initial certification in a subject area in Adolescence Education (i.e., biology, english, mathematics, or social studies). Upon satisfactory completion of the program, students will have met the academic requirements for professional certification in a subject area in Adolescence Education.

Sequence 2: This sequence is designed for students who wish to become secondary education teachers in biology, english, mathematics, or social studies but have not completed the coursework.
required for initial certification. Upon satisfactory completion of the program, students will have met the academic requirements for initial certification in a subject area of Adolescence Education.

**Adolescence Education Admission Requirements**

For Sequence 1, candidates must have completed the courses required for a New York State initial certificate to teach in their area of specialization at the secondary (adolescence) level. A copy of the certificate must be submitted to the College. Candidates must also possess the baccalaureate degree in an appropriate major with a grade point average (GPA) at or above 2.75.

For Sequence 2, candidates must possess the baccalaureate degree in an appropriate major, or 32 approved academic credits in an appropriate subject area, and an overall grade point average (GPA) at or above 2.75.

For both sequences, applicants whose GPAs fall below the required minimums may appeal to the appropriate program coordinator; however, such appeals will be granted only under extraordinary circumstances. Applicants appealing for admission must present documentation demonstrating their ability to succeed in the program and may be required to take up to 24 credits in undergraduate liberal arts and science courses, as prescribed by the program coordinator, in which they must earn grades no lower than 2.7 (B-).

Applications for Sequences 1 and 2 are accepted for fall and spring semesters. All applications must include two academic or professional letters of recommendation and a one- or two-page personal statement that discusses the academic, teaching, and/or work experiences that have led and prepared the applicant to pursue graduate study in education.

**Adolescence Education Degree Requirements**

Sequence 1 consists of a minimum of 33-38 graduate credits distributed among 11 courses in the categories listed below. Sequence 2 consists of a minimum of 45-52 graduate credits in the categories listed below. In both sequences, students are required to complete an acceptable educational research project, which is carried out under faculty supervision in the course EDD 631 Educational Seminar II.

### Credit Distribution for Sequence 1 (33-39 credits)

1. **Required Areas of Study**  
   Educational Psychology: One course from the following:
   - EDD 611 Advanced Educational Psychology
   - EDD 615 Developmental Psychology: Adolescence

2. **Capstone Sequence: Inquiry in Education** 6 credits
   - Both of the following:
     - EDD 630 Educational Seminar I
     - EDD 631 Educational Seminar II

### Credit Distribution for Sequence 2 (45-53 credits)

1. **Core Courses** 12 credits
   - EDD 602 Studies in Urban and Metropolitan Education
   - EDD 610 Adolescent Development and Learning
   - EDD 607 Integrating Curricula and Learning through Discovery

2. **Advanced Courses** 24-28 credits
   - Teaching Students with Special Needs: One course from the following:
     - EDP 615 Teaching Exceptional Adolescents
     - EDP 660 Teaching Students with Special Needs in the General Education Classroom

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**Disciplines and Pedagogy: Six courses**

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**Education of Students with Special Needs**

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**United States**

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**Comparative and International Education**

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**Multicultural Approaches to Teaching**

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**Sociology of Schools**

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**Teaching Students with Special Needs in the General Education Classroom**

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**Teaching Exceptional Adolescents**

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**Teaching Students with Special Needs in the General Education Classroom**

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Classroom

Foundations of Education: One course from the following:
- EDD 606 History of Urban Education in the United States
- EDD 611 Advanced Educational Psychology
- EDD 615 Developmental Psychology: Adolescence
- EDD 616 Comparative and International Education
- EDD 643 Sociology of Schools

Disciplines and Pedagogy: 18-22 credits
- EDS 654 Reading in the Content Areas
- One course from the following:
  - EDS 691 Advanced Studies in Teaching Secondary School Social Studies
  - EDS 692 Advanced Studies in Teaching Secondary School English
  - EDS 693 Advanced Studies in Teaching Secondary School Mathematics
  - EDS 694 Advanced Studies in Teaching Secondary School Science
- Four courses from the following:
  - Content area courses in either biology, English, history, or mathematics
  - EDD 642 New Media of Instruction

3. Field-based Courses: One of the following alternatives: 3-6 credits
- EDS 609 Teaching Practicum I (2 credits)
- EDS 610 Teaching Practicum II (1 credit)
- EDS 611 Student Teaching (6 credits)

4. Capstone Sequence: Inquiry in Education 6 credits
- Both of the following:
  - EDD 630 Educational Seminar I
  - EDD 631 Educational Seminar II

Master of Science in Special Education (MSED)
Program Coordinator for Sequences I and II: Associate Professor Eleni Tournaki
Education Building (3S), Room 219; telephone: 718.982.37280
Email: tournaki@mail.csi.cuny.edu

The program prepares students to teach students with disabilities in childhood. It is designed to serve dual functions through two distinct instructional sequences:

Sequence 1: This sequence is designed for those who have completed the course requirements for initial certification in childhood education from the New York State Department of Education. Upon satisfactory completion of the program, students will have met the academic requirements for professional certification in special education at the childhood level.

Sequence 2: This sequence is designed for college graduates who have not completed the course requirements for initial certification in childhood education. Upon satisfactory completion of the program, students will have met the academic requirements for initial certification in teaching students with disabilities in childhood.

Special Education Admission Requirements
For Sequence 1, candidates must have completed the courses required for a New York State initial certificate in childhood education. Official transcripts and a copy of the certificate must be submitted when it is received from the New York State Department of Education. Candidates must also have a baccalaureate degree in a liberal arts and sciences major, or 36 credits in a liberal arts and sciences concentration, and an overall grade point average (GPA) at or above 3.0 (B).

For Sequence 2, candidates must have a baccalaureate degree in a liberal arts and sciences major, or 36 approved credits in a liberal arts and sciences concentration, at least six credits each in English, history, mathematics, and science; one year of college-level foreign language or the equivalent; and an overall grade point average (GPA) at or above 3.0 (B).

For both sequences, candidates whose GPAs are below 3.0 but above 2.5 may submit a letter of appeal to the program coordinator; however, such appeals will be granted only under extraordinary circumstances. Candidates appealing for admission must present documentation demonstrating their ability to succeed in the program and may be required to take up to 24 credits in undergraduate liberal arts and sciences courses, as prescribed by the program coordinator, in which they must earn grades no lower than 2.7 (B-).

Applications for both sequences are accepted for the fall and spring semesters. All applications must include two academic or professional letters of recommendation and a one- or two-page personal statement that discusses the academic, teaching, and/or work experiences that have led and prepared the applicant to pursue graduate study in education.

Special Education Degree Requirements
Sequence 1 consists of ten three-credit required courses and one elective for a total of 11 courses (33) credits. Sequence 2 consists of 14 three-credit required courses and a three- to six-credit, field-based requirement for a total of 45-48 credits. Several of the courses have fieldwork requirements. As a culminating experience, all students complete an original research paper in EDP 642 Research Project in Special Education.
Credit Distribution for Sequence 1 (33 credits)

1. Required Education Courses: 30 credits
   - EDP 610 Psychology of Exceptional Children
   - EDP 611 Social Foundations of Special Education
   - EDP 621 Teaching English Language Arts and Social Studies in Special Education and Inclusive Classrooms
   - EDP 622 Classroom Management in Special Education and Inclusive Classrooms
   - EDP 624 Reading: Assessment and Instruction in Special Education and Inclusive Classrooms
   - EDP 626 Principles of Assessment in Special Education
   - EDP 630 Practicum in Special Education
   - EDP 640 Fundamentals of Educational Research in Special Education
   - EDP 642 Research Project in Special Education
   - EDP 680 Integrating Technology in Math and Science Instruction in Special Education and Inclusive Classrooms

2. Elective Courses: One course from the following:
   - EDD 620 The Teacher and Curriculum
   - EDP 625 Reading: Advanced Instructional Methods
   - EDP 627 Assessment for Instruction in Special Education and Inclusive Classrooms
   - EDP 675 Issues in Bilingualism in Special Education and Inclusive Classrooms
   - EDP 685 Perspectives on Normalization and Integration in Special Education

3. Field-based Experience
   - EDP 631 Teaching Practicum in Special Education I
   - EDP 632 Teaching Practicum in Special Education II
   - EDP 633 Student Teaching in Special Education

Credit Distribution for Sequence 2 (45-48 credits)

1. Core Courses
   - EDD 602 Studies in Urban and Metropolitan Education
   - EDD 609 Child Cognitive Development and Learning
   - EDE 601 Teaching and Learning Social Studies in Elementary Education
   - EDE 602 Teaching and Learning Reading in Elementary Education
   - EDE 603 Teaching and Learning Mathematics in Elementary Education
   - EDE 604 Teaching and Learning Science in Elementary Education

2. Advanced Courses
   - EDP 626 Education
   - EDP 640 Fundamentals of Educational Research in Special Education
   - EDP 642 Research Project in Special Education
   - EDP 680 Science Instruction in Special Education and Inclusive Classrooms

   One of the following courses:
   - EDP 624 Reading: Assessment and Instruction in Special Education and Inclusive Classrooms
   - EDP 625 Reading: Advanced Instructional Methods

   Post-Master’s Advanced Certificate for Leadership in Education

Program Coordinator: Associate Professor Ruth Powers-Silverberg
Education Building (3S), Room 105A; telephone: 1.718.982.3726
Email: silverberg@mail.csi.cuny.edu

This certificate program is designed to prepare qualified candidates for leadership positions in schools in New York State, with an emphasis on effective leadership in urban schools. Upon successful completion of the program, students will have met the statutory requirements of the New York State Department of Education for certification as School Building Leader and School District Leader. All students move through the course of studies with a cohort.

Post-Master’s Advanced Certificate for Leadership in Education Admission Requirements

1. A master’s degree with a minimum average of 3.0 (B).
2. Evidence of four years’ teaching experience in an accredited school or equivalent.
3. Professional recommendations (three).
4. An interview with faculty of the program and district partners.

Applications are accepted during the spring for admission in the summer session.
Post-Master’s Advanced Certificate for Leadership in Education Degree

Requirements
The program requires 30 credits of approved coursework within a cohort model including: 24 credits in supervision, administration, curriculum, policy analysis, human relations; theory, research, and practice in educational leadership; six credits in a field experience seminar.

Sequence of Courses
EDA 710 Curriculum Design and Development
EDA 720 Supervision and Improvement of Instruction in Schools
EDA 724 Organization and Administration of Schools, Part I
EDA 726 Organization and Administration of Schools, Part II
EDA 728 Field Experience I
EDA 729 Field Experience II
EDA 731 Research Seminar in Leadership in Education
EDA 732 Educational Leadership, Part I
EDA 733 Educational Leadership, Part II
EDA 735 Law and Finance in Contemporary Schools

EDA - Supervision and Administration Courses

EDA 710 Curriculum Design and Development
3 hours; 3 credits
Principles of curriculum design and instructional programming; creation and support of effective learning environments; the personal, social, cognitive, and demographic characteristics of school populations. Particular attention is given to instructional and curricular issues in urban schools.

EDA 720 Supervision and Improvement of Instruction in Schools
3 hours; 3 credits
Meaning, purpose, techniques, and organization of supervision in elementary and secondary schools; its relations to improvement of instruction and learning; evaluating teaching and creating programs for continuous professional growth of teachers in elementary and secondary schools.

EDA 724 Organization and Administration of Schools, Part I
3 hours; 3 credits
Introduction to theories and practices relating to the organization and administration of schools. Candidates explore theories of schooling, school leadership, and leadership in general that have influenced practice in public schools since their inception. The administrator’s responsibilities are studied in their political, social, and economic contexts. Current policies and practices are examined and critiqued in the context of this theoretical background.

EDA 726 Organization and Administration of Schools, Part II
3 hours; 3 credits
Continued analysis of educational policy and leadership practice. Administration and leadership are studied in relation to student and adult learning, the provision of school climates conducive to individual growth, and formation of parent and community relationships that support student learning.

EDA 728 Field Experience Seminar in Leadership in Education I
3 hours; 3 credits
Pass/Fail
Candidates perform administrative roles in the New York City Summer Schools under the supervision of the school building supervisor and a program faculty member. Issues of facilities and resource management and improvement of instruction are addressed in the site and through intensive interactions with colleagues and faculty in a weekly seminar.

EDA 729 Field Experience Seminar in Leadership in Education II
3 hours; 3 credits
Selected individual projects and problems in actual supervision and administration, with opportunities for the student to exercise a leadership role related to action research in the schools. The seminar also provides for sharing understandings with colleagues while assisting them in the implementation of action research findings in school programs.

EDA 731 Research Seminar in Leadership in Education
3 hours; 3 credits
Understanding and developing competence as a consumer in the use of research methods for studying issues and problems in instructional improvement, including interpretation of research, and school- and district-based performance data.

EDA 732 Educational Leadership, Part I
3 hours; 3 credits
Change in schools is explored theoretically through relevant literature in the fields of organizational and school change, while candidates consider change issues facing the field experience site.

EDA 733 Educational Leadership, Part II
3 hours; 3 credits
Candidates apply theoretical models of systems thinking to knowledge and understandings developed during the prior semesters. Opportunities to collaborate with colleagues in the formulation of effective professional development; preparation for the application and interview process; development of entry strategies; human and intergroup relations theory and practice applied to decision making, communication, personnel relationships, and other functions of
Graduate Programs, Disciplines, and Course Offerings

Educational leadership. Candidates will prepare a portfolio of artifacts from all program courses reflecting their knowledge, understanding and developing vision for effective leadership.

EDA 735 Law and Finance in Contemporary Schools
3 hours; 3 credits
Candidates develop knowledge of laws and regulations at the city, state, and federal levels, including Federal Title legislation, IDEA and ADA, NCLB, New York State Regulations, Chancellor’s Regulations, and contracts. Candidates apply knowledge to real situations in their schools, regions, and New York State. School finance is addressed at the school and district levels through development of strategic plans and use of budget software. Issues of national education policy are explored in a financial context.

EDC - Early Childhood Education Courses

EDC 600 Contemporary Curriculum in Childhood Education in Grades 1-2
3 hours; 3 credits
A study of controversial issues affecting early childhood programs, curriculum, and practice in grades 1 and 2. Discussions of contemporary issues are placed within the context of the history of early childhood curriculum and curriculum theory. Emphasis is on enlarging and refining students’ thinking on issues that impact early childhood education.

EDC 601 Advanced Early Childhood Science and Mathematics Education
3 hours; 3 credits
An integrated approach to teaching science and mathematics at the early childhood level, grades N-2.

EDD - General Education Courses

EDD 602 Studies in Urban and Metropolitan Education
3 hours; 3 credits
An examination of economic, social, and technological developments in United States cities and the resulting educational changes for children in present-day urban areas. The social identities of children are explored in terms of race, class, gender, ethnicity, and ability. Promising programs of urban education are examined as well. This course discusses hazards to children, including child abuse, substance abuse, and child safety, as well as violence prevention. Students spend ten hours in varied education environments examining the connections between school and society. Not open for students who have taken EDE 200, EDS 201, or equivalents.

EDD 606 History of Urban Education in the United States
3 hours; 3 credits
Examination of major developments in United States educational thought, practices, and organization as they occurred in the cities of the United States. Emphasis on the role of identity politics and material transformations in shaping the character of public schools. Contemporary efforts to reform urban education are placed in historical context. This course meets the human relations requirement of the New York City Board of Education.

EDD 609 Child Cognitive Development and Learning
3 hours; 3 credits
Examination of the main concepts and principles of teaching/learning that stem from modern psychological theories of cognitive development. Students will analyze and critically evaluate different theoretical frameworks (constructivist, sociocultural, and information processing theory). Using group and class discussions and other interactive formats, students will learn how the ideas of developmental psychology can be integrated into their classroom teaching. A fieldwork component of ten (10) hours is included. Not open for students who have taken EDE 260 or its equivalent.

EDD 610 Adolescent Development and Learning
3 hours; 3 credits
Introduction to a range of core ideas regarding teaching and learning. Psychological and social factors that influence students and classroom practice will be addressed, with primary attention to implications for student performance. The intent is to challenge traditional assumptions regarding adolescents’ thinking, emotions, and social behavior, and to introduce current thought based on research findings. A fieldwork component of 20 hours is included. Not open for students who have taken EDS 202 or its equivalent.

EDD 611 Advanced Educational Psychology
3 hours; 3 credits
This course is designed to acquaint the student with the broad scope of psychological investigations within the field of education. A critical analysis and evaluation of selected readings is intended to aid the student in interpreting professional literature.

EDD 612 Sociocultural Development during Childhood
3 hours; 3 credits
How a child becomes a member of a culture and the implications for development and schooling. A sociocultural perspective on child development will be used to achieve an understanding of children as members of their community and as participants in a world culture changing due to technology and popular culture. Discussion will move beyond research and theory to help students better understand the children in their classrooms.

EDD 613 Developmental Psychology: Childhood
3 hours; 3 credits
Psychological development of the child from birth to early adolescence, with emphasis on the cognitive, social, and emotional aspects of growth that play a major role in elementary school learning. Theoretical formulations and research findings will be related to situations and problems.

**EDD 615 Developmental Psychology: Adolescence**
3 hours; 3 credits
Psychological development from early to late adolescence with emphasis on those aspects of personal and social adjustment that influence school learning in middle schools and high schools. Theoretical formulations and research findings will be related to situations encountered in the class by teachers.

**EDD 616 Comparative and International Education**
3 hours; 3 credits
Comparison of educational philosophies and systems in the modern world.

**EDD 618 The Idea of the Contemporary University**
3 hours; 3 credits
Examination of the contemporary critique of higher education with particular focus on curriculum issues within the university and their connection with curriculum issues in the primary and secondary schools. The mission of the university is explored through the works of such thinkers as Michael Oakeshott, Alfred North Whitehead, José Ortega y Gasset, and Martha Nussbaum in order to speculate on how their ideas inform our study. The course provides a forum for students to extend their understanding of the U.S. university and its relationship to U.S. society, especially lower educational institutions.

**EDD 620 The Teacher and Curriculum Improvement**
3 hours; 3 credits
Exploration of practices that improve the learning process. Examination of the role of the classroom teacher in planning classroom curriculum within the context of a specific school’s purpose, function, and structure. Use of the Internet for curriculum development and delivery.

**EDD 622 The School and Its Community Relationships**
3 hours; 3 credits
Examination of social forces affecting the school in U.S. society. Socialization of the individual in the family, peer group, and community agency, in group educative processes, and in intergroup relations. Individual projects in testing general concepts through exploration of sociological phenomena in the local community.

**EDD 624 Multiethnic Approaches to Teaching**
3 hours; 3 credits
Examination of the role of race, gender, ethnicity, and class in education. Beginning with a self-assessment of the impact of these interconnected issues, students analyze learning environments, developing their own theoretical foundations for addressing race, gender, ethnicity, and social class in their classrooms. The course will focus on the works of Paulo Freire, Henry Giroux, Bell Hooks, and Sandra Harding, among others.

