I am pleased to welcome you to the College of Staten Island, a senior college of The City University of New York, offering courses of study that lead to associate’s, bachelor’s, and master’s degrees and, in collaboration with the Graduate School and University Center/CUNY, doctoral degrees. Our campus is alive with exciting new programs and initiatives to enable you to fulfill your dreams. David Cooperfield said, “I learned that there were two ways I could live my life: following my dreams or doing something else. Dreams aren’t a matter of chance, but a matter of choice. When I dream, I believe I am rehearsing my future.” In selecting the College of Staten Island, you’ve made the right choice.

The College of Staten Island is committed to academic excellence and the opportunity to prepare students to build their futures on a solid foundation of knowledge, and confident inner strength. The administration, the faculty, the staff, and I are all keenly aware of the role we play in our students’ lives and how your college experience shapes how you think and who you become. In today’s mutually dependent world, the challenge for educators is to stimulate students to do their best possible work, to use their minds to bridge cultural, economic, and intellectual differences in order to create a safer, a more educated, and a more tolerant society. As globalization shrinks our world and expands our institutions, it is imperative that we provide the best possible opportunity for our students to grow in both mind and spirit, thus ensuring our collective vitality.

A vibrant scholarly community thrives on our nurturing 204-acre campus. Hopes become reality at CSI. Students succeed at every level, from those in the CUNY Honors College to those who need extra support through peer counseling. Our futuristic technology and scientific equipment in our outstanding programs in the sciences, health sciences, liberal arts, social sciences and technology offer students the tools to prepare them for successful careers. Our faculty comes from the country’s most prestigious schools. We also have an international study abroad program to offer you an array of perspectives on education and life outside the United States. From Staten Island’s only observatory you cannot only dream of the heavens, but also explore the worlds beyond and imagine what lies ahead. The College of Staten Island wants to make your present and your future exciting, and aspires to develop in you a curious spirit that will last a lifetime. I know that whatever your dreams are, the path to fulfilling them can begin here at CSI. I hope your own “rehearsals for your futures” will be enlightening, and enjoyable. Welcome to our community.

Marlene Springer
President
Students entering in fall 2006 or later must consult the Catalog supplement for changes in degree requirements and College policies.
### Fall 2005

<table>
<thead>
<tr>
<th>Date</th>
<th>Day(s)</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 26</td>
<td>Friday</td>
<td>Last day of registration. Last day to withdraw from course(s) with a 100% tuition refund.</td>
</tr>
<tr>
<td>Aug 29</td>
<td>Monday</td>
<td>First day of classes. Only classes scheduled to end after 4:00pm. Late Registration. Registration for senior citizens seeking a tuition waiver.</td>
</tr>
<tr>
<td>Aug 30-31</td>
<td>Tues.-Wed.</td>
<td>Late Registration. Registration for senior citizens seeking a tuition waiver.</td>
</tr>
<tr>
<td>Sept 5</td>
<td>Monday</td>
<td>College Closed. Last day to add a course.</td>
</tr>
<tr>
<td>Sept 6</td>
<td>Tuesday</td>
<td>College Closed. Last day to withdraw from course(s) with a 75% tuition refund.</td>
</tr>
<tr>
<td>Sept 13</td>
<td>Tuesday</td>
<td>Last day to withdraw from a course(s) with a 50% tuition refund.</td>
</tr>
<tr>
<td>Sept 19</td>
<td>Monday</td>
<td>Last day to withdraw from a course(s) with a 25% tuition refund.</td>
</tr>
<tr>
<td>Sept 30</td>
<td>Friday</td>
<td>College Closed. Last day to file for January 2006 graduation. Last day to file for readmission for spring 2006 semester.</td>
</tr>
<tr>
<td>Oct 3</td>
<td>Monday</td>
<td>College Closed. Only classes scheduled to end before 4:00pm – no evening classes.</td>
</tr>
<tr>
<td>Oct 4-5</td>
<td>Tues.-Wed.</td>
<td>No Classes.</td>
</tr>
<tr>
<td>Oct 11</td>
<td>Tuesday</td>
<td>No Classes.</td>
</tr>
<tr>
<td>Oct 12-13</td>
<td>Wed.-Thurs.</td>
<td>Last day to withdraw from first 7 1/2-week NRS, BIO, or CSC courses with permission of an advisor.</td>
</tr>
<tr>
<td>Oct 19</td>
<td>Wednesday</td>
<td>Midterm grades due.</td>
</tr>
<tr>
<td>Nov 3</td>
<td>Thursday</td>
<td>Last day to appeal grades other than WU or FIN from spring 2005 semester. Please refer to Undergraduate Catalog for details and procedures.</td>
</tr>
<tr>
<td>Nov 4</td>
<td>Friday</td>
<td>Last day to withdraw without permission of an instructor or chairperson. Financial aid recipients who totally withdraw before this date may incur repayment liability.</td>
</tr>
<tr>
<td>Dec 8</td>
<td>Thursday</td>
<td>Last day to withdraw from second 7 1/2-week NRS, BIO, or CSC courses with permission of an advisor.</td>
</tr>
<tr>
<td>Dec 15</td>
<td>Thursday</td>
<td>Last day of classes.</td>
</tr>
<tr>
<td>Dec 16-23</td>
<td>Fri.-Fri.</td>
<td>Final Examinations Day/Evening.</td>
</tr>
<tr>
<td>Dec 24-26</td>
<td>Sat.-Mon.</td>
<td>College Closed.</td>
</tr>
<tr>
<td>Dec 30-31</td>
<td>Fri.-Sat.</td>
<td>College Closed.</td>
</tr>
<tr>
<td>Jan 1</td>
<td>Sunday</td>
<td>College Closed.</td>
</tr>
<tr>
<td>Jan 16</td>
<td>Monday</td>
<td>College Closed.</td>
</tr>
</tbody>
</table>
## Spring 2006