**EDD 626 Historical Themes and Interpretations**
(Also HST 626)
3 hours; 3 credits
Examination of selected themes in world history, such as nationalism, globalization, minorities and society, religion and the state, and humans and their environment. Each semester the course will focus on the development of one theme, affording students the opportunity to deepen their interpretation through case studies, critical analysis of texts, museum work, and Internet research.

**EDD 627 Historical Perspectives on Mathematics Topics**
(Also MTH 627)
3 hours; 3 credits
An examination of the historical origins and contemporary applications of mathematics topics selected from areas such as arithmetical computation, number theory, cryptology, graph theory, geometry, and probability. Emphasis on exploration, analysis, and problem solving. Intended for teachers who wish to extend their own knowledge of mathematics and enhance classroom pedagogy. Prerequisites: Two courses in fundamentals of mathematics (equivalent to MTH/SLS 217 and 218)

**EDD 628 Philosophy and Children**
3 hours; 3 credits
Study of selected classics of Western philosophy. Creation of ways to bring philosophical issues, concerns, and practices into schools in forms accessible to students in grades K-12. Practice with community of inquiry teaching techniques.

**EDD 629 Factors and Components of Educability**
4 hours; 4 credits
Why do children appear to be so different in their ability to learn? Can we be satisfied with many versions of the "nature and nurture" explanation? What major factors affect students' educability? What are those more specific abilities that underlie educability and where do they come from? What does it mean to be psychologically ready for formal schooling? The course offers some non-traditional answers to these questions by challenging the view of abilities as stable intrinsic properties of the individual. The main focus is on what teachers can do to enhance students' ability to succeed academically.
Prerequisite: One of the following courses in psychological foundations of education: EDE 260, EDS 202, EDD 609

**EDD 630 Educational Seminar I (Effective Fall 2009)**

3 hours; 3 credits
Preparation for a student inquiry involving the collection of data on the processes and conditions of learning, including the identification of a topic, problem, or question for study, and the investigation of relevant literature. Students complete a critical literature review and design a project to be executed in EDD 631.
Prerequisite: Before beginning the course, students must have completed at least 21 credits in the Graduate Adolescence or Childhood Education programs, have a GPA of at least 3.0, and have obtained permission of the instructor.

**EDD 631 Educational Seminar II**

3 hours; 3 credits
Implementation of a student-initiated inquiry involving the collection of data on the processes or conditions of learning. The seminar serves as a forum to guide and assess students’ progress on their project design from EDD 630. Students submit a formal written document and make an oral presentation, both of which critique relevant literature, analyze research findings, interpret the significance of the project, and consider its implications.
Prerequisite: EDD 630

**EDD 642 New Media of Instruction**

3 hours; 3 credits
Students learn to apply new educational technology to enhance their own professional growth and productivity. They will use technology in communicating, collaborating, conducting research, decision making, and solving problems. Using the Internet as an educational resource and learning how to infuse technology in teaching and learning are the main goals of the course. Note: This course is not open to students who have successfully completed CSC 602.

**EDD 643 Sociology of Schools**

4 hours; 4 credits
This course applies sociological approaches to the study of school organization and its effects. Students are introduced to a wide array of topics that relate to the embeddedness of schools in social contexts. The course will span a variety of organizational processes such as moral and technical socialization, stratification, authority, social cohesion, and knowledge organization and distribution.

**EDE - Childhood Education (Elementary Education) Courses**

**EDE 601 Teaching and Learning Social Studies in Elementary Education**

3 hours; 3 credits

This course is designed to prepare prospective teachers for social studies instruction at the elementary level. The course examines the structures and concepts of the social studies as well as appropriate connections to other disciplines within the curriculum. Relevant research on child development and learning is incorporated, as are strategies to provide for students’ special needs. Issues addressed include curriculum development, resources and materials, management, standards, assessment, and the educational application of technology. A fieldwork component of 15 hours is included. Not open for students who have taken EDE 302 or its equivalent.

**EDE 602 Teaching and Learning Reading in Elementary Education**

3 hours; 3 credits
The methodologies and materials used in reading instruction and literacy development. Students will analyze and apply strategies, organizational designs, materials, and assessments for language and literacy teaching. Technology will be infused throughout the course to facilitate teaching and learning processes. Emphasis will be placed on addressing the needs of students in urban contexts, who reflect a range of abilities, experiences, and diverse cultural and linguistic communities. A fieldwork component of 15 hours is included. Not open for students who have taken EDE 302 or its equivalent.

**EDE 603 Teaching and Learning Mathematics in Elementary Education**

3 hours; 3 credits
The design and implementation of mathematics lessons that will address the needs of students with a variety of abilities, the integration of instructional technology into the curriculum, and multiple approaches to assessment of learning. The roles of context, culture, and language are explored as they relate to the development of mathematical ideas, strategies, and models in the elementary years. A fieldwork component of 15 hours is included. Not open for students who have taken EDE 303 or its equivalent.

**EDE 604 Teaching and Learning Science in Elementary Education**

3 hours; 3 credits
An inquiry approach to help entering teachers develop methods that foster and encourage elementary students to develop their natural curiosities about their world. Students will learn how to teach science within the context of the state and national science standards. The course will stress experiential teaching of science and refinement of students’ professional approach based on peer feedback and self-reflection. A fieldwork component of 15 hours is included. Not open for students who have taken EDE 303 or its equivalent.

**EDE 608 Teaching Practicum I in Elementary Education**

2 hours; 2 credits
Students complete 30 days in a mentored teaching experience in an elementary school setting in grades 1-3 or 4-6. Students currently employed as teachers work with a faculty member, a cooperating teacher, and the school principal or designee to enhance learning for individual and groups of children of varying abilities. Students meet once a week for two hours in a seminar to reflect upon the educational philosophies they have studied and the methodologies they are currently implementing in their own classrooms as they develop their own approaches to teaching and learning. The teacher’s role in developing environments that are safe and nurturing as well as intellectually stimulating and challenging for all students is examined. Graded Pass (P) or Fail (F).

Prerequisites: EDD 602, EDD 609, EDE 601, EDE 602, EDE 603, and EDE 604

**EDE 609 Teaching Practicum II in Elementary Education**

1 hour; 1 credit
Students complete 20 days in a mentored teaching experience in an elementary school setting in grades 1-3 or 4-6. Students currently employed as teachers work with a faculty member, a cooperating teacher, and the school principal or designee to enhance learning for individual and groups of children of varying abilities. Students meet once a week for two hours in a seminar to reflect upon the educational philosophies they have studied and the methodologies they are currently implementing in their own classrooms as they develop their own approaches to teaching and learning. The teacher’s role in developing environments that are safe and nurturing as well as intellectually stimulating and challenging for all students is examined. Graded Pass (P) or Fail (F).

Prerequisite: EDE 608

**EDE 610 Student Teaching in Elementary Education**

6 hours; 6 credits
Practice and problem solving in student teaching in elementary schools. Students are required to be in attendance at an assigned school full-time (8:30am-3:00pm), five days per week. Students will teach in grades 1-3 for part of the semester and in grades 4-6 for part of the semester. Students meet once a week for two hours in a seminar to reflect upon the educational philosophies they have studied and the methodologies they are currently implementing in their own classrooms as they develop their own approaches to teaching and learning. Application for a student teaching assignment must be completed and filed with the Student Teaching Office the semester preceding the semester in which the student plans to student teach. Students must also submit three letters of recommendation from full-time Education faculty. Graded Pass (P) or Fail (F).

Prerequisite: EDE 608

**EDE 620 Advanced Social Studies Education for Elementary School Teachers**

3 hours; 3 credits
The place of the social studies in the elementary school curriculum. Development of units and other teaching and learning materials. Emphasis on creative learning in the social studies.

**EDE 630 Advanced Science Education for Elementary School Teachers, Grades 3-6**

3 hours; 3 credits
Investigation of current curriculum improvement projects and new trends in elementary science education. Examination of conceptual schemes in the biological and physical sciences as they relate to the children’s “doing” of science in grades 3-6.

**EDE 631 Advanced Science Education for Elementary Teachers, Grades 1-2**

3 hours; 3 credits
An intensive exploration of current theory in science education in grades 1 and 2 with particular emphasis on the transformation of theory into classroom experience. Current research studies and related literature will be utilized to provide a conceptual framework within which modern trends in the discipline may be viewed.

**EDE 640 Advanced Mathematics Education for Elementary School Teachers, Grades 3-6**

3 hours; 3 credits
Examination of the conceptual structure in mathematics of the mathematics curricula for the elementary school in grades 3-6. Designed to assist the teacher in presenting these concepts, this course explores a variety of viewpoints concerning development and reinforcement of subject matter at successive levels. Prerequisite: At least two courses in mathematics at the 100 level or above

**EDE 642 Advanced Mathematics for Elementary School Teachers, Grades 1-2**

3 hours; 3 credits
Analysis of the conceptual structures in mathematics as applied to grades 1 and 2. Developed to aid the teacher in communicating modern concepts of mathematics to young children.

**EDE 650 Advanced Study in Reading**

3 hours; 3 credits
This course is designed to provide teachers with an inventory of ideas in reading. The programs, methods, and materials in reading diagnosis, skill development, and creativity presented in this course will be applicable to classroom situations.

**EDE 651 Integrated Strategies for Underachieving Readers**

3 hours; 3 credits
Examination of theories of oral and written language learning with a focus on models of literacy instruction for children at risk of reading failure. Review and evaluation of formal and informal assessments and teaching strategies for children from diverse language and cultural backgrounds and methods for addressing specific reading problems within a balanced reading program.

EDE 652 Children’s Literature
3 hours; 3 credits
Examinations of the place of reading in the child’s life. Use of reading techniques to acquire enjoyment, interest, information, and, especially, appreciation. Storytelling materials appropriate for children in nursery school and kindergarten. Interpretive and critical study of literature suitable for children of varied abilities and backgrounds in elementary grades. Introduction to promising practices of using children’s literature in various fields.

EDE 661 Music and Movement in Childhood Education
3 hours; 3 credits
An examination of theories and current methods in the teaching of music, movement, and dance in early childhood and elementary schools. Techniques of instruction and motivation to promote expressiveness, creativity, appreciation, and skill in music, movement, and dance. Studio experiences for students who want to develop their understanding and skill in teaching music and movement to children who are developing normally and to children with special needs.

EDE 662 Advanced Art
3 hours; 3 credits
An examination of theories and current methods in teaching art in early childhood and elementary schools. Techniques of instruction and motivation to promote expressiveness, creativity, appreciation, and skill in art. Studio experiences for students who want to develop their understanding and skill in teaching art to children who are developing normally and to children with special needs.

EDM 601 Teaching and Learning Social Studies at the Middle School Level
3 hours; 3 credits
Introduction to the history, content, methods, and functions as well as structures, concepts, and instruction of social studies to young adolescents are examined. Students explore a range of alternative strategies and technologies to address the needs of adolescents with and without special needs. Cultural and linguistic diversity are widely integrated in course content as in individual and group assignments in which students create specific curricula in social studies at the middle school level.
Prerequisite: Entry into Sequence 3 program

EDM 603 Teaching and Learning Mathematics at the Middle School Level
3 hours; 3 credits
Investigation of issues and research in mathematics teaching and learning at the middle school level. Topics include curriculum, standards, technology, assessment, diverse learners, problem solving, instructional strategies, and resources.
Prerequisite: Entry into Sequence 3 program

EDM 604 Teaching and Learning Science at the Middle School Level
3 hours; 3 credits
The course covers the pedagogy and educational issues in science that are fundamental to teaching and learning at the middle school level. Pedagogical topics explored include learning-teaching styles, classroom organization and management, safety and equipment concerns, experimentation, lesson planning and execution, assessment and evaluation, and standards-based programs. Educational issues related to science teaching that will be explored include alternative conceptions and conceptual change theories.
Prerequisite: Entry into Sequence 3 program

EDP - Special Education Courses

EDP 601 The Gifted Child in the Classroom
3 hours; 3 credits
Understanding gifted children and how to meet their educational needs.

EDP 602 Creative Arts in Special Education
3 hours; 3 credits
A workshop in a variety of expressive art media used in teaching children with various learning disabilities.

EDP 610 Psychological Foundations of Special Children (Effective 2009)
3 hours; 3 credits
The psychological, educational, social, and communicative needs of exceptional children and theories of behaviorism and cognitive psychology as they relate to methods of instruction. All categories of exceptionality are covered, with emphasis on cultural and linguistic diversity. Students are required to spend 10 hours in a variety of special education settings collaborating with teachers, parents, and professionals from multidisciplinary teams to broaden their experiences with the practices and services available to students with disabilities.

EDP 611 Social Foundations of Special Education (Effective Spring 2009)
3 hours; 3 credits
The historical and legal background of special education, a sociological view of disability, and the current state of special education including issues confronting the field, such as inclusion, professionalism, and ethics. The course is designed to
broaden students' understanding of the evolution of special education in the contexts of social, economic, and political influences. Students are required to spend 20 hours in a variety of special education settings collaborating with teachers, parents, and professionals from multidisciplinary teams to expand their understanding of the field of special education.

Pre- or corequisite: EDP 610

**EDP 612 Foundations of Special Education**  
*(Effective Spring 2009)*

3 hours; 3 credits  
The psychological, historical, and social foundations of special education. All categories of exceptionality are covered, with emphasis on cultural and linguistic diversity. The course covers the current state of special education, including issues confronting the field, such as inclusion, professionalism, and ethics. Students are required to do 20 hours of fieldwork in a variety of special education settings, including an inclusive setting. Fieldwork entails collaboration with parents and professionals from multidisciplinary teams to expand their understanding of the field of special education.  
Prerequisite: EDD 602, EDD 609, EDE 601, EDE 602, EDE 603, EDE 604

**EDP 615 Teaching Exceptional Adolescents**

3 hours; 3 credits  
The course is designed to provide teachers with the knowledge and competencies required to implement a variety of learning strategies and study skills for improving the literacy skills of adolescents with learning disabilities. Theories and research findings that support the effectiveness of a cognitive approach to literacy instruction, instructional procedures, and facilitation of the process in which the learner is engaged are major components of the course.  
Prerequisites: EDP 610 and EDP 621

**EDP 620 Teaching Exceptional Children with Severe and Low-Incidence Handicapping Conditions**

3 hours; 3 credits  
Methods, materials, and curriculum practices for teaching students with severe and low-incidence handicapping conditions. Adaptations and modifications for severely mentally retarded and emotionally disturbed persons will be discussed.  
Pre- or corequisite: EDP 610 or equivalent

**EDP 621 Teaching English Language Arts and Social Studies in Special Education and Inclusive Classrooms**

3 hours; 3 credits  
Examination of the learning and curricular needs of students with disabilities in English language arts and social studies. Emphasis is placed on students’ acquisition of a knowledge base in these content areas and on effective methods of instruction. The cultural and linguistic diversity of students with disabilities is discussed in detail. Twenty hours of fieldwork in varied educational environments provide additional experiences in teaching English language arts and social studies.  
Pre- or corequisite: EDP 610 or EDP 612

**EDP 622 Classroom Management in Special Education and Inclusive Classrooms**  
*(Effective 2009)*

3 hours; 3 credits  
The behavioral and psychoeducational approaches as they apply to classroom management. Techniques that increase desirable behaviors and techniques that ameliorate maladaptive behaviors are covered in detail for populations including those with mild/moderate, severe, and multiple disabilities. Preventive techniques are emphasized for classrooms in which teachers need to accommodate students with diverse levels of functioning, as well as diverse cultural and linguistic backgrounds. Twenty hours of fieldwork in one setting help students apply the techniques reviewed during class. This course satisfies the NYC Department of Education human relations requirement.  
Pre- or corequisite: EDP 610 or EDP 612

**EDP 623 Classroom Management in Special Education II: Practical Applications**

3 hours; 3 credits  
This course emphasizes the skills and competencies required to observe, define, interpret, and manage inappropriate behaviors effectively. Procedures and materials designed to facilitate positive changes in behavior will be discussed.  
Prerequisites: EDP 610 and EDP 622

**EDP 624 Reading: Assessment and Instruction in Special Education and Inclusive Classrooms**  
*(Effective Spring 2009)*

3 hours; 3 credits  
Comprehensive coverage of the developmental nature of reading approaches to assessment and instructional methods for correcting reading problems of students with disabilities. The informal assessment techniques discussed include traditional and alternative approaches. Students acquire the skills necessary to assess reading effectively and to make appropriate linkages to instruction. Twenty hours of fieldwork in a variety of educational settings enhance students’ experiences in diagnostic techniques and appropriate linkages to instruction.  
Pre- or corequisites: Sequence 1 Students: EDE 602 or EDP 610; Sequence 2 Students: EDE 602 and EDP 612

**EDP 625 Reading: Advanced Instructional Methods**  
*(Effective Spring 2009)*

3 hours; 3 credits  
Advanced examination of current reading theories and instructional practices, with emphasis on improving the reading comprehension of students with disabilities. Students gain an in-depth understanding of the
interactive nature of reading, the role of language development in reading acquisition, and the connections of language to students' reading and writing difficulties. Issues addressed include developmentally appropriate instruction, cultural and linguistic diversity, and literature-based instruction. Twenty hours of fieldwork in a variety of educational settings increase students' knowledge of activities and techniques that enhance reading comprehension.

Pre- or corequisites: Sequence 1 students: and EDP 610 or EDP 611; Sequence 2 students: EDE 602 and EDP 612

EDP 626 Principles of Assessment in Special Education
3 hours; 3 credits
Basic principles of measurement, diagnosis, and student evaluation, including domains of intelligence, achievement, language, and behavior. Formal and informal assessment techniques for classification and placement decisions are discussed. Authentic (performance-based) assessment techniques for instructional planning and ongoing assessment are also covered.

Pre- or corequisite: EDP 610 or EDP 612

EDP 627 Assessment for Instruction in Special Education and Inclusive Classrooms
3 hours; 3 credits
The development, administration, scoring, analysis, and interpretation of informal assessment techniques in the language arts and mathematics. Principles of curriculum-based assessment and criterion-referenced testing are covered in detail with emphasis on the construction of teacher-made tests. Students develop skills in observing, recording, and monitoring students' progress, and planning instruction in the context of classroom curriculum.

Prerequisite: EDP 610

EDP 630 Practicum in Special Education
3 hours; 3 credits
Students complete 40 days or the equivalent in a mentored teaching experience: 20 days in a special education setting in grades 1-3, and 20 days in a special education setting in grades 4-6. Students currently employed as teachers work with a faculty member, a cooperating teacher, and the school principal or designee to enhance learning for individual and groups of children of varying abilities. Students meet once a week for two hours in a seminar to reflect upon the educational philosophies they have studied and the methodologies they are currently implementing in their own classrooms as they develop their own approaches to teaching and learning. The teacher's role in developing environments that are safe and nurturing as well as intellectually stimulating and challenging for all students is examined.

Prerequisite: Students must have completed at least 18 credits of the graduate program, including EDP 610 and EDP 611, or EDP 612

EDP 631 Teaching Practicum I in Special Education (Effective Spring 2009)
2 hours; 2 credits
Sequence 2 students who request the Internship Certificate select this option as their college supervised practicum in special education. EDP 631 and EDP 632 are taken over a year. EDP 631 and EDP 632 cannot be taken in the same semester. Upon obtaining a teaching position with NYSDOE, CSI will apply to NYSED for an Internship Certificate for our student. The student taking EDP 631 and EDP 632 must secure his/her own school placement. In EDP 632, teacher candidates complete 20 (twenty) days (or 80 instructional hours) in a mentored teaching experience in a special education setting in grades 1-3 or 406, whichever grade levels were not covered in EDP 631. Teacher candidates currently employed as teachers work with a faculty member, a cooperating teacher, and the school principal or designee to enhance learning for individual and groups of children of varying abilities. The teacher's role in developing environments

Prerequisites: EDD 602, EDD 609, EDE 601, EDE 602, EDE 603, EDE 604, EDP 612, and EDP 622

EDP 632 Teaching Practicum II in Special Education (Effective Spring 2009)
1 hour; 1 credit
Sequence 2 students who request the Internship Certificate select this option as their college supervised practicum in special education. EDP 631 and EDP 632 are taken over a year. EDP 631 and EDP 632 cannot be taken in the same semester. Upon obtaining a teaching position with NYSDOE, CSI will apply to NYSED for an Internship Certificate for our student. The student taking EDP 631 and EDP 632 must secure his/her own school placement. In EDP 632, teacher candidates complete 20 (twenty) days (or 80 instructional hours) in a mentored teaching experience in a special education setting in grades 1-3 or 406, whichever grade levels were not covered in EDP 631. Teacher candidates currently employed as teachers work with a faculty member, a cooperating teacher, and the school principal or designee to enhance learning for individual and groups of children of varying abilities. The teacher's role in developing environments

Prerequisite: EDP 631

EDP 633 Student Teaching in Special Education
6 hours; 6 credits
Practice and problem solving in student teaching in elementary school special education settings. Students are required to be in attendance at an assigned school full-time (8:30am-3:00pm), five days per week. Students will teach in grades 1-3 for part of the semester and in grades 4-6 for part of the semester. Students meet once a week for two hours in a seminar to reflect upon the educational philosophies they have studied and the methodologies they are currently implementing in their own classrooms as they develop their own approaches to teaching and learning. Application for a student teaching assignment must be
completed and filed with the Student Teaching Office the semester preceding the semester in which the student plans to student teach. Students must also submit three letters of recommendation from full-time Education faculty.

Prerequisites: EDD 602, EDD 609, EDE 601, EDE 602, EDE 603, EDE 604, and EDP 621

EDP 635   Primary Support Systems in Special Education and Inclusive Classrooms
3 hours; 3 credits
Teachers are assisted in understanding and addressing issues pertaining to the related service needs of exceptional children and youth and their families, with focuses on issues of assessment, placement, and provision of related services; identification and prevention of child abuse (sexual, physical, emotional, neglect); and substance abuse. Supportive therapies and other resources addressing the diverse needs of exceptional children are also addressed.
Prerequisite: EDP 610

EDP 640   Fundamentals of Research in Special Education (Effective Spring 2009)
3 hours; 3 credits
This research-based course introduces students to various methods of inquiry that include principles of empirical research, basic statistical and measurement concepts, and criteria for evaluating published educational research studies. A proposal is developed that is the basis for the culminating research project that students complete in EDP 642.
Prerequisite: Sequence 1 Students: EDP 610 or EDP 611 ; Sequence 2 Students: EDP 612

EDP 642   Research Project in Special Education
3 hours; 3 credits
This course is the second half of the research sequence. To complete the research projects they began in EDP 640, students review and synthesize the literature, collect data, apply statistical methods for data analysis where appropriate, and discuss the implications of their findings. The flexible design of the course allows students to develop their projects based on portfolios, curriculum design, or research reports that incorporate their understandings of the academic and social needs of students with disabilities, the field of special education, and issues inherent in inclusion. The final project represents the culminating experience of the program.
Prerequisites: EDP 621, EDP 622, EDP 624, EDP 640, and EDP 680

EDP 650   Special Education in the Early Childhood Years
3 hours; 3 credits
This course will emphasize the comparison of normal child development to the special developmental discrepancies of the child with handicapping conditions in such areas as cognitive, motor, language, social, and behavioral functioning. Techniques of assessment, diagnosis, and program planning will be discussed. Emphasis will also be placed upon the needs of the families of young exceptional children.
Prerequisites: Enrollment in a Master’s degree program in Education or the Advanced Certificate Program, and EDP 610

EDP 656   Teaching English Language Arts/Social Studies in Special Education and Inclusive Classrooms at the Middle School Level
3 hours; 3 credits
Examination of the learning and curricular needs of students with and without disabilities in English language arts and social studies at the middle school level. Emphasis is placed on students’ acquisition of a knowledge base in these content areas and on effective methods of instruction. The cultural and linguistic diversity of students with and without disabilities is discussed in detail.
Prerequisites: Entry into Sequence 3 program; EDM 601 and EDM 651

EDP 657   Reading Assessment and Instruction in Special Education and Inclusive Classrooms at the Middle School Level
3 hours; 3 credits
The course offers comprehensive coverage of the reading difficulties of students with and without disabilities at the middle school level. Traditional assessment approaches are addressed, but emphasis is placed on informal assessment techniques including alternative/authentic approaches. Students acquire the skills necessary to assess reading effectively and to use assessment data in the development of instructional plans.
Prerequisites: Entry into Sequence 3 program; EDE 651

EDP 658   Teaching Mathematics and Science and Integrating Technology in Special Education and Inclusive Classrooms at the Middle School Level
3 hours; 3 credits
At the adolescent level, math and science instruction is provided with an emphasis on the use of technology to foster inquiry and enhance learning. Students acquire information about software and other classroom-based technologies designed to improve academic performance. Students learn to develop curriculum by integrating Web-based activities and making effective instructional adaptations.
Prerequisites: EDM 603 and EDM 604

EDP 660   Teaching Students with Special Needs in the General Education Classroom
3 hours; 3 credits
This course prepares educators to provide for the individual special needs of students with learning and
behavioral differences who are integrated into general education programs. The course includes exploration of instructional techniques applicable to all children, with special attention given to curricular adaptations necessary to modify instruction for pupils with special needs. A fieldwork component of 20 hours is included.

EDP 665 Transition: Career and Vocational Education in Special Education
3 hours; 3 credits
Discussion of the link between school preparation and the post-secondary needs of exceptional children, youth, and young adults, covering the full range of transition options including post-secondary study in colleges or universities or in vocational programs, and employment in supported or community-based programs. Material will also be presented concerning independent living, recreational leisure activities, and life cycle needs.
Prerequisites: Admission to the Master’s degree program in Special Education, Elementary Education, or Secondary Education; or the Post-Master’s Advanced Certificate Program for Leadership in Education.
Pre- or corequisite: EDP 610

EDP 670 School Leadership in Special Education
3 hours; 3 credits
Designed to prepare administrators of special education programs to deal with legal mandates, pupil certification processes, program development and evaluation, personnel evaluation and inservice development, and parent/community issues.
Prerequisites: Acceptance of students with graduate status into the Master’s degree program in Special Education, completion of EDP 610, EDP 620, or EDP 621, or their equivalent

EDP 675 Issues in Bilingualism in Special Education and Inclusive Classrooms
3 hours; 3 credits
The purpose of this course is to enhance students’ awareness and knowledge of the issues relating to cultural pluralism and multilingualism in the field of special education. This course will analyze the needs of individuals with disabilities for whom English is not a native language. Topics will include the identification and assessment of limited English proficient (LEP) children, the research concerning first and second language acquisition, strategies for the instruction of children from different cultures and with different language experience, and administrative difficulties in the implementation of special education programs for children who are not native speakers of English.
Prerequisites: Admission to the Master’s degree program in Special Education, Elementary Education, or Secondary Education; or the Post-Master’s Advanced Certificate Program for Leadership in Education; EDD 630
Pre- or corequisite: EDP 610. Students need not be bilingual

EDP 680 Integrating Technology in Math and Science Instruction in Special Education and Inclusive Classrooms (Effective Spring 2009)
3 hours; 3 credits
Computer applications to the math and science curricula in special education and inclusive classrooms. Introduction to a variety of strategies and instructional techniques for using computers in teaching concepts in science and mathematics to children with learning and behavior problems. The use and evaluation of computer software programs and Internet resources to promote children’s academic progress in mathematics and science are explored.
Pre- or corequisite: (EDP 610 and EDP 611) or EDP 612

EDP 685 Perspectives on Normalization and Integration in Special Education
3 hours; 3 credits
The purpose of the course is to provide those involved in the education of individuals with special needs with an understanding of the philosophy of normalization and the cultural contexts within which this philosophy developed. The philosophy of normalizing the lives of individuals with disabilities originated in Denmark and was subsequently adopted in the United States. The course will address the implications of normalization on (1) the education and treatment of persons with disabilities, and (2) the relation of persons with disabilities to society at large. Students will specifically examine how the philosophy of normalization has been applied in Denmark and the United States, where it is embodied in the least restrictive environment principle of P.L. 94-142.
Prerequisite: EDP 610 or equivalent

EDS - Adolescence Education (Secondary Education) Courses

EDS 601 The Pedagogy of Secondary School Social Studies (Effective Fall 2009)
3 hours; 3 credits
Students explore a range of effective and differentiated strategies for designing, implementing, and assessing teaching and learning in the social studies classroom. Issues of language and literacy acquisition related to the pedagogy of the social studies are discussed and the uses of technology are highlighted. A field work component of thirty (30) hours is included. Not open to students who have taken EDS 301 or its equivalent.
Prerequisite: EDS 615

EDS 602 The Pedagogy of Secondary School English (Effective Fall 2009)
3 hours; 3 credits
Issues of teaching and learning English language arts and literature are examined with attention to planning, instruction, assessment, management, and the educational application of technology. Reading and learning activities and literature depicting multicultural
settings are explored in relation to developing strategies for instruction and providing for students' differing special needs. A fieldwork component of 30 hours is included. Not open to students who have taken EDS 302 or its equivalent.
Prerequisite: EDS 616

EDS 603 The Pedagogy of Secondary School in Mathematics (Effective Fall 2009)
3 hours; 3 credits
Investigation of the issues and research in mathematics teaching and learning. Topics include instructional strategies, problem solving, assessment, technology, and diverse learners. A fieldwork component of 30 hours is included. Not open to students who have taken EDS 303 or its equivalent.
Prerequisite: EDS 617

EDS 604 The Pedagogy of Secondary School in Science (Effective Fall 2009)
3 hours; 3 credits
Issues of teaching and learning science are examined with attention to planning, instruction, assessment, management, and the educational application of technology. Scientific concepts, structures, and language are explored in relation to developing strategies for instruction and providing for students' differing special needs. A fieldwork component of thirty (30) hours is included. Not open to students who have taken EDS 304 or its equivalent.
Prerequisite: EDS 618

EDS 607 Integrating Curricula and Learning through Discovery
3 hours; 3 credits
Development of an interdisciplinary and discovery-based conceptualization of teaching that allows the disciplines to be viewed outside their area of teaching. Theories of interdisciplinary teaching, discovery learning, and technology are examined as instrumental in building connections between the school disciplines. Students work across disciplines to create integrated curricula informed by relevant research in human development and learning. Technology will be used to facilitate the application of interdisciplinary curricula and discovery learning in specific community, school, classroom, and student contexts. A fieldwork component of 20 hours is included. Not open for students who have taken EDS 307 or its equivalent.

EDS 609 Teaching Practicum I in Secondary Education
2 hours; 2 credits
Students complete 30 days in a mentored teaching experience in a secondary school setting in grades 7-9 or 10-12. Students currently employed as teachers work with a faculty member, a cooperating teacher, and the school principal or designee to enhance learning for individual and groups of children of varying abilities. Students meet once a week for two hours in a seminar to reflect upon the educational philosophies they have studied and the methodologies they are currently implementing in their own classrooms as they develop their own approaches to teaching and learning. The teacher’s role in developing environments that are safe and supportive as well as intellectually stimulating and challenging for all students is examined. Graded Pass (P) or Fail (F).
Prerequisites: EDD 602, EDD 610, and EDS 601, EDS 602, EDS 603, or EDS 604

EDS 610 Teaching Practicum II in Secondary Education
1 hour; 1 credit
Students complete 20 days in a mentored teaching experience in a secondary school setting in grades 7-9 or 10-12. Students currently employed as teachers work with a faculty member, a cooperating teacher, and the school principal or designee to enhance learning for individual and groups of children of varying abilities. Students meet once a week for two hours in a seminar to reflect upon the educational philosophies they have studied and the methodologies they are currently implementing in their own classrooms as they develop their own approaches to teaching and learning. The teacher’s role in developing environments that are safe and supportive as well as intellectually stimulating and challenging for all students is examined. Graded Pass (P) or Fail (F).
Prerequisite: EDS 609

EDS 611 Student Teaching in Secondary Education
6 hours; 6 credits
Practice and problem solving in student teaching in secondary schools. Students are required to be in attendance at an assigned school full-time (8:30am-3:00pm), five days per week. Students will teach in grades 7-9 for part of the semester and in grades 10-12 for part of the semester. Students meet once a week for two hours in a seminar to reflect upon the educational philosophies they have studied and the methodologies they are currently implementing in their own classrooms as they develop their own approaches to teaching and learning. Application for a student teaching assignment must be completed and filed with the Student Teaching Office the semester preceding the semester in which the student plans to student teach. Students must also submit three letters of recommendation from full-time Education faculty. Graded Pass (P) or Fail (F).
Prerequisites: EDD 602, EDD 610, and EDS 601, EDS 602, EDS 603, or EDS 604

EDS 654 Reading in the Content Areas
3 hours; 3 credits
Development of skills toward utilizing the reading process in content areas, the application of reading techniques as another approach to comprehension of
subject matter, and study of fundamental methods related to the reading process. (Not open to students who have had an undergraduate reading course.)

EDS 691 Advanced Studies in Teaching Secondary School Social Studies
3 hours; 3 credits
Guided individual and group study. Examination of the New York State curriculum in social studies along with testing requirements. Teaching techniques as they apply to effective instruction in the social studies will be emphasized. Review of relevant research.
Prerequisites: For Sequence 1 students: EDS 301 and EDS 400 or permission of instructor. For Sequence 2 students: EDS 601 and EDS 609 or EDS 611 or permission of instructor.

EDS 692 Advanced Studies in Teaching Secondary School English
3 hours; 3 credits
An investigation of instructional strategies, curricula, research, and current issues related to the teaching of secondary school English.
Prerequisites: For Sequence 1 students: EDS 302 and EDS 400 or permission of instructor. For Sequence 2 students: EDS 602 and EDS 609 or EDS 611 or permission of instructor.

EDS 693 Advanced Studies in Teaching Secondary School Mathematics
3 hours; 3 credits
Prerequisites: For Sequence 1 students: EDS 303 and EDS 400 or permission of instructor. For Sequence 2 students: EDS 603 and EDS 609 or EDS 611 or permission of instructor.

EDS 694 Advanced Studies in Teaching Secondary School Science
3 hours; 3 credits
A comprehensive review of the teaching/learning process in secondary school science. Emphasis on cognitive learning, teaching strategies, curricula, and developing science literacy.
Prerequisites: For Sequence 1 students: EDS 304 and EDS 400 or permission of instructor. For Sequence 2 students: EDS 604 and EDS 609 or EDS 611 or permission of instructor.

Master of Arts in English (MA)
Program Coordinator: Assistant Professor Terry Rowden
English/Modern Languages Building (2S), Room 208
Email: englishmasters@mail.csi.cuny.edu
Telephone: 718.982.3660

The program is designed for students who wish to enlarge their knowledge of English and U.S. literature, to improve their critical skills in literature and in writing, and/or to improve their skills as high school teachers of English. It is of interest to recent graduates, to students who wish to resume their education, and to teachers with initial certification who wish to deepen their knowledge of English as they complete the master’s degree.

Two options are offered, one with a concentration in literature and one with a concentration in rhetoric. Students electing the literature option will take at least five courses in literature (ENG 700-level courses); students electing the rhetoric option may take three courses in linguistics or writing (ENG 600-level courses).

For students who are not pursuing teacher certification, 30 credits are required for the degree. For students with initial certification desiring professional certification as high school teachers of English, 34 credits are required for the degree.

English Admission Requirements
1. Bachelor of Arts degree from an accredited institution
2. At least 32 credits of undergraduate courses in English (excluding freshman composition)
3. A cumulative grade point average of 3.0 (B) or a grade point average of 3.0 (B) in English courses

The Graduate Record Examination is not required for admission.
Students may be admitted conditionally with the approval of the coordinator of the English MA program; their admission will be reviewed after completion of two courses.

English Degree Requirements
1. A grade point average of 3.0 (B) in all coursework
2. A grade of at least Pass (P) on the master’s papers and master’s examination
3. Of the 30 credits required for students who are not pursuing professional certification as high school teachers of English, seven four-credit courses are chosen from either the Literature or Rhetoric option, three credits are chosen from linguistics, writing, or teaching of writing, and two credits of independent study (ENG 892) that are awarded after passing the master’s examination.

Literature Option: seven courses (28 credits), including at least five courses in literature (700-level courses) that must include at least one course in English literature before 1800.
Rhetoric Option: seven courses (28 credits), including three in linguistics, writing, and the teaching of writing (600-level courses) that must include at least one course in English literature before 1800.
4. Of the 34 credits required for students who have received initial certification and who desire professional certification as high school teachers of English, seven four-credit courses are chosen from either the Literature or Rhetoric options above, four credits are taken in the Department of Education, and two credits of independent study (ENG 892) are awarded after passing the master’s examination. Within the seven four-credit courses, students must take eight credits of English courses linking content and pedagogy. Four credits taken in the Department of Education:

EDS 692 Advanced Methods of Teaching Secondary School English (3 credits)
Independent Study in Education (1 credit)

Eight credits of English courses linking content and pedagogy, chosen from the following:

ENG 686 The Teaching of Writing (4 credits);
ENG 630 Writing Across the Curriculum (4 credits);
ENG 682 Modern Grammar (4 credits);
ENG 683 Sociolinguistics (4 credits);
ENG 687 Models of Second Language Acquisition (4 credits).