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 16</td>
<td>Monday</td>
<td><strong>College Closed.</strong></td>
</tr>
<tr>
<td>Jan 25</td>
<td>Wednesday</td>
<td>Last day to withdraw with a 100% tuition refund.</td>
</tr>
<tr>
<td>Jan 26</td>
<td>Thursday</td>
<td>First day of classes.</td>
</tr>
<tr>
<td>Jan 26-27</td>
<td>Thurs.-Fri.</td>
<td>Late Registration. Registration for senior citizens seeking a tuition waiver.</td>
</tr>
<tr>
<td>Jan 30</td>
<td>Monday</td>
<td>Late Registration. Registration for senior citizens seeking a tuition waiver.</td>
</tr>
<tr>
<td>Feb 1</td>
<td>Wednesday</td>
<td>Last day to withdraw with a 75% tuition refund.</td>
</tr>
<tr>
<td>Feb 8</td>
<td>Wednesday</td>
<td>Last day to withdraw with a 50% tuition refund.</td>
</tr>
<tr>
<td>Feb 13</td>
<td>Monday</td>
<td>College Closed.</td>
</tr>
<tr>
<td>Feb 15</td>
<td>Monday</td>
<td>Last day to withdraw with a 25% tuition refund.</td>
</tr>
<tr>
<td>Feb 20</td>
<td>Monday</td>
<td>College Closed.</td>
</tr>
<tr>
<td>Feb 21</td>
<td>Tuesday</td>
<td>Classes follow a Monday schedule.</td>
</tr>
<tr>
<td>Mar 1</td>
<td>Wednesday</td>
<td>Last day to file for June/August 2006 graduation.</td>
</tr>
<tr>
<td>Mar 14</td>
<td>Tuesday</td>
<td>Last day to file for readmission for summer/fall 2006 semester.</td>
</tr>
<tr>
<td>Mar 20</td>
<td>Monday</td>
<td>Last day to withdraw from first 7 1/2-week BIO, CSC, NRS courses with permission of an advisor.</td>
</tr>
<tr>
<td>Mar 28</td>
<td>Tuesday</td>
<td>Midterm grades due.</td>
</tr>
<tr>
<td>Apr 3</td>
<td>Monday</td>
<td>Last day to withdraw without permission of an instructor and chairperson. Financial aid recipients who totally withdraw before this date may incur repayment liability.</td>
</tr>
<tr>
<td>May 9</td>
<td>Tuesday</td>
<td>Last day to withdraw from second 7 1/2-week BIO, CSC, NRS courses with permission of an advisor.</td>
</tr>
<tr>
<td>May 17</td>
<td>Wednesday</td>
<td>Last day of classes, day and evening sessions.</td>
</tr>
<tr>
<td>May 18-26</td>
<td>Thurs.-Fri.</td>
<td>Last day to remove incomplete grades from the fall 2005 semester.</td>
</tr>
<tr>
<td>May 20-21</td>
<td>Sat.-Sun.</td>
<td>Final Examinations, weekend session.</td>
</tr>
<tr>
<td>May 29</td>
<td>Monday</td>
<td>College Closed.</td>
</tr>
<tr>
<td>June 1</td>
<td>Thursday</td>
<td>Commencement.</td>
</tr>
</tbody>
</table>

**College calendars for fall 2006 and spring 2007 will appear in a supplement to this Catalog.**
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. Programs in the liberal arts and sciences and professional studies lead to bachelor's and associate's degrees. The master's degree is awarded in 13 professional and liberal arts and sciences fields of study. The College participates in doctoral programs of The City University Graduate School and University Center in Biology, Chemistry, Computer Science, Physics, and Psychology.

A broad general education is assured through requirements that allow students to explore a range of fields of knowledge and acquire educational breadth in mathematics, the sciences, social sciences, arts, and humanities. Requirements for the bachelor's degree provide a disciplined and cumulative program of study in a major field of inquiry. Enrollment in baccalaureate programs requires freshmen admission standards consonant with those of CUNY senior colleges. Enrollment in associate's degree programs