5. Two master’s papers (2 credits)
The two master’s papers will be course papers. Candidates will choose them in consultation with their instructors and submit them to the coordinator of the English MA Program. The papers will be read by two faculty members and graded Honors, Pass, or Fail. The first paper is to be submitted before enrolling in a fifth graduate course, the second before taking the master’s examination.

6. Master’s examination (2 credits)
The master’s examination is intended to provide candidates an opportunity for further reading and independent study and to test their ability to read, interpret, and synthesize. They will select three of their courses for this examination and will be expected to answer questions with reference to works both assigned in those courses and on the supplementary reading lists provided by their instructors. Candidates with the Rhetoric Option may elect linguistics or writing for two of their three courses.
The master’s examination is a three-hour written examination and is graded Honors, Pass, or Fail. Credit for two hours of independent study will be awarded upon passing.

7. Honors

To earn the degree with Honors, a grade point average of 3.5 and grades of Honors on the master’s examination and at least one of the master’s papers are required.
The MA in English at CSI is not a research-oriented degree.

There is no foreign language requirement for the MA in English at CSI. Students planning to continue graduate studies beyond the MA, however, should take note that most doctoral programs in English require a reading knowledge of at least two foreign languages, and The City University Graduate Center requires three, one ancient (Greek or Latin) and two modern.

English Courses

Linguistics, Linguistics and Writing

ENG 630 Writing Across the Curriculum
4 hours; 4 credits
An introduction to the principal issues, both theoretical and practical, in writing across the curriculum. Topics for reading and discussion will include: models of the writing process; kinds of writing; writing for learning and writing for testing; teaching English and teaching in the content areas. The class will develop a series of writing assignments in content areas useful to its members.

ENG 640 Workshop in Creative Writing
4 hours; 4 credits
The particular genre will be announced each semester: poetry, fiction, playwriting, or creative nonfiction. Discussion of writing processes and problems arising from the experience of the class. Although reading material will primarily be the work of the class, there will be some attention to the theory and practice of professional writers.

ENG 650 Workshop in Writing about Literature
4 hours; 4 credits
Extensive practice in writing about literature in conjunction with readings in several major works. Discussion of major approaches to writing about literature such as the historical, the biographical, the psychological, the formalistic, the archetypal, and the philosophic.

ENG 670 Workshop in Autobiographical Writing
4 hours; 4 credits
Extensive practice in autobiographical writing in conjunction with readings in autobiography. Discussion of issues arising from the experience of the class as well as relationships among fact and value, reality and imagination, historical circumstance and myth.

ENG 682 Modern English Grammar
4 hours; 4 credits
A generative-transformational analysis of the English sentence and a normative approach to contemporary
usage. An introduction to sentence diagramming according to the principles of generative grammar with attention to deep and surface structure and semantic features. Traditional grammar is reformulated in transformational terms and usage is taught with reference to generative theory.

ENG 683 Sociolinguistics
4 hours; 4 credits
The interaction of language with region, class, sex, and nationalism. Special consideration is given to Black English, urban dialects, and educational policy. An exploration of regional and class dialects, the reactions to them, and the historical reasons for their development. The differences between male and female speech as well as the different ways language refers to sex are considered. The debate over biaialectism in the schools is reviewed as well as the role of language in nationalism and questions of language policy in developing countries.

ENG 686 The Teaching of Writing
4 hours; 4 credits
An introduction to the principal issues, both theoretical and practical, in the teaching of writing. Topics such as the following will be approached through readings in the literature and class scrutiny of the participants’ own experiences as writers: relations between speech and writing, models of the writing process; standard English, bilingualism, and biaialectism; special problems of English usage and orthography; strategies for overcoming blocks and interferences; evaluation of growth in writing.

ENG 687 Models of Second Language Acquisition
4 hours; 4 credits
This course presents various models of second language acquisition, including the monitor model, interlanguage theory, linguistic universals, and sociocultural models. Public policy issues, such as English only, bilingual education, and immigration, are explored. In addition, factors that may interfere with second language learning and those that may enhance it are studied. Contrasts are made between learning ESL as a child and as an adult with special reference to the critical period hypothesis. Prerequisite: Graduate students only

ENG 688 Composition Theory and Rhetorical Models
4 hours; 4 credits
Focus on recent developments that have brought new theories of writing and new methods of teaching to English classes. Among the schools of thought and research communities explored are expressivism, cognitivism, social-epistemic rhetoric, cultural studies, and critical pedagogy. Prerequisite: Graduate students only

ENG 689 Studies in Composition and Rhetoric
4 hours; 4 credits
An in-depth study of single subjects in composition theory and contemporary rhetoric. Possible subjects could include: an in-depth study of a single paradigm, a study of a major figure in the field, an examination of a research methodology, an exploration of assessment models, an in-depth reading of a current controversy. Prerequisite: Graduate students only

Literature

ENG 710 Studies in Literary Theory
4 hours; 4 credits
This course offers students the opportunity to think critically and self-consciously about the way they approach literary study. Students will gain an understanding of analytical discourses and practices in literary studies. Such understanding is necessary because it has become increasingly central to the field. Instructors are free to design the course according to various temporal or methodological frameworks.

ENG 719 Studies in Anglo-Saxon Literature

ENG 720 Studies in Medieval English Literature

ENG 721 Studies in the Literature of the English Renaissance

ENG 722 Studies in Restoration and 18th-Century English Literature

ENG 723 Studies in 19th-Century English Literature

ENG 724 Studies in 20th-Century English Literature

ENG 725 Studies in Shakespeare

ENG 726 Studies in United States Literature before 1900

ENG 727 Studies in United States Literature after 1900

ENG 728 Studies in United States Literature after 1900

ENG 729 Studies in Classical and Biblical Backgrounds to Literature

ENG 730 Studies in Modern World Literature

ENG 731 Studies in Drama

ENG 732 Studies in Fiction

ENG 733 Studies in Poetry
(4 hours; 4 credits each)
Each time a Studies course is offered, the Semester Bulletin will define, within the larger area of the course, its focus and the topic or topics for special investigation. Each course will include a supplementary reading list, a list of works important to the period or genre of the course but not assigned in it. Each course will include at least one paper that is explication in nature and one paper that involves additional reading in history, literary history, biography, or criticism. Each course will also have a final examination.
ENG 734  Studies in U. S. Multicultural Literature
4 hours; 4 credits
This course investigates the rich diversity of United States culture and literature. The instructors may choose various themes and time frames as they tailor a syllabus to fit this rubric.

ENG 735  Studies in Women and Literature
4 hours; 4 credits
The course explores literature by women in the context of historical, cultural, and/or theoretical issues of feminist studies. The course may be taught differently in different semesters in order to include various historical periods, and varied national and ethnic literatures.

ENG 736  Studies in African American Literature
4 hours; 4 credits
This course explores selected African American literary and critical texts as exemplars of African American literary traditions and participants in United States literature. Emphasis is on close reading and analysis of various critical approaches to those readings. The course serves as introduction to the advanced study of texts drawn from all genres but may focus on any one in a given semester. The course will consist of readings in African American literary and critical texts, class discussion, written work, and oral reports. A student may not register for a course under the same course number more than once.

Master of Science in Environmental Science (MS)
Program Coordinator: Professor Alfred Levine
Biological Sciences/Chemical Sciences Building (6S), Room 310
Email: envirscimasters@mail.csi.cuny.edu
Telephone: 718.982.3920
The program is designed to provide broad interdisciplinary training in those areas of the biological, engineering, physical, chemical, and social sciences that are important in solving environmental problems. Graduates are prepared for careers in both governmental agencies and private companies working on such problems as pollution control, environmental impact, and urban planning, and for careers in environmental education. Students can use this degree to prepare for a PhD. The College has extensive modern laboratories and computer facilities.

Environmental Science Admission Requirements
1. An acceptable bachelor’s degree from an institution whose degree requirements are substantially equivalent to those of the College of Staten Island or other senior units of The City University of New York. Ordinarily, this would be a bachelor’s degree in a natural science or in engineering.
2. An overall average of B minus, or the equivalent, in undergraduate work and an average of B, or the equivalent, in undergraduate science and engineering courses. The undergraduate credits must include at least one year each of general chemistry and general physics, mathematics through differential and integral calculus, and at least one semester of ecology. Candidates who are deficient in one or more of these requirements may be accepted on the expectation that they will make up the deficiency without receiving graduate credit for it.
3. An interview with faculty of the graduate program.
4. The applicant is ordinarily required to submit the results of the General Aptitude Test of the Graduate Record Examination. Applicants should apply directly to the Educational Testing Service, Box 955, Princeton, NJ 08540, to take the tests. Applicants should take these examinations no later than February for fall admission and July for spring admission.

Environmental Science Degree Requirements
Thirty credits in approved courses with an average of at least 3.0 (B). The courses normally include The Biosphere and Our Species, Community Ecology, Earth Science, Applied Environmental Science, one course from an approved list of graduate courses in the social sciences, and a thesis project for a minimum of three to a maximum of six credits. The remaining 12 credits are chosen so that the concentration will be in either environmental biology or applied environmental science. Courses may be chosen from environmental science and social science courses at the College or from appropriate courses offered in graduate programs in The City University Graduate School and University Center.

Environmental Science Courses
ESC 601  The Biosphere and Our Species
3 hours; 3 credits
A required course that covers the structure and function of the biospheric ecosystem on the planet Earth, and the impacts of our species upon it in terms of ecology, resource use and exploitation, sociopolitical aspects, economics, environmental ethics, and related topics. (Also creditable toward biology requirements.)

ESC 702  Community Ecology
3 hours; 3 credits
Function and integration of natural communities and ecosystems: trophic structure, energy flow, species diversity and dominance, stability and resilience, interspecific interactions. Selected topics from the
current literature. (Also creditable toward biology requirements.)
Prerequisite: Ecology

**ESC 703 Earth Science**
3 hours; 3 credits
Ecological significance of physical geology and geochemistry; tectonics, pedogenesis, erosion and deposition. The hydrologic cycle; ground water geology and pollution. Weather and climate; the general circulation; climatic geography; dynamics of fronts and traveling weather systems.
Prerequisites: Calculus, physics

**ESC 704 Applied Environmental Science**
3 hours; 3 credits
Prerequisite: Calculus

**ESC 705 Global Climate Change**
3 hours; 3 credits
This course examines the dominant physical, chemical, and geological processes controlling global climate and its variations through time, on time scales from millions of years to seasonal, interannual, and decadal scales of relevance to human societies. An account of the Cenozoic climate decline leading to the major glacial cycles of Pleistocene will be used as a context for understanding global climate sensitivity, the modes and mechanisms of climatic responses to external forcings, and projected consequences of the ongoing build-up of greenhouse gases in Earth's atmosphere.

**ESC 710 Instrumentation for Chemical Analysis**
6 laboratory hours; 3 credits
Lecture and laboratory work covering theories and applications of modern approaches to chemical analysis. Equal emphasis will be placed on physical theory and design and chemical theory and procedure. Topics include optometric and electrometric methods, magnetic resonances, radioactivity, and separation techniques applicable to analysis of environmental pollutants.

**ESC 721 Methods in Environmental Analysis**
6 laboratory hours; 3 credits
Collection and analysis of water, air, and soil samples in local terrestrial and aquatic habitats. Various sampling methodologies will be used in the field to collect data that will be analyzed and tested statistically.
Prerequisites: Ecology, ESC 702 and 732, or permission of the instructor

**ESC 722 Marine Ecology**
(Also BIO 722)
3 hours; 3 credits
Field-oriented study of estuarine and pelagic ecosystems. This course will emphasize how spatial and temporal scales are critically important in the study of marine organisms. Students will learn specialized sampling and analytical techniques necessary for the study of marine systems. Topics will include comparisons of “rate-based” versus “abundance-based” studies of population dynamics plus comparisons of individual, population, and community levels of analysis.
Prerequisite: BIO 360 or equivalent

**ESC 724 Computer Simulation of Environmental Systems**
3 hours; 3 credits
The development and construction of mathematical models; defining pollution parameters and quality criteria; analog, digital, and hybrid techniques in environmental systems simulation studies. Case studies for model verification; control policies based on simulations. (Also creditable toward biology requirements.)
Prerequisite: A knowledge of digital computer programming

**ESC 725 Energy Sources and the Environment**
3 hours; 3 credits
The environmental impact of present and future sources of power. Methods of power production and distribution; analysis of energy resources; pollution associated with energy conversion; effect of engineered energy systems on the energetics of ecological systems.

**ESC 726 Transportation Systems**
3 hours; 3 credits
Urban travel characteristics and needs determined by origin-destination surveys, population and economic factors, and land use. Traffic-study techniques for obtaining data on speeds, travel times, delays, and volumes. Capacity analysis for freeways, city streets, air corridors, bus lanes, and railroads. Criteria considered in selection of the “optimum” transportation plan. Presentation of current advances in the state of the art.

**ESC 727 Conservation Biology**
(Also BIO 727)
3 hours; 3 credits
Conservation biology is a multidisciplinary field of environmental science. The objectives of this course are: (1) to understand global biodiversity in its historical context; (2) to learn how human impacts are endangering ecosystems around the world; (3) to identify the biological properties of organisms, populations, species, and systems that render them vulnerable; and (4) to explore means of protecting biodiversity and the ecological processes on which it depends.
Prerequisites: ESC 601

**ESC 772 Conservation Biology**
3 hours; 3 credits
This course is an introduction to the law pertaining to environmental issues such as population, economic growth, energy, and pollution. Environmental problems are defined and alternative approaches for dealing with them are examined. Existing statutory efforts such as the National Environmental Policy Act, the Clean Water Act, the Clean Air Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Insecticide, Fungicide and Rodenticide Act, and the Resource Conservation and Recovery Act are analyzed.

ESC 731 Behavioral Ecology
3 hours; 3 credits
The role of behavior in the dynamics of populations; social behavior, the reproductive function of pheromones and hormones, mate selection, species-isolating mechanisms, habitat selection, orientation and navigation. Laboratory and field evidence will be discussed. (Also creditable toward biology requirements.)
Prerequisite: BIO 338 or equivalent

ESC 732 Population Ecology
3 hours; 3 credits
Ecological basis of fitness in natural populations; theory of evolution in stable and changing environments; genetic aspects of interactions between species; population dynamics and regulation; life tables. Case histories. (Also creditable toward biology requirements.)
Prerequisites: Genetics and ecology

ESC 734 Chemical Ecology
3 hours; 3 credits
The role of secondary metabolites in ecological interactions within and among species. Allelopathy; defense mechanism; chemical co-evolution and the organization of natural communities. (Also creditable toward biology requirements.)
Prerequisites: Any two of the following: ecology, behavioral biology, organic chemistry

ESC 735 Biogeography
3 hours; 3 credits
Distribution of biomes of the world. Impact of geologic and climate change on the ranges of plants and animals. Experimental biogeography; models of colonization and insular evolution; effects of humans on regional biota. (Also creditable toward biology requirements.)
Prerequisites: Any two of the following: ecology, evolution, historical geology, or college geography

ESC 736 Systems Ecology
3 hours; 3 credits
Systems approach to energy flow, biogeochemical cycles, and resource management: systems measurement, description, analysis, and simulation modeling. Examination of systems studies in current literature. (Also creditable toward biology requirements.)
Prerequisites: Ecology, calculus, statistics, and CSC 270 or equivalent, or permission of the instructor

ESC 740 Experimental Design and Analysis
3 hours; 3 credits
Statistical analysis of research and survey data with emphasis on the design of experiments, regression analysis, and analysis of variance.
Prerequisites: Introductory statistics, biometrics, or equivalent

ESC 743 Cellular Toxicology
(Also BIO 743)
4 hours; 4 credits
Toxicology is the overview of the mechanisms by which exogenous agents produce deleterious effects in biological systems. An overview of the sensitive analytical techniques that have facilitated studies on the metabolism and biotransformation of xenobiotics and have contributed to interpretation of the biological and toxicological effects of xenobiotics will be presented. Since the action of toxins is ultimately exerted at the cellular level, emphasis will be placed on the description of representative model cell systems that play an important role in the identification and assessment of potential environmental hazards. A variety of prokaryotic and eukaryotic cell systems are currently in use for the study of different toxic effects including cytotoxicity, genotoxicity, and mutagenesis.
Prerequisites: CHM 256, BIO 314, BIO 352 or equivalent

ESC 748 Environmental Chemistry
3 hours; 3 credits
The science of chemical phenomena involving the nature, reactions, and transport of natural and anthropogenic chemicals in the natural environment, including the lithosphere, hydrosphere, and atmosphere. The interaction between chemical species, and the effects of the physical environment, and the role of microorganisms. Specific emphasis on pollutants and hazardous wastes.
Prerequisite: General chemistry

ESC 751 Microclimate and Air Pollution
3 hours; 3 credits
Topographic, vegetational, and human impact on local climates. Properties and biological implications of the active surface. Pollution as part of a meteorological system; the urban heat island, environmental photochemistry. (Also creditable toward biology requirements.)

ESC 752 Soils and Geohydrology
3 hours; 3 credits
ESC 753  U.S. Land-Use Planning and Environmental Policy
(Also GEG 753)
3 hours; 3 credits
This course explores contemporary United States land-use and environmental planning issues in terms of their historical background, regulatory setting, cultural context, and practical politics. It focuses on specific local, regional, and national cases, and introduces students to Geographic Information Systems (GIS) as a way of analyzing land-use problems.
Prerequisite: ESC 601 (Biospheres and Our Species)

ESC 760  Epidemiology
3 hours; 3 credits
The study of health and disease through analysis of geographical and temporal patterns of health risks and disease, and of the populations affected. Demographic (mortality and morbidity) and epidemiological (clinical, community, cohort, and case-control) studies. Statistical analyses and designs. Determination of biological inference and risk.
Pre- or corequisite: ESC 740, or permission of the instructor

ESC 799  Thesis Research
Hours and credits vary; maximum 6 credits
This course may be repeated. No student may apply more than a total of six credits of thesis research toward the degree.

ESC 891 (1 credit), ESC 892 (2 credits), ESC 893 (3 credits), ESC 894 (4 credits), Graduate Independent Study in Environmental Science

Master of Arts in History (MA)
Program Coordinator: Professor Catherine Lavender
History/Political Science, Economics, and Philosophy Building (2N), Room 203
Email: historymasters@mail.csi.cuny.edu
Website: http://www.library.csi.cuny.edu/dept/history/ma/
Telephone: 718.982.2869

The Irish playwright Oscar Wilde once wrote that, "Any fool can make history, but it takes genius to write it." For students who wish to develop a genius for writing about the past, The Master's Degree in history at the College of Staten Island provides opportunities for personal growth and career development. The program meets the highest intellectual and professional standards of the historical discipline, offering training in the analytic and communications skills demanded by all the professions.

Whether graduate students are interested in the master’s degree to satisfy curiosity about the past, or as a preliminary step toward doctoral study, they will benefit from an explanation of the histories of Africa, Asia, Europe, and North and South America; they also will learn to recognize historical questions and to apply the methods historians have developed to analyze and describe critical human events.

The program is also suited to teachers in the social sciences with initial certification who wish to deepen their knowledge of history as they complete the master’s degree qualification demanded for professional certification. Careers in cultural institutions are also open to students with the professional training in historical research provided by the master’s program.

Graduates of the Master’s program in History at the College of Staten Island will acquire an overview of global history and a focus on a geographic area of specialization. The curriculum requires coursework distributed across four of the department’s five fields of concentration: History of Africa and the Middle East, History of Asia, History of Europe, History of Latin America and the Caribbean, and History of the United States. Students will explore one of these areas of concentration, and will complete a significant work of historical scholarship, a master’s thesis under the supervision of a thesis director. Students desiring recommendation for doctoral work will demonstrate competence in at least one foreign language.

History Admission Requirements
For matriculated status:
1. Satisfactory completion of a bachelor’s degree from an accredited college and a cumulative grade point average of at least 3.0. Students not meeting this requirement may be evaluated after an interview with the program coordinator and the admissions committee.
2. A superior record of accomplishment in undergraduate history courses, with at least a 3.0 average in these courses. Students not meeting this requirement may be evaluated after an interview with the program coordinator and the admissions committee.
3. Two letters of recommendation from professors under whom the applicant has studied or other persons who can comment directly on the applicant's potential as a graduate student and scholar.
4. Each applicant will provide a letter or statement not to exceed one typed page explaining why he or she is interested in pursuing graduate studies in history.
5. Students may enter the program in either the fall or spring semester, but are required to take HST 701 at their first opportunity.

For non-matriculated status:
Non-matriculated graduate students and graduate students in the Education program or other graduate programs, at the discretion of the MA in History program coordinator, may enroll in the program’s offerings on a space-available basis after matriculated History MA program students have been
accommodated.

In special cases, master’s students may take an advanced undergraduate history course or a 600-level history course, with appropriate additional work, for degree credit, but only by special arrangement and with the prior permission of the program coordinator. Undergraduate students may, with the permission of the program coordinator, take graduate courses for credit toward their undergraduate degree or the master’s degree.

History Retention Requirements
Students must have a minimum grade point average of 3.0 to be retained in a graduate program. Students will be able, but not required, to complete the MA Program in four semesters. Some students, particularly those who continue to work full-time while completing the degree, will find it difficult to complete all of the requirements in four semesters. This is normal in most history MA programs, and students should not be discouraged by the demanding pace of CSI's program.

History Degree Requirements
The MA in History requires 32 graduate credits at the 700-level, with all graduate courses designated at four credits, for a total of eight courses. Students must take at least one course in each of four of the program’s five areas of concentration, the Historical Methods course (HST 701), and the two thesis seminars (HST 798 and HST 799).

Students with initial certification in Adolescence Education (social studies) who wish to obtain professional certification will complete a program of 36 credits. They will take HST 798 (4 credits) and HST 799 (4 credits). In addition, they will take EDS 691 Advanced Studies in Teaching Secondary School Social Studies (3 credits) and an independent study course (1 credit) in the Department of Education in the same semester in which they enroll in HST 799 (Thesis Tutorial Seminar). For further information about these certification requirements, consult the Office of Teacher Certification Services of the New York City Department of Education at 212.420.1830.

Areas of concentration
- History of Africa and the Middle East
- History of Asia
- History of Europe
- History of Latin America and the Caribbean
- History of the United States

Thesis
Students in their third semester will take the four-credit HST 798 Preparation of Thesis Proposal Seminar with an additional four-credit HST 799 Thesis Tutorial Seminar during the following semester.

A. In the preparation of a proposal seminar, thesis students will develop their topic, begin research, collect bibliography, and receive instruction in research methodology and historical writing. Students will write a historiographical essay, reviewing the broader historical literature of their subject and relating their own approach to the field. Students will work with a thesis director in their field from the department faculty.

B. The thesis director will continue to supervise the thesis student during the semester in the tutorial seminar. The thesis will be accepted in partial completion of the degree when it is approved by the thesis director, and the second and third readers, and is deposited in the department’s archives.

The Faculty of the Department of History has established the following standards for an acceptable History MA thesis:

1. An acceptable History MA thesis must be based on extensive research in primary sources. The thesis cannot be synthetic work based on the student's own interpretation of secondary sources and the writings of other historians.

2. An acceptable History MA thesis must provide the historiographical context for the topic. The introduction to the thesis will provide a thorough literature review that illustrates student mastery of, and the study's situation within, the scholarship available on the thesis topic. Establishing the historiographical context for the thesis topic will be one of the main objectives of HST 798 in the preparation of the thesis proposal.

3. An acceptable History MA thesis must advance an original argument. This does not mean that the student will be the first or only person ever to address the topic, but it does mean that the student must bring a new perspective to the study that has not been provided by a scholar before.

(Thesis students should consult the statement of guidelines for thesis submission to the CSI Library, maintained by the MA in History program).

History Probation and Dismissal

Probationary Admission to Program
In some cases (such as when Probationary a student applies after the application closing date, with a lower-than-expected GPA, an undergraduate major other than History, or other issues), the MA committee may admit students to the program on a probationary basis. In these cases, the standing of the student will be re-evaluated by the committee at the end of the student's first semester in the program, at which point the probation may be lifted or the student will be informed that he or she may not continue in the program.
**Dismissal from the Program**

When students engage in acts of academic dishonesty or fail to maintain a 3.0 GPA or the MA committee may elect to place a student on probation or to dismiss a student from the MA Program. The probationary period lasts for at least one semester. During that time, the MA committee will determine whether students have made satisfactory progress toward correcting the situation that has resulted in the probationary status. If the committee determines that such progress exists, then the probation may be lifted; if not, the students will be informed that they may not continue in the program.

**History Courses**

**HST 701  Historical Method**
4 hours; 4 credits

This course presents an advanced study of the philosophy and method of historical research, with particular attention to writing and teaching history. While intended to familiarize students with the traditions and current practice of the historical profession, the course will also acquaint students with specific problems in historical research reflected in the publications of the seminar instructor.

**Courses in the areas of concentration:**

**HST 704  Topics in the History of Africa**
4 hours; 4 credits

This course examines the history of Africa. Topics in the History of Africa will cover such issues as slavery in African societies, ethnicity, class, and power in 20th-century Africa; Africa in the post-Cold War era.

**HST 708  Topics in the History of the Middle East**
4 hours; 4 credits

This course examines the history of the Middle East. Topics in the History of the Middle East will feature such issues as women and gender in Islam, the historiography of the Middle East, and the Middle East through literature and film. The approach will be predominantly historical, but perspectives from the different social sciences will deepen the analysis.

**HST 710  Topics in the History of South Asia**
4 hours; 4 credits

This course covers important issues in South Asian history. Topics in South Asian History presents an examination of aspects of the social, political, and cultural history of India from the Mauryan to the Gupta periods, and Islamic rule from the Sultanate of Delhi to the Mughal period; Modern South Asia; a study of British imperial rule in South Asia and the development of India, Pakistan, Sri Lanka, and Bangladesh since independence.

**HST 711  Topics in the History of East Asia**
4 hours; 4 credits

This course covers important issues in East Asian history. Topics explored are: Late Imperial China, Tokugawa Japan, Meiji Japan, Republican-era China, rebellion and revolution in China, The People's Republic of China, the Cultural Revolution in China, and international relations in East Asia.

**HST 716  Topics in European History to the Renaissance**
4 hours; 4 credits

This course examines important themes in the early history of Europe. The course will require students to analyze issues in social, political, religious, and intellectual history through the use of primary and secondary sources. Topics in European History to the Renaissance may include medieval urban history, medieval religious history, Byzantine history, early Germanic Europe, the Crusades, and the rise of the Ottoman Empire in Eastern Europe.

**HST 717  Topics in European History from the Renaissance**
4 hours; 4 credits

This course examines important themes in the history of Europe from the time of the Renaissance. The course will require students to analyze issues in social, political, religious, and intellectual history through the use of primary and secondary sources. Topics in European History from the Renaissance may include: the European Renaissance, the Reformation and Counter Reformation, the English civil wars, the French Revolution, the Industrial Revolution, the Russian Revolution and world communism, the world wars, the post-war synthesis, and the European Union.

**HST 720  Topics in Latin American History**
4 hours; 4 credits

This course covers important issues in the early and later history of Latin America. Topics in Latin American history may include a study of the Iberian discovery of America and the conquest of the native peoples from 1492 to 1650, the role of the Catholic church in the Hispanicization of Iberian America, the Latin American wars of independence, reform and revolution in Latin America, race in Latin America, the 20th-century Latin revolutions, U.S.-Latin American relations, and Cuban reform and revolution.

**HST 722  Topics in Caribbean History**
4 hours; 4 credits

This course will focus on the period from Columbus’s arrival in the Caribbean to the abolition of slavery in the 19th century. Among the topics that may be examined: the pre-Hispanic Caribbean Spanish contact with the Arawaks and Caribs, settlement and colonies, the Atlantic slave trade, “King Sugar,” the world of Europeans and Euro-Caribbeans, the world of slaves, free persons of color, the Haitian Revolution, metropole-directed abolitionism, the Morant Bay Revolt, the emergence of Cuban nationalism.

**HST 725  Topics in U.S. History to 1865**
4 hours; 4 credits
This course covers the period of colonial American history until the Civil War era. Important topics in the early history of the United States will be explored. These may include a selection of the following: racial encounters in the New World, the environmental history of the United States, the intellectual and cultural history of the American nation, colonial American history, the American Revolution and the early republic, Jacksonian America, and the Civil War era.

HST 726  Topics in U.S. History since 1865  
4 hours; 4 credits  
This course covers the period of U.S. history that begins with Reconstruction and moves forward to contemporary issues. Important topics in the history of the United States will be explored. These may include a selection of the following: Reconstruction, Gilded Age, and Progressive history; the history of United States wars; the diplomatic history of the United States; United States biography; United States encounter with communism; the history of the women in the United States, the history of the United States west; and United States popular culture.

HST 730  Topics in Ancient European and Mediterranean History  
4 hours; 4 credits  
This course examines themes drawn from the ancient period in Europe, the Mediterranean basin, and/or the Middle East. Topics may include Greek, Roman, Hellenistic, and Jewish politics, culture, and religion. The course will require students to analyze issues in social, religious, and intellectual history through the use of primary and secondary sources.

HST 732  Topics in Medieval European and Mediterranean History  
4 hours; 4 credits  
This course examines themes drawn from the medieval period in Europe, the Mediterranean basin, and/or the Middle East. Topics may include Late Antiquity, Byzantine, western medieval or early Islamic history, medieval religious and urban history, and medieval historiography. The course will require students to analyze issues in social, religious, and intellectual history through the use of primary and secondary sources.

HST 734  Topics in Early Modern European History  
4 hours; 4 credits  
This course will examine themes selected by the faculty member drawn from the early modern period (15th-18th centuries) ranging from the Renaissance to the Enlightenment. The course will require students to analyze issues in social, political, religious, and intellectual history through the use of primary and secondary sources.

HST 736  Topics in Modern European History  
4 hours; 4 credits  
This course will examine themes selected by the faculty member drawn from the modern and contemporary period (18th-20th centuries), which includes topics from the French Revolution to the European Union. The course will require students to analyze issues in social, political, religious, and intellectual history through the use of primary and secondary sources.

Thesis Courses

HST 798  Preparation of Thesis Proposal  
4 hours; 4 credits  
Students who have completed HST 701 and at least two other 700-level courses may enroll in the Preparation of Thesis Proposal Seminar. In the seminar, students will develop their topic, begin research, collect bibliography, and receive instruction in research methodology and historical writing. Students will write a historiographical essay, reviewing the broader historical literature of their subject and relating their own approach to the field. Before completion of the seminar, students, in consultation with faculty and the program coordinator, will be assigned a thesis director and a second reader.

HST 799  Thesis Tutorial Seminar  
4 hours; 4 credits  
After having completed HST 798 and while working on their thesis students will enroll in the Thesis Tutorial Seminar under the supervision of their thesis director. The thesis director will monitor students' progress on their thesis and meet regularly with the students. Students will present portions and drafts of their work in progress to the thesis director and, under the advice of the director, consult with the readers before submitting a formal draft to the thesis committee (the director and second and third readers).

Master of Arts in Liberal Studies (MA)

Program Coordinator: Professor David Traboulay  
History/Political Science, Economics, and Philosophy Building (2N), Room 214  
Email: mals@mail.csi.cuny.edu  
Telephone: 718.982.2877  
The program is designed to provide students who have attained the bachelor’s degree the opportunity to study modern Western society, culture, and thought through an intensive interdisciplinary examination of their origins and through comparison with other societies and cultures. The curriculum provides students with an integrated, sequential exploration of central works and topics in the liberal arts. The major focus is on the social sciences and humanities with attention paid to the development and impact of scientific thought and technological developments. There are seven required courses, two electives, and a master’s essay.
All of the courses in the program focus on the study and analysis of key theoretical and artistic works created during the periods under study. Those works are studied in their own right as major intellectual statements, in their historic context as representative of major intellectual movements, and as potential sources of insight to an understanding of contemporary problems and issues.

The program is structured to facilitate the completion of all coursework in two years. Students are required to take two courses in the Liberal Studies sequence during each of four semesters. In addition they are encouraged to enroll in one elective course during a summer term and one during their fourth semester in the program.

The program holds full membership in and is accredited by the Association of Graduate Liberal Studies Programs.

Liberal Studies Admission Requirements
A bachelor of arts or bachelor of science degree with a cumulative grade point average of at least 3.0 is required for admission. Students with other bachelor’s degrees and/or with cumulative averages of less than 3.0 may be considered following an interview with the program coordinator of the Master of Arts in Liberal Studies.

Applicants are accepted for fall semester admission.

Liberal Studies Degree Requirements
To receive the Master of Arts degree in Liberal Studies students must complete the following requirements:
1. All courses must be completed with a cumulative grade point average of at least 3.0 (B). The courses are LBS 710, 720, 730, 740, 750, 760, 770, 780, and electives, totaling 30 credits.
2. Students must complete a master’s essay that will be an extended reflection on a problem of contemporary social and/or cultural interest drawing on the intellectual tradition of the liberal arts and on the student’s own values and analysis. The completed essay must be judged acceptable by the student’s master’s essay adviser and by the coordinator of the Master of Arts in Liberal Studies Program.

Liberal Studies Courses
LBS 710 Roots of Modern Culture
3 hours; 3 credits
Consideration of the artistic and literary traditions inherited from the Renaissance and the significant classical revivals of the 17th and 18th centuries in order to identify and assess those divergent aesthetic movements in the 19th and early 20th centuries that gave rise to modernism. An effort will be made to place works discussed in their fullest artistic, literary, philosophic, scientific, and historical context.

LBS 720 Roots of Modern Society
3 hours; 3 credits
An exploration of the transition of the Western world from an agrarian, rural society to an urban, industrial-technological society, and the accompanying changes in economic and political structure and social values through a study of selected works written during this period concerned with social, scientific, philosophical, and political analysis and theory.

LBS 730 Modern Culture
3 hours; 3 credits
An analysis of selected works of 20th-century Western literature and art designed to provide an introduction to major movements in the cultural life of this century and an introduction to the analysis of individual creative works seen in the context of modern social and intellectual movements and modern scientific and philosophic thought. Prerequisite: LBS 710

LBS 740 Modern Society
3 hours; 3 credits
An analysis of social movements such as liberalism, communism, socialism, nationalism, and fascism; an introduction to modern social structure and change; and the role of social theory studied through the analysis of individual works of social theory and commentary placed in their historical and intellectual setting. The relevance of the theories and commentaries read to contemporary social problems and movements will be discussed. Attention will be paid to the impact of science and technology on modern social thought and living conditions. Prerequisite: LBS 720

LBS 750 Interaction of Western and Non-Western Societies
3 hours; 3 credits
An introduction to the structure and values of a selected non-Western civilization and a study of the cross-cultural impact of Western expansion since 1500. A variety of sources will be used such as fiction, anthropological studies, historical journals, traveler’s accounts, and works of art. Prerequisite: LBS 730 or 740

LBS 760 Ancient Roots of Modern Thought
3 hours; 3 credits
A study of key works of ancient and medieval thought chosen from figures or works such as the Bible, Thucydides, Plato, Aristotle, Sophocles, Virgil, Cicero, Augustine, Aquinas, and Dante. The emphasis will be on an understanding of the works and their relationship to the intellectual tradition of the Western world as studied in the previous courses. Prerequisite: LBS 730 or 740
LBS 770  Seminar: Values and Contemporary Issues
3 hours; 3 credits
A seminar in which the instructor and the students assist in developing ideas about topics of contemporary social and cultural concern that have been chosen by the students as subjects of their master’s essay. Each student must have chosen a topic before the beginning of the seminar. In the seminar the instructor and students draw on the works read and discussed in the previous courses in the program to illuminate the topics of the essays. Drafts of portions of student essays are discussed.
Prerequisites: LBS 730, 740, 750, 760, and permission of the MALS program coordinator
Corequisite: LBS 780

LBS 780  Master’s Essay Tutorial
3 hours; 3 credits
A tutorial in which the student and master’s essay adviser meet weekly to discuss drafts of and problems with the master’s essay. Credit is awarded on successful completion of the master’s essay and its acceptance by the essay adviser and program coordinator.
Prerequisite: Permission of the MALS program coordinator
Corequisite: LBS 770

Master of Science in Neuroscience, Mental Retardation, and Developmental Disabilities (MS)
Program Coordinators
Associate Professor Probal Banerjee, PhD
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Telephone:1.718.982.4167
Psychology Building (4S), Room 230
Professor Andrzej Wieraszko, PhD
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Telephone: 1.718.982.3941
Biological Sciences/Chemical Sciences Building (6S), Room 324A
The Center for Developmental Neuroscience and Developmental Disabilities at the College and the New York State Institute for Basic Research on Mental Retardation and Developmental Disabilities offer a broad interdisciplinary program leading to the Master of Science degree. Courses integrate relevant subject matter in the areas of biology, chemistry, mathematics, philosophy, psychology, and sociology, and students have a unique opportunity to explore both neuroscientific and applied aspects of the normally and abnormally developing brain, as well as recent advances in the cognitive sciences.

Neuroscience, Mental Retardation, and Developmental Disabilities Admission Requirements
An adequate background in biology and psychology undergraduate courses will be required of all entering students. If deficiencies are identified during the application process students will be advised to take the appropriate undergraduate course, which will be offered at CSI. Admission to the CSI program will be determined by the proposed program's Graduate Studies Committee comprised of four faculty members and the Director of the Center for Developmental Neuroscience and Developmental Disabilities. Students with bachelor’s degrees in all fields may apply for admission, provided they have taken two semesters of biology (with laboratory), two semesters of psychology, one semester of chemistry, one semester of calculus, and one semester of statistics. Students applying for admission are expected to have a grade point average of at least 3.0 (B) in their undergraduate biology, mathematics, psychology, or other science courses. They are expected to submit three letters of recommendation attesting to their ability to complete the program successfully. Students with English as a second language must score 550 (paper), 213 (computer), or 79-80 (Internet) or better on the Test of English as a Foreign Language (TOEFL). Based on an interview, the Program's Graduate Studies Committee will make the final decision on the admission of the candidate. Similar to other master's programs at CSI, the students have to maintain a GPA of at least 3.0 (B) to remain in the program. Prior to the start of the second year of study, the student will submit selected writings from their coursework, creating a portfolio to be reviewed and approved by the Neuroscience Graduate Studies Committee. Faculty approval of the writing portfolio is a requirement prior to the registration of the Master's Thesis.

Neuroscience, Mental Retardation, and Developmental Disabilities Degree Requirements
The program consists of 37 credits: 31 credits in coursework and six credits of thesis research, an oral preliminary examination, and a thesis defense. A faculty thesis committee will approve the content and style of the Master's thesis. The thesis committee will consist of four members, with at least 2 full-time CSI faculty (including at least one member from the Biology, the Chemistry or the Psychology Department).
Required Courses
BIO 605 Statistical Analysis
NSM 701 Neurobiology I
NSM 702 Neurobiology II
NSM 703 Mental Retardation and Developmental Disabilities I
NSM 704 Mental Retardation and Developmental Disabilities II
NSM 705 Journal Seminar I, II, III, IV
NSM 706 Research Methods
NSM 707 Developmental Neuroscience
NSM 708 Behavioral Genetics
NSM 709 Foundations of Cognitive Science
NSM 710 Learning
NSM 798 Thesis Research I
NSM 799 Thesis Research II

Alternative Courses
Other courses may be relevant to an individual student’s educational goals, and students may be allowed to take alternatives from the graduate courses at the College of Staten Island and up to nine credits at the CUNY Graduate Center, approved in advance by the program coordinator.

Neuroscience, Mental Retardation, and Developmental Disabilities Courses
NSM 701 Neurobiology I
3 hours; 3 credits
An introduction to neuroscience through lectures, readings, and demonstrations with emphasis on the components of the field and the important techniques used for studying the brain and brain-related phenomena. A research paper is required.
Prerequisites: Admission into the program or permission of the instructor and one year of undergraduate biology and psychology

NSM 702 Neurobiology II
3 hours; 3 credits
Selected topics concerning functional brain anatomy and mechanisms regulating the activity of nerve cells and their development in organisms ranging from drosophila through vertebrates. Biochemical characterization of components and of processes occurring in the nervous system. Cellular events involved in learning and memory. The molecular basis of diseases of the central nervous system. A research paper is required.
Prerequisite: NSM 701

NSM 703 Mental Retardation and Developmental Disabilities I
3 hours; 3 credits
Major issues in mental retardation and developmental disabilities, including the history of the field, definitions of relevant conditions (in principle and in practice), causes of mental retardation and developmental disabilities, epidemiology, description of the currently affected population, prevention, treatment, significant secondary disabilities (including problem behaviors and psychiatric conditions), determination of support needs, and state-of-the-art research strategies. A term paper is required.
Prerequisite: Admission into the program or permission of the instructor

NSM 704 Mental Retardation and Developmental Disabilities II
3 hours; 3 credits
Current issues in mental retardation and developmental disabilities, which may include consumer-centered planning, practice standards, early intervention, diagnostic labeling, balancing access to services and stigmatization, life span development, family planning, diagnostic and screening methods and their impact on public health, the determination of treatment efficacy, worldwide and U.S. perspectives on treatment and prevention, the impact of postmodern thinking.
Prerequisite: Admission to the program or permission of the instructor

NSM 705 Journal Seminar I-IV
1 hour; 0 credits
Reading and analysis of classical and current scientific papers in biology and psychology related to mental retardation and developmental disabilities. Student presentations (at least one per student each semester); slide preparation, data presentation, and computer methods, including spreadsheets and software.
Prerequisite: Admission into the program

NSM 706 Research Methods
3 hours; 3 credits
Methods of studying the nervous system at different levels of organization, including investigating the properties of neurons using electrophysiological, tissue culture, and staining procedures. Methods of studying behavior. Ethical issues of experimenting with animal and human populations. Model systems used to evaluate functional relations between different types of cells, structures, areas of the brain, and populations will be emphasized. A research paper is required.
Prerequisite: Admission into the program or permission of the instructor

NSM 707 Developmental Neuroscience
3 hours; 3 credits
The development of biological systems with particular attention to the development of the nervous system in organisms ranging from drosophila through vertebrates. Pattern formation and mechanistic solutions for particular neuronal functions from an evolutionary perspective. Phenotypic variation and evolutionary adaptability expressed on cellular and molecular levels. A research paper is required.
Prerequisite: NSM 701

NSM 708 Behavioral Genetics
3 hours; 3 credits
The heritability of complex psychological traits with attention to DNA structure, gene expression, Mendelian and non-Mendelian modes of inheritance, and the
contribution of genetic endowment to traits such as mental retardation and other cognitive and developmental disabilities. Attention to issues such as genetic determinism, genetic risk, and nature versus nurture.

Prerequisite: NSM 702

NSM 709 Foundations of Cognitive Science
3 hours; 3 credits
Experimental techniques, methodological paradigms, and prevailing theories concerning brain function and behavior. The study of perception, language, and memory and their association with underlying brain function, with attention to neuroimaging techniques such as MRI, PET, SPECT, EEG, and MEG, which provide new approaches for investigating brain-behavior relationships. The neuralanatomical and neuralphysiological properties that underlie cognitive functions such as perception, imagery, language, memory, and attention. Research from classical cognitive psychology, neuropsychology (i.e., lesion studies), and functional brain imaging.
Prerequisites: NSM 701 and NSM 702

NSM 710 Learning
3 hours; 3 credits
Theories of learning with representative studies and applied behavior analysis, with attention to learning impairments in individuals with mental retardation and developmental disabilities. Introduction to advanced behavioral preparations designed to assess learning, with special emphasis on learning impairments related to mental retardation and developmental disabilities. Basic processes and animal models of impairment related to developmental processes and analysis of current research paradigms in several areas.
Prerequisite: Admission to the program or permission of the instructor

NSM 798 Master’s Thesis NSM 799 Master’s Thesis II
5 hours per credit; up to 3 credits a semester, for a total of up to 6 credits. May be repeated for credit. Research and thesis-writing under the supervision of a mentor. Topics may be chosen from all areas included in the program with the approval of the mentor and program faculty. Hours and credits per semester may vary, with 15 hours and 3 credits the maximum per semester.
Prerequisites: NSM 706, NSM 702, and NSM 705
Pre- or corequisite: BIO 605 and NSM 703

Graduate Programs in Nursing
Graduate Program Coordinator: Professor Margaret Lunney
Acting Nurse Practitioner Program Coordinator: Professor Janice Pattison
Marcus Hall (5S), Room 109
Email: lunney@mail.csi.cuny.edu
Telephone: 718.982.3823
The Department of Nursing offers programs leading to the Master of Science in Adult Health Nursing, Master of Science in Gerontological Nursing, Advanced Certificate in Adult Health Nursing, Advanced Certificate in Gerontological Nursing, Advanced Certificate in Cultural Competence, and Advanced Certificate in Nursing Education.

Master of Science Degree Programs

Master of Science in Adult Health Nursing (MS)

Master of Science in Gerontological Nursing (MS)
The Department of Nursing offers programs leading to the Master of Science (MS) in Adult Health Nursing and the Master of Science (MS) in Gerontological Nursing. Students in the two degree programs take the same courses but focus their course assignments and clinical hours on the population of choice—adults across the life span (adult health nursing) or older adults (gerontological nursing). The MS degree programs have two options: Clinical Nurse Specialist (CNS) and Clinical Nurse Specialist/Nurse Practitioner (CNS/NP).

These programs are designed to meet health care workforce needs and to provide opportunities for graduate-level education. The program requirements are consistent with the Clinical Nurse Specialist (CNS) competencies published by the National Association of Clinical Nurse Specialists, and the Nurse Practitioner (NP) competencies published by the Division of Nursing, U.S. Department of Health and Human Services. Nurses who successfully complete the programs are prepared to meet the needs of culturally diverse individuals, families, and communities and will have a competitive edge in the changing environment of health care.

Restructuring of health organizations has created new roles for nurses, especially those with master’s-level preparation. Graduates of the Master’s programs are eligible for certification as specialists in adult health or gerontological nursing through the American Nurses Credentialing Center (ANCC) and other certifications offered by ANCC and nursing specialty organizations. Graduates of the CNS/NP option are also eligible for certification as Adult Nurse Practitioner or Gerontological Nurse Practitioner.

Nursing Admission Requirements
Applicants should have a Bachelor’s degree with a Major in Nursing from an accredited school and at least one year full-time experience in nursing or a bachelor’s degree in another field with three years' full-time experience in nursing, and completion of required nursing, science, and mathematics courses. A TOEFL score of 550 or higher is required for all students for whom English is a second language.
Applications will be evaluated on an individual basis when all official transcripts and supporting documents have been received. Applicants will be notified by mail regarding their acceptance. Enrollment with matriculated status is contingent upon satisfaction of admission criteria.

**Matriculated Status**
Admission requirements for fully matriculated graduate status:

1. Official transcript(s) documenting a cumulative grade point average of 3.0 on a 4.0 point scale in nursing courses
2. Evidence of successful completion of undergraduate courses (or comparable learning experiences approved by the Admissions Committee) in nursing research, statistics, and health assessment/physical examination; community health nursing, leadership and management in nursing, general chemistry, and pharmacotherapeutics
3. Two recommendation letters supporting the applicant’s potential for completing graduate studies; one must be from a current nursing supervisor or recent professor
4. Personal statement of 300 words or more describing career goals;
5. Current RN license to practice in New York State
6. A minimum of one year of full-time experience or its equivalent as a registered nurse.

**Non-Matriculated Status**
Applicants with exceptional qualifications, but who do not meet all the admission requirements, may be granted admission with non-matriculated graduate status at the discretion of the Graduate Nursing Admissions Committee.

**Requirements for Retention**
Students must have a minimum grade point average (GPA) of 3.0 (B) to be retained in a graduate program. Students whose GPAs fall below 3.0 are on probationary status. Students may attend full- or part-time. In specialization courses (i.e., NRS 720, NRS 721, NRS 722, NRS 723, NRS 725, NRS 726, NRS 727, and NRS 728), a student must achieve a B or higher in order to progress in the program. If a student achieves a B-, or C+, or C, he or she may request to repeat the course, if space is available and remedial activities have been completed. If the grade is an F, the student will be dismissed from the program. A minimum of three years of full time experience or its equivalent as a registered nurse are required before enrolling in the clinical courses.

**Advisement**
Each student admitted to the program will be provided academic guidance and career support. The program coordinator will monitor and evaluate each student’s progress and recommend appropriate counseling and/or academic support services. The faculty members assigned to coordinate clinical role practica will collaborate with agency preceptors to guide students’ progress in clinical settings.

**Nursing Degree Requirements**

**Clinical Nurse Specialist (CNS) Option: 42 credits**
The program requires 42 credits with 500 supervised hours toward development of clinical competencies for specialty practice, and a thesis option. Students may attend on a full-time or part-time basis. Completion of the program requires a minimum of one and a half years of full-time study; part-time study may take three years or more. Requirements include a graduate core of 15 credits, an advanced practice core of nine credits, specialty (CNS role) courses of 12 credits, and six credits of elective courses. Three of the elective credits may satisfy the thesis option.

**Clinical Nurse Specialist/Nurse Practitioner (CNS/NP) Option: 48 credits**
The program requires 48 credits with a minimum of 360 supervised hours in addition to the 500 hours required in the CNS program. In these additional clinical hours, students focus on the development of nurse practitioner competencies that do not overlap with CNS role competencies. Completion of the CNS/NP option requires a minimum of two years of full-time study; part-time study may take four years or more.

Requirements include the same graduate core of 15 credits, advanced practice core of nine credits, and specialty (CNS role) courses of 12 credits as for the CNS program. An additional 12 credits of specialty (NP role) courses are required to fulfill the minimum number of credits for the Nurse Practitioner option.

**Graduate Core (15 credits)**
- NRS 700 Transcultural Concepts and Issues in Health Care
- NRS 701 Theoretical Foundations for Advanced Practice Nursing
- NRS 705 Health Organizations, Policy, Financing, and Ethics
- NRS 710 Collaborative Research for Advanced Practice Nursing
- NRS 730 Evidence-based Nursing for Advanced Practice

**Advanced Practice Core (9 credits)**
- BIO 670 Pathophysiological Concepts in Health and Illness
- NRS 682 Advanced Pharmacology
- NRS 702 Advanced Health Assessment
Specialty (CNS Role) Courses (12 credits)

NRS 720 Advanced Practice Nursing with Adults in Community Settings
NRS 721 Role Practicum: Adults in Community Settings
NRS 722 Advanced Practice Nursing with Adults in Acute Care Settings
NRS 723 Role Practicum: Adults in Acute Care Settings

Electives:
NRS 703 Teaching and Learning for Cultural Competence Development
NRS 704 Cultural Competence in Nursing: Project Development
NRS 711 Health Care Program Development
NRS 712 Nurse as Educator
NRS 724 Case Management
NRS 725 Primary Health Care with Young and Middle-Aged Adults
NRS 726 Primary Health Care with Older Adults

Specialty (NP Role) Courses (12 credits)

NRS 725 Primary Health Care with Young and Middle-aged Adults
NRS 726 Primary Health Care with Older Adults
NRS 727 Role Practicum: Primary Health Care I*
NRS 728 Role Practicum: Primary Health Care II*

* A minimum of 360 hours of supervised practice are completed in these 2 courses, in addition to the 500 hours required in the CNS program, for a minimum total of 860 hours.

Advanced Certificate Programs

Advanced Certificate in Adult Health Nursing
The Department of Nursing offers an Advanced Certificate in Adult Health Nursing and an Advanced Certificate in Gerontological Nursing. These certificates prepare nurses who have Master’s degrees in Nursing to meet the requirements for certification as Adult Nurse Practitioners of New York State and the American Nurses Credentialing Center. Students in the two certificate programs take the same courses but focus their course assignments and clinical hours on the population of choice—adults across the life span (adult health nursing) or older adults (gerontological nursing).

Admission Requirements: Advanced Certificate in Adult Health Nursing
A Master’s degree in Nursing and master’s-level courses in pathophysiology, health assessment, and pharmacology are required. Candidates who do not have the required master’s-level courses may take them before beginning the required Nurse Practitioner courses.

Requirements: Advanced Certificate in Adult Health Nursing
This certificate requires 12-21 credits with a minimum of 500 supervised hours toward development of Nurse Practitioner competencies and satisfactory demonstration of Nurse Practitioner competencies. The number of credits required is derived from the Nurse Practitioner courses listed below (12 credits) and those master’s-level courses specified in the admission requirements that were not taken prior to admission. These certificate prepare nurses who have Master’s degrees in Nursing to meet the requirements for certification as Adult Nurse Practitioners of New York State and the American Nurses Credentialing Center.

Required Nurse Practitioner Courses
NRS 725 Primary Health Care with Young and Middle-aged Adults
NRS 726 Primary Health Care with Older Adults
NRS 727 Role Practicum: Primary Health Care I
NRS 728 Role Practicum: Primary Health Care II

Advanced Certificate in Gerontological Nursing
The Department of Nursing offers an Advanced Certificate in Adult Health Nursing and an Advanced Certificate in Gerontological Nursing. These certificates prepare nurses who have Master’s degrees in Nursing to meet the requirements for certification as Adult or Gerontological Nurse Practitioners of New York State and the American Nurses Credentialing Center.

Students in the two certificate programs take the same courses but focus their course assignments and clinical hours on the population of choice—adults across the life span (adult health nursing) or older adults (gerontological nursing).

Admission Requirements: Advanced Certificate in Gerontological Nursing
A Master’s degree in Nursing and master’s-level courses in pathophysiology, health assessment, and pharmacology are required. Candidates who do not have the required master’s-level courses may take them before beginning the required Nurse Practitioner courses.

Requirements: Advanced Certificate in Adult Health Nursing and Advanced Certificate in Gerontological Nursing
This certificate requires 12-21 credits with a minimum of 500 supervised hours toward development of Nurse Practitioner competencies and satisfactory demonstration of Nurse Practitioner competencies. The number of credits required is derived from the Nurse Practitioner courses listed below (12 credits) and those master’s-level courses specified in the
admission requirements that were not taken prior to admission. This certificates prepare nurses who have Master’s degrees in Nursing to meet the requirements for certification as Gerontological Nurse Practitioners of New York State and the American Nurses Credentialing Center.

**Required Nurse Practitioner Courses**

- **NRS 725** Primary Health Care with Young and Middle-aged Adults
- **NRS 726** Primary Health Care with Older Adults
- **NRS 727** Role Practicum: Primary Health Care I
- **NRS 728** Role Practicum: Primary Health Care II

**Advanced Certificate in Cultural Competence**

**Admission Requirements: Advanced Certificate in Cultural Competence (Effective Fall 2009)**

All applicants must have a bachelor's degree in nursing with a GPA of 3.0 or above in nursing courses, or a higher degree in nursing, or other related fields. Applicants must also submit a personal goal statement of 300-500 words that describes their cultural competence goals. Students who enroll in the Advanced Certificate in Cultural Competence who later want to matriculate in one of the Master's degree in nursing programs must meet admissions criteria of the degree program.

**Requirements: Advanced Certificate in Cultural Competence**

The certificate requires 9 credits and would enable graduates to become resources for the health care system in which they work.

**Required Cultural Competence Certificate Courses (9 credits)**

- **NRS 700** Transcultural Concepts and Issues in Health
- **NRS 703** Teaching and Learning for Cultural Competence Development
- **NRS 704** Cultural Competence in Nursing Education

**Advanced Certificate in Nursing Education**

**Admission Requirements: Advanced Certificate in Nursing Education**

All applicants must have a Master's degree in Nursing or be accepted as master's degree students in the graduate program of the College of Staten Island, using the standard admission requirements for the Master's degree in Nursing programs.

**Requirements: Advanced Certificate in Nursing Education**

The certificate requires 12 credits and would enable graduates to become resources for the health care system in which they work.

**Required Nursing Education Certificate Courses (12 credits)**

- **NRS 750** Curriculum in Nursing
- **NRS 754** Evaluation in Nursing Education
- **NRS 758** Teaching and Learning in Nursing Education
- **NRS 760** Practicum in Nursing Education

**Nursing Courses**

**BIO 670** Pathophysiological Concepts in Health and Illness

3 hours; 3 credits

This course is designed to provide a critical understanding of physiologic concepts, issues, research, and theories. Representative topics are selected to provide a comprehensive basis for understanding physiologic functions in health and illness at the molecular, cellular, and systemic levels of organization. Ethical, moral, and cultural issues are addressed.

Prerequisites: BIO 150, BIO 160 or equivalent

**NRS 682** Advanced Pharmacology Effective (Fall 2009)

(Also BIO 682)

3 hours; 3 credits

This course provides the knowledge and skills to assess, diagnose, prescribe, and guide the management of medication therapy of adults. Emphasis will be on pharmacodynamics, pharmacokinetics, and pharmacotherapeutics to supplement previous learning. Critical thinking and research data will be the basis for determining appropriate medications for adults of varied ages, medical problems, and health practices.

Prerequisites: Basic college-level pharmacology course

**NRS 700** Transcultural Concepts and Issues in Health Care

3 hours; 3 credits

This course focuses on the general philosophy, ethics, concepts, skills, theory, research, and practices underlying transcultural care. Current issues in pluralism, diversity, and health care are explored in relation to culturally competent care by advanced practitioners in health care settings. Leininger’s Theory of Culture Care and other selected theories and research studies are critically appraised for utilization in various practice and management settings. Future directions of transcultural care are discussed.

Prerequisite: Matriculated or non-matriculated status in the graduate program

**NRS 701** Theoretical Foundations for Advanced Practice Nursing

3 hours; 3 credits

This course explores the theoretical basis of advanced practice nursing through analysis of nursing’s extant models and theories that contribute to nursing’s unique body of knowledge. Emphasis is placed on nursing’s metaparadigm concepts: person-environment-health-nursing. The dialectical process between theory, research, and practice is examined. The value of theory-
based practice, including the sharing of knowledge with other disciplines, is stressed as foundational for Advanced Practice Nursing. Prerequisite: Matriculated or non-matriculated status in the graduate nursing program

**NRS 702 Advanced Health Assessment**
4 hours; 3 credits
This course prepares students to develop advanced competencies in health assessment (health histories and physical examinations) to analyze data, and to make clinical decisions. Prerequisites: Matriculated or non-matriculated status in the graduate nursing program

**NRS 703 Teaching and Learning for Cultural Competence Development**
3 hours; 3 credits
This course builds on the foundational philosophy, ethics, concepts, skills, theory, research, and practices underlying the development of cultural competence in health care. The multidimensional process of teaching and learning cultural competence is presented as an organizing framework for advancing cultural competence development. Strategies and techniques for helping culturally diverse nurses, other health professionals, and health organizations to develop cultural competence are critically appraised for use in various practice, management, and educational settings. Eliminating health disparities through the creative use of culturally competent client education is emphasized. Future directions for advancing cultural competence development are discussed. Prerequisite: NRS 700 or equivalent graduate-level course

**NRS 704 Cultural Competence in Nursing: Project Development**
3 hours; 3 credits
This course will assist learners to develop a “cultural competence in nursing” project. The project can be directed toward clients, communities, agencies, nursing organizations, nursing personnel, or nursing education, and must relate to the overall goal of eliminating health disparities. The course also emphasizes measurement and evaluation of project outcomes. Prerequisite: NRS 703

**NRS 705 Health Organizations, Policy, Financing, and Ethics**
3 hours; 3 credits
This course synthesizes knowledge about health care systems as established social institutions. Emphasis will be on an examination of the health care delivery system, current issues in the policy arena, and trends associated with health care, including finance and resource allocation. Current legislative initiatives related to health care and the implications of these will be fully explored. Ethical issues will be a recurrent theme. Prerequisite: Matriculated or non-matriculated status in the graduate program

**NRS 706 Applied Statistical Thinking and Methods in Health Research (Effective Fall 2009)**
(Also MTH 706)
3 hours; 3 credits
This graduate-level course introduces the learner to statistical thinking and methods as applied in health research. An undergraduate statistics course is a prerequisite for the course. Emphasis is on the blending of basic descriptive and inferential statistical techniques, conceptual understanding, and depreciation for statistical methods. A hands-on interactive, multidimensional approach to teaching-learning includes use of computer software for statistical analyses. Current issues, trends, and technological advances influencing statistical analyses and data interpretation in health research will be explored from the multi-cultural perspective. Selected theories, quantitative research studies, case exemplars, and data sets will be critically appraised for utilization in various health settings and with diverse populations. Ethical issues will be a recurrent theme. Future applications of statistical techniques in health research will be discussed. Prerequisite: Matriculated or non-matriculated status in the graduate program

**NRS 711 Health Care Program Development**
3 hours; 3 credits
This course focuses on development of programs for populations with special health care needs. Students develop the ability to conduct a needs assessment, document health care needs, develop and describe a health care program, plan evaluation strategies for process and outcomes, and write grant proposals to obtain funding. Existing health care programs for medically underserved populations are used as examples.

**NRS 712 Nurse as Educator**
3 hours; 3 credits
This course addresses principles and methods related to nursing education, including learning theories and teaching techniques used for the education of nursing students, professional staff, other health care personnel, patients, and families. Students apply methods and techniques for classroom and clinical teaching with emphasis on development of a class, goals and objectives, and methods of evaluation.

**NRS 720 Advanced Practice Nursing with Adults in Community Settings (Effective Fall 2009)**
3 hours; 3 credits
This course addresses integration of theory, research, and practice related to health promotion and disease
Preventive of healthy, chronically ill, and disabled adults, their families, and communities.
Prerequisites: Matriculated status in the program; BIO 670, NRS 682/BIO 682, NRS 700, NRS 701, NRS 702.
Corequisites: NRS 721

NRS 721 Role Practicum: Adults in Community Settings
17 hours; 3 credits
This preceptored practicum course provides for application of theories and research to health promotion and disease prevention of healthy, chronically ill, and disabled adults from culturally diverse backgrounds, their families, and communities.
Corequisite: NRS 720

NRS 722 Advanced Practice Nursing with Adults in Acute Care Settings (Effective Fall 2009)
3 hours; 3 credits
This course focuses on the caring and healing process in adults with acute illness, and its impact on their families and communities. Theories of crisis, stress, and psychobiologic unity are integrated with advanced technology. Research findings related to acute care of adults are identified and synthesized. Students apply theories and research to their chosen subspecialization in adult health nursing.
Prerequisites: Matriculated status in the program; BIO 670, NRS 682/BIO 682, NRS 700, NRS 701, NRS 702.
Corequisite: NRS 723

NRS 723 Role Practicum: Adults in Acute Care Settings (Effective Fall 2009)
17 hours; 3 credits
A clinical course for the application of knowledge and skills related to nursing care of acutely ill adults from culturally diverse backgrounds. The selection of clinical placements varies according to the specializations of students in each group.
Corequisite: NRS 722

NRS 724 Case Management for Advanced Practice Nursing
3 hours; 3 credits
Focus on responses of advanced practice nurses to a changing health care system, especially provision of high-quality health care at minimal cost to populations with special needs. Proactive roles of nurses are emphasized for selection, implementation, and evaluation of interventions for targeted populations. As a case manager, the clinical nurse specialist uses clinical and technical expertise to develop standardized care processes, establish outcomes, identify variances, assess transitional levels of care, and act as an agent for planned change.
Prerequisite: Matriculated or nonmatriculated status in the MS degree program or permission of the instructor

NRS 725 Primary Health Care with Young and Middle-aged Adults (Effective Fall 2009)
3 hours; 3 credits
Health promotion, health protection, and health restoration with young and middle-aged adults experiencing acute and chronic illnesses. Differential diagnosis and treatment of common health problems and human responses. The partnership model of working with consumers is emphasized and cultural aspects of living with acute and chronic illnesses are explored. Research findings and relevant theories for advanced practice nursing with young and middle-aged men and women are addressed.
Prerequisites: NRS/BIO 682, BIO 670, NRS 700, NRS 701, NRS 702.

NRS 726 Primary Health Care with Older Adults
3 hours; 3 credits
Health promotion, health protection, and health restoration of older adults experiencing acute and chronic illnesses. Differential diagnosis and treatment of common health problems and human responses. The partnership model of working with consumers is emphasized and cultural aspects of living with acute and chronic illnesses are explored. Research findings and relevant theories for advanced practice nursing with older men and women are addressed.
Pre- or corequisites: BIO 670, BIO/NRS 682, NRS 700, NRS 701, NRS 702

NRS 727 Role Practicum: Primary Health Care I (Effective Fall 2009)
17 hours; 3 credits
A clinical course addressing health promotion, health protection, and health restoration of adults experiencing acute and chronic health problems. With preceptor supervision, students perform differential diagnosis and treatment of common health problems, including prescription of drugs and other medical interventions. Students use nursing theories and research in the Nurse Practitioner (NP) roles, diagnose human responses, plan to meet positive health outcomes, and conduct nursing interventions.
Prerequisites: NRS 720, NRS 721, NRS 722, NRS 723
Pre or corequisite: NRS 725 or NRS 726

NRS 728 Role Practicum: Primary Health Care II (Effective Fall 2009)
17 hours; 3 credits
A clinical course addressing health promotion, health protection, and health restoration of adults experiencing acute and chronic health problems. With preceptor supervision, students perform differential diagnosis and treatment of common health problems, including prescription of drugs and other medical interventions. Students use nursing theories and research in the Nurse Practitioner (NP) role, diagnose human responses, plan to meet positive health outcomes, and conduct nursing interventions.
Prerequisites: NRS 720, NRS 721, NRS 722, NRS 723
Pre- or corequisites: NRS 725 or NRS 726

NRS 730 Evidence-based Nursing for Advanced Practice (Effective Fall 2009)
3 hours; 3 credits
This course is designed to assist students in further developing the competencies in evidence-based nursing learned in baccalaureate courses. Students explore models of evidence-based practice, barriers and facilitators to evidence-based practice, statistical methods, and strategies for implementation of research findings in practice. Emphasis is placed on identifying the best evidence that addresses particular practice problems related to adult and gerontological health. Students determine the scientific merit of research and develop an evidence-based practice design to implement in selected practice settings.
Prerequisite: NRS 700, NRS 701, NRS 706

NRS 750 Curriculum in Nursing
3 hours; 3 credits
The course focus is curriculum development, including philosophy, outcome criteria, curriculum design, and evaluation of nursing curriculum. The goals of the course are formulated to meet the nursing education and professional standards and are reflective of current and future trends in nursing education and health care. Development of the curriculum design is based on theoretical foundations of nursing and nursing education. Evaluation of the educational outcomes is based on national accreditation standards and criteria.
Prerequisite: Matriculation in the Advanced Certificate in Nursing Education

NRS 754 Evaluation in Nursing Education
3 hours; 3 credits
Standardized criteria are used to guide development of a master plan of evaluation for a nursing education program. To measure student achievement of learning, the course also emphasizes test construction, item writing, clinical evaluation tools, and psychomotor skills evaluation. NRS 801 or NRS 712 is accepted in substitution.
Prerequisite: Matriculation in the Advanced Certificate in Nursing Education

NRS 758 Teaching and Learning in Nursing Education
3 hours; 3 credits
Teaching and learning in nursing education are based on applications of selected learning theories and guide various methods of instruction for lecture presentation, clinical laboratory, and distance learning. The course addresses the learning needs and diversity of students today. Legal, ethical, fiscal, and regulatory influences on teaching and education are included.
Prerequisite: Matriculation in the Advanced Certificate in Nursing Education

NRS 760 Practicum in Nursing Education
6 clinical lab hours per week, 1 seminar hour; 3 credits
The course provides an opportunity for the application of teaching and learning theory to nursing education. Varied learning settings will be used to meet the individual needs of the student, who is developing his/her role as a nurse educator.
Prerequisite: NRS 754
Pre- or corequisite: NRS 758, NRS 754

NRS 799 Thesis Option (Effective Fall 2009)
3 hours; 3 credits
The purpose of this seminar course is to individually guide students in applying the steps of the research process in actual settings. The process culminates in the presentation of findings as a written thesis. The course is graded Pass/Fail.
Prerequisites: NRS 706, NRS 730, matriculated status, permission of the program coordinator

Physical Therapy Department
Chair: Professor Jeffrey Rothman
Engineering Technologies-East Building (5N), Room 207
Email: rothmanj@mail.csi.cuny.edu
Telephone: 718.982.3153
The DPT program is a collaboration between the College of Staten Island and the Graduate Center of The City University of New York (CUNY). To access comprehensive information on the DPT, including admissions requirements, curriculum, and all pertinent information please go to the following link http://web.gc.cuny.edu/ClinicalDoctoral/pt-overview.asp. The deadline for admissions is November 1 for classes that begin the spring semester. Online application is available through a link to the Graduate Center Admissions Website. Prospective applicants can also contact the program directly at 718.982.3153 or by email to rothmanj@mail.csi.cuny.edu.

The Physical Therapy program is accredited by the Commission on Accreditation in Physical Therapy Education.

Topics Courses and Independent Study
Graduate courses are also offered as topics courses and as independent study. These courses are identified by the ALPHA designation for the discipline and an 800 number:

Graduate Topics in XYZ: XYZ 800-890 (1-4 hours; 1-4 credits).
Independent Study in XYZ:
- XYZ 891 (1 credit)
- XYZ 892 (2 credits)
- XYZ 893 (3 credits)
- XYZ 894 (4 credits)
(See the Semester Bulletin for course offerings.)

Graduate Courses in Selected Disciplines
In addition to courses listed under a degree program, a number of courses have been designed specifically for teachers, particularly those educators who teach at the high school level. Graduate courses in disciplines outside the major field may also be of interest to students in fields other than education.

American Studies Courses
AMS 661  Education and United States Society
3 hours; 3 credits
The development of educational thought and practice in the United States. The school and other educational agencies viewed as cultural institutions affected by and shaping the political, economic, and social character of the nation.

Art Courses
ART 893  Independent Study in Contemporary Painting
4 hours; 3 credits
The course is concerned with the techniques and theories of contemporary painting in its form as the modern heritage of Cezanne and Cubism and is intended for advanced painters.
Prerequisite: BA or BS with an art major, BFA, or permission of the instructor

Biology Courses
BIO 602  Evolution for Secondary School Teachers
4 hours; 4 credits
A course dealing with evolution as it is understood today. It will cover the origin and evolution of the universe and life on Earth. Both the mechanisms of evolution and its historical record will be examined. Discussion of social, philosophical, and biological implications of evolution.
Prerequisite: Bachelor’s degree with a major in a biological or physical science

BIO 610  Genetics for Secondary School Teachers
4 hours; 4 credits
A study of the mechanical and molecular basis of inheritance. This course will discuss patterns of inheritance including linkage and chromosome mapping; cytotgenetics; molecular genetics; and non-chromosomal inheritance, the nature of the gene, and the history of the foremost ideas in genetics.
Prerequisite: Bachelor’s degree with a major in a biological or physical science

BIO 620  Molecular Biology for Secondary School Teachers
4 hours; 4 credits
This course offers a general survey of cell structure and function in molecular terms, with current concepts emphasized throughout. Topics include the role of protein-ligand interactions in cell function, gene organization and control, cell membranes and membrane transport mechanisms, cell organelles, the molecular basis of contractility, chemical recognition and response mechanisms in cells of the immune system, molecular events at chemical synapses, hormones and other chemical messengers.
Prerequisite: Bachelor’s degree with a major in a biological or physical science

BIO 625  Developmental Biology for Secondary School Teachers
4 hours; 4 credits
Differentiation and growth of organisms from the egg to the adult, including gametogenesis, fertilization, cleavage, and morphogenesis. Emphasis is placed on vertebrate development (amphibian and avian); selected invertebrates are also studied.
Prerequisite: Bachelor’s degree with a major in a biological or physical science

BIO 630  Animal Physiology for Secondary School Teachers
4 hours; 4 credits
Study of the life processes of multicellular organisms including principles of homeostasis, composition of body fluids, transport processes, and neuro-endocrine mechanisms.
Prerequisite: Bachelor’s degree with a major in a biological or physical science

BIO 640  History of Natural Science for Secondary School Teachers
4 hours; 4 credits
A course designed for teacher education students, particularly those interested in science, mathematics, and the history of ideas. The course will discuss the important scientific developments since the Renaissance. The contributions of major figures, such as Copernicus, Galileo, Kepler, Harvey van Leeuwenhoek, Priestley, Schleiden, Schwann, Darwin, and Mendel, will be included. The relationship of their ideas to modern scientific thought and the social implications of their contributions will be discussed.
Prerequisite: Bachelor’s degree with a major in a biological or physical science

BIO 640  History of Natural Science for Secondary School Teachers
(Also NRS 682)
3 hours; 3 credits
This course provides the knowledge and skills to assess, diagnose, prescribe, and guide the management of
medication therapy of adults. Emphasis will be on pharmacodynamics, pharmacokinetics, and pharmacotherapeutics to supplement previous learning. Critical thinking and research data will be the basis for determining appropriate medications for adults of varied ages, medical problems, and health practices. Prerequisites: Basic college-level pharmacology course and BIO 670

**Computer Science Courses**

**CSC 602 Computing for Teachers I**
4 hours; 4 credits
Students will be instructed in the history of computers. Basic computer hardware will be discussed. Students will become computer literate by gaining experience in using a computer application program and additional commercial software and shareware. Integration of the computer into the classroom will be addressed by discussion and demonstration of a computer lesson. A major project will be required.

**CSC 702 Computing for Teachers II**
4 hours; 4 credits
Emphasis will be placed on acquiring the skills to teach computer programming at the lower grade levels. Instruction will be given in LOGO and BASIC. The mathematical basis of computing will be discussed along with elementary data structures.
Prerequisite: CSC 602

**Dramatic Arts Courses**

**DRA 601 Drama in the Schools**
4 hours; 4 credits
An examination of the role of drama in both its educational and social settings. Study of the ways in which drama may be used at the various levels of education—childhood through adult programs. Creative drama as a process as well as educational theater as a product. Drama as a teaching tool in the general curriculum as well as drama as a subject of aesthetic education.
Prerequisite: A bachelor’s degree. Undergraduate juniors and seniors may enroll with the permission of the instructor

**Environmental Science Courses**

**ESC 602 Environmental Science for Elementary School Teachers**
3 hours; 3 credits
The course covers the basic scientific concepts that underlie the structure and function of the biospheric ecosystem. Topics include the impacts of human activities in terms of ecology, sociopolitical aspects, economics, environmental ethics, and other topics as they relate to elementary teachers. (Not creditable toward Environmental Science Master’s degree.)

**Geography Courses**

**GEG 601 Geography of Ordinary Landscapes**
4 hours; 4 credits
Examines everyday environments. Explores physical, architectural, political, and economic conditions that shape these landscapes and their impact on cultural life.

**GEG 753 U.S. Land-Use Planning and Environmental Policy**
(Also ESC 753)
3 hours; 3 credits
This course explores contemporary United States land-use and environmental planning issues in terms of their historical background, regulatory setting, cultural context, and practical politics. It focuses on specific local, regional, and national cases, and introduces students to Geographic Information Systems (GIS) as a way of analyzing land-use problems.
Prerequisite: ESC 601 (Biospheres and Our Species)

**History Courses**

**HST 601 Intellectual History of Europe: Medieval Inheritance I**
4 hours; 4 credits
Topics in medieval intellectual history (ca. 300 - 1050) to be examined include classical, Jewish, and early Christian elements in medieval thought, the Latin Fathers, Byzantine and Islamic contributions to the West, Germanic ideas and institutions. Special attention will be given to the secondary authorities in the field. Reports and papers will form the basis of class discussion.

**HST 603 The Classical Inheritance**
4 hours; 4 credits
Various aspects of Greco-Roman history with special emphasis on the characteristic contributions of the classical world to the development of European civilization. Some previous coursework and/or reading in the history of classical antiquity is recommended.

**HST 604 Tudor and Stuart History**
4 hours; 4 credits
Readings in the controversial literature concerned with (1) the 16th-century administrative revolution and (2) the constitutional and social crisis of the 17th century. The emphasis will be on the political and social history of the period 1540-1640. A general knowledge of modern European history or of British literature in this period is presupposed.

**HST 605 War and Society in the Modern World**
4 hours; 4 credits
The history of war from the early modern period to the present. War will be studied as a social and political phenomenon. The focus will be on European rather than United States experience until the 20th century is considered. A general knowledge of history is presupposed.
HST 606  Age of the French Revolution  
4 hours; 4 credits  
Beginning with a study of the debate over the coming of the Revolution in late 18th-century Europe, this course will go on to consider the various phases of the Revolution and to assess the effective changes within France and Europe that it brought about, the foreign wars, and the Napoleonic “synthesis.” A reading knowledge of a European language, particularly French, will be helpful.

HST 607  Nineteenth-Century Europe  
4 hours; 4 credits  
A study of classic works and recent literature dealing with selected topics of 19th-century European history. There will be an effort to acquaint students with basic primary sources of information as well as with secondary literature. The emphasis will be on continental Europe. A reading knowledge of a European language is presupposed.

HST 610  Europe in the Twentieth Century  
4 hours; 4 credits  
The range of the European experience from 1914-1945 runs from a position of world hegemony to the nadir of sociopolitical collapse. This course will explore the major events and forces—the nature of modern war and peacemaking, the challenge of Communist revolution, the shock of fascism, the failure of the liberal states, and the rise of the superpowers—that shaped contemporary European civilization.

HST 614  United States' Origins  
4 hours; 4 credits  
History of the 13 British colonies, from their settlement through the Revolution. The material and ideological forces that helped to create the new nation will be examined. Among the topics to be discussed will be Puritanism, slavery, mercantilism, and the political development of the colonies. The last part of the course will examine the reasons for and significance of the American Revolution.

HST 624  U.S. History: 1900-1940  
4 hours; 4 credits  
Readings, analysis, and reports of the major historical accounts of Progressivism, World War I, the 1920s, and the New Deal period including social, political, and intellectual themes.

HST 625  Gender and Modern Consciousness  
4 hours; 4 credits  
An examination of the category of “gender” as an area illuminating the social sciences, particularly history and modern sociology, in recent scholarship.

HST 626  Historical Themes and Interpretations  
(Also EDD 626)  
3 hours; 3 credits  
Examination of selected themes in world history, such as nationalism, globalization, minorities and society, religion and the state, and humans and their environment. Each semester the course will focus on the development of one theme, affording students the opportunity to deepen their interpretation through case studies, critical analysis of texts, museum work, and Internet research.

HST 700  The Russian Revolution: 1917-1991  
4 hours; 4 credits  
This course will examine the historiography of the 1917 Revolution and the ensuing Soviet state, the origin of Stalinism, and the various political trends in this emerging Russian historiography. Major 1991 political events in ex-Soviet Union countries will be examined as well as contemporary social movements.

Mathematics Courses

MTH 612  Introduction to Mathematical Logic  
4 hours; 4 credits  
A development of the propositional calculus and the predicate calculus with special emphasis on their mathematical aspects and applications. The course covers formal axiomatic theory, validity, provability, consistency, and completeness.  
Prerequisite: MTH 233 or MTH 236 or permission of the department

MTH 615  Modern Algebra for Secondary School Teachers  
4 hours; 4 credits  
Set operations, mappings, algebraic structures, groups, rings, integral domains, division rings, fields, ruler and compass constructions. These topics will include a discussion of the historical development of these ideas.  
Prerequisite: MTH 233 or MTH 236 or permission of the department

MTH 620  Topics in Mathematics for Teachers  
4 hours; 4 credits  
A culturally oriented course for teachers who seek to deepen their understanding and appreciation of the style and status of modern mathematics. Topics will be drawn from sets, number systems, complex numbers, and other areas.  
Prerequisite: MTH 233 or MTH 236 or permission of the department

MTH 621  Calculus for Secondary School Teachers, with Graphing Calculators  
4 hours; 4 credits  
A study of the theoretical concepts of calculus as a preparation for the teaching of calculus in the secondary school. Emphasis will be placed on drawing connections between various ideas in calculus and on using the graphic calculator as a tool for illustrating concepts and solving problems. A wide variety of applications is stressed throughout the course.  
Prerequisites: MTH 233 or MTH 236 or permission of the department
MTH 623  Geometry for Secondary School Teachers
4 hours; 4 credits
Finite geometries, properties of axiomatic systems, a critique of Euclid. An axiomatic development of Euclidean geometry and the re proving of major theorems of Euclid. Non-Euclidean geometry: the concept of parallelism, its history; the geometry of Bolyai-Lobachevsky; a comparison of hyperbolic and Euclidean properties.
Prerequisite: MTH 233 or MTH 236 or permission of the department

MTH 627  Historical Perspectives on Mathematics Topics
(Also EDD 627)
3 hours; 3 credits
An examination of the historical origins and contemporary applications of mathematics topics selected from areas such as arithmetical computation, number theory, cryptology, graph theory, geometry, and probability. Emphasis on exploration, analysis, and problem solving. Intended for teachers who wish to extend their own knowledge of mathematics and enhance classroom pedagogy.
Prerequisites: Two courses in fundamentals of mathematics (equivalent to MTH/SLS 217 and 218) or permission of the department

MTH 632  Foundations of Number Theory
4 hours; 4 credits
Number theory: mathematical induction, factorization and fundamental theorem of arithmetic, the division and the Euclidean algorithms, linear diophantine equations, congruence of classes in integers, modulo n, famous problems in number theory, arithmetic functions, elementary theory of the distribution of primes, quadratic reciprocity, and solutions of systems of congruence equations.
Prerequisite: MTH 233 or MTH 236 or permission of the department

MTH 637  Introduction to Mathematical Modeling
4 hours; 4 credits
A project-based introduction to the essential components of mathematical modeling. Using fully developed case studies and exploratory student projects, the aim is to provide a broad perspective on modeling physical, biological, and societal phenomena using modern mathematical methods. In particular, emphasis will be placed on three prototypical modeling, paradigms: dynamical systems, statistical/probabilistic modeling, and optimization.
Prerequisites: Differential equations and linear algebra (MTH 330 or equivalent) or mathematical probability (MTH 311) or permission of the instructor.

MTH 640  Numerical Analysis for Secondary School Teachers
4 hours; 4 credits
Solution of equations, interpolation and approximation, and convergence; numerical differentiation and numerical solution of initial value problems in ordinary differential equations; selected algorithms programmed for solution on computers.
Prerequisite: MTH 233 or MTH 236 or permission of the department

MTH 643  Development of Mathematics
4 hours; 4 credits
This course is open to students who have an interest in the historical development of mathematics. It is recommended that this course be taken by students who plan to teach mathematics in the high schools. The course will cover the development of mathematics and its influence on Western culture. Several important concepts in mathematics such as Euclidean and non-Euclidean geometry and theory of numbers will be discussed both in the context of impact on the society and the later development of the science of mathematics.
Prerequisite: MTH 233 or MTH 236 or permission of the department

MTH 650  Discrete Mathematical Modeling for Secondary School Teachers
4 hours; 4 credits
Graphs, interval graphs, transitively orientable graphs, Euler and Hamiltonian circuits, graph-theoretic models including one-way street assignment, phasing traffic signals, street sweeping, graph coloring, probabilistic models including Markov Chains and basic queuing models, voting methods and group ranking, weighted voting models and shapely power index.
Prerequisite: MTH 223 or MTH 236 or permission of the department

MTH 651  Functions of a Complex Variable
4 hours; 4 credits
Prerequisite: MTH 233 or MTH 236 or permission of the department

MTH 679  Statistics for Secondary School Teachers
4 hours; 4 credits
An introductory statistics course for secondary school teachers. Selected topics include exploratory data analysis, basic probability concepts, sampling distributions, confidence intervals, tests of significance, goodness of fit topics, and linear models.
Prerequisite: MTH 233 or MTH 236 or permission of the instructor
MTH 680  Probability Theory for Secondary School Teachers
4 hours; 4 credits
Sample spaces, combinatorial analysis, binomial Poisson and normal distributions, random variables, laws of large numbers, random walks, Markov chains, time-dependent stochastic processes, continuous sample spaces.
Prerequisite: MTH 233 or 236 or permission of the department

MTH 681  Theory of Topology
4 hours; 4 credits
Set theory; topology of the real line, Cauchy sequences, open sets, connected sets, limit points and closed sets, bounded sets, compactness, continuous functions; topological spaces, mappings, subspaces, homeomorphisms; metric spaces.
Prerequisite: MTH 233 or MTH 236 or permission of the department

MTH 690  Applied Mathematics for Secondary School
4 hours; 4 credits
An application of algebra, trigonometry, and calculus to the analysis and description of wave motion. The theory of transverse and longitudinal waves, the propagation of these waves, as well as applications to a variety of problems in nature will be studied. Applications will be chosen from the study of sound and light waves, water waves, the sound of music, traffic flow, shockwaves, and wave mechanics. Historical and cultural aspects will be stressed.
Prerequisite: MTH 233 or MTH 236 or permission of the department

MTH 704  Advanced Statistics (Effective Fall 2009)
Also BIO 704
3 hours, 3 credits
This course teaches statistical analysis using the concept of Likelihood to drive Model Selection. The subject matter differs from other statistical methods in that a single model is chosen from multiple alternatives based on data. To enroll in this courses students must have taken an undergraduate course in statistics and calculus.

MTH 706  Applied Statistical Thinking and Methods in Health Research
(Also NRS 706)
3 hours; 3 credits
This graduate-level course introduces the learner to statistical thinking and methods as applied in health research. An undergraduate statistics course is a prerequisite for the course. Emphasis is on the blending of basic descriptive and inferential statistical techniques, conceptual understanding, and depreciation for statistical methods. A hands-on interactive, multidimensional approach to teaching-learning includes use of computer software for statistical analyses. Current issues, trends, and technological advances influencing statistical analyses and data interpretation in health research will be explored from the multi-cultural perspective. Selected theories, quantitative research studies, case exemplars, and data sets will be critically appraised for utilization in various health settings and with diverse populations. Ethical issues will be a recurrent theme. Future applications of statistical techniques in health research will be discussed.
Prerequisite: Matriculated or non-matriculated status in the graduate program

Political Science Courses

POL 636  The Judicial Process
3 hours; 3 credits
A study of the powers and weaknesses of, and the checks upon, the court systems in the United States. Special attention will be given to the role of the Supreme Court and its functions in dealing with government regulation of business and in protecting minorities.

POL 643  The Russian Revolution
3 hours; 3 credits
A review of the Russian pre-revolutionary socialist tradition with special emphasis on the Leninist theory and the Bolshevik practice. Russia at war and the disintegration of the Czarist empire. The Russian Revolution, the Bolshevik takeover, and the civil war struggle. Soviet government and politics under Lenin.

POL 735  United States Government and Politics
4 hours; 4 credits
A study of the structure and operations of the United States political system, the process of its evolution, the philosophical principles and theories on which it rests, and the social pressures and forces operating on it.

POL 737  United States Constitution
4 hours; 4 credits
The structures of government established by the United States Constitution and the system of limited government, which is a consequence of a written constitution. The course will make extensive use of Supreme Court cases to examine branches of the national government, their relationship to each other, and the extent and limits of their powers under the Constitution, and will explore by case analysis the system of federalism established by the Constitution.

POL 741  European Government and Society
4 hours; 4 credits
A study of the structure and operation of major European political systems, their evolution and governing principles; the social and economic contexts in which they operate; present-day domestic problems confronting them, including immigration and demographic changes; and such external forces as the European Union and globalization.
Science Courses

SCI 602  Philosophy of Science
4 hours; 4 credits
Prerequisite: Two semesters of science

SCI 605  Science and Educational Policy in the United States for Secondary Science Teachers
4 hours; 4 credits
Scientific activity from the beginning of the republic to the present day will be surveyed, with special concern devoted to the major shifts in science and education policy since the depression, and the economic, social, and political forces that influenced public support for scientific research and education during the post-war period. Also, current issues affecting many levels of society and the way the public views science will be discussed. Original scientific papers and various other materials surveying the leading developments over the last half a century will be utilized.
Prerequisite: Bachelor’s degree with a major in a biological or physical science or permission of the instructor
Appendix i

CSI Library Guidelines for Submission of the Master's Thesis

Students submitting their approved thesis to the Library are asked to submit two copies, both of which must be signed by all members of the thesis committee, or by the program coordinator if no committee exists, on the thesis signature page. One copy will be kept in the Library archives; the other will become part of the special collections. Students wishing to copyright their theses through an official agency must make their own arrangements to do so.

Format
The two copies for the Library must be printed on 8.5” x 11” unpunched, unbound white paper of 20-24 lb. weight or heavier. The paper must also meet the specification of 100% cotton content (i.e., acid free) and must not contain lines, smudges, spots, or shaded background. Copies from a laser printer or commercial copier service are highly recommended. Copies done on departmental or self-service copy machines do not meet the Library’s high-quality standard. All printing must be one side only.

Photographs, maps, charts, color copies, and some special illustrative materials may be placed, prepared, or reproduced on paper different from that of the regular text (for example, color copies on cotton paper will smudge; use paper specifically made for color copying). On either side of this special paper, students must include a blank sheet of the specified cotton, acid-free paper. Students also must place one extra sheet at the front and back of the thesis.

The following (minimum) margins must be used throughout the manuscript:
Left 1.5”  Top margin:  1.0
Right 1.0”  Bottom margin:  1.0

Material that cannot fit within regular or oversized margin requirements may be placed on 11” x 17” paper. Page numbers on these oversized pages must be placed in the upper right corner in the same position as the rest of the text. These pages are not to be folded prior to submission. The bindery will fold them as appropriate.

Abstract
Abstracts must be double-spaced and are limited to a single page with margins as described above. This page should bear the heading “Thesis Abstract.”

Submission
After a successful thesis defense the student should submit two official copies of the manuscript to the Library. If there are any concerns regarding the submission guidelines, the student may consult with the Head of Reference (718.982.4010) or the Archivist (718.982.4128). Either person will be available to ensure that the thesis meets the standards as described above.
TRAVEL INFORMATION

Carpooling:
Students, Faculty, and Staff are encouraged to utilize the services of the regional carpooling and rideshare organization.

- **Commuterlink**: Commuterlink provides information on carpooling and rideshare for regional commuters including a guaranteed ride home program for people who have emergency needs to alter their hours or work late. Faculty and Staff are particularly encouraged to utilize the services of Commuterlink. For more information go to www.commuterlink.com.

- **GoLoco**: Students are strongly encouraged to utilize the services of rideshare programs such as GoLoco. The College is working with www.goloco.org to promote rideshare and lower commuting costs for students. By notifying students of potential rideshare opportunities, the College hopes to increase the availability of carpooling from key student resident areas. The College has already established a group webpage for CSI. For more information go to: www.goloco.org

By Bus:

**Victory Boulevard buses - St. George/Travis**

S62 - frequent weekday service and service every 30 minutes on Saturdays and Sunday.
From 8:30am to 11:30pm, to the ferry, and from 7:30am to 12:20am, from the ferry; the S62 makes a stop inside the Victory Blvd. entrance to the campus.
S92 - commuter schedule from Travis every 15 minutes from 6:30am to 7:42am and from St. George every 15 minutes from 4:50pm to 6:00pm.

**Richmond Avenue buses - North/South route**
The Richmond Avenue and Victory Boulevard stop is two blocks from the entrance to the campus.
S44 - frequent service on weekdays and runs every 30 minutes on Saturday and Sunday.
S59 - every 30 minutes every day.

**Forest Hill Road buses - South Shore/St. George route**
S61 - frequent daily and weekend service.
S91 - commuter schedule weekdays.

**Brooklyn buses- Port Richmond/Bay Ridge - 95th Street**
S53 - Bay Ridge - 95th Street/Port Richmond

Frequent weekday service; stops at Victory Boulevard for transfer to S62 or S92.
S93 - 86th Street and 4th Avenue/College of Staten Island campus
Limited service Monday-Friday
Departs 86th Street at 6:55am, 7:55am, 8:55am
Departs CSI at 3:00pm, 5:00pm, 7:00pm.

**Manhattan/Staten Island Express bus**
X-10 Express bus - frequent daily schedule from 57th Street and 3rd Avenue to Victory Boulevard and the return route; stops at the campus main entrance.
Call 1.718.330.1234 for information and schedules for local buses and Manhattan/Staten Island express buses.

**By automobile from the Staten Island Expressway**
Traveling westbound on the Staten Island Expressway from the Verrazano-Narrows Bridge, take the Victory Boulevard Exit (#10). At Victory Boulevard, turn left and continue under the Expressway and turn left into the campus at the first traffic light. Eastbound on the SI Expressway, take the Victory Boulevard Exit (#8) and turn left onto Victory Boulevard, and turn right at the traffic light to enter the campus.

**Parking**
Students are sold permits for on-campus parking at the time of registration on a first-come, first-served basis. Speed limit: 25 mph

**Transportation Available on Campus**

**Loop Bus**
The Loop Bus leaves the main gate approximately every ten minutes for a trip around the campus with regular stops; in operation during regular class schedule with adjusted hours for advisement and registration periods.

**Van for Disabled**
Dispatched by the Office of Operational Services or Security as requested (extension 3220 or 2112).
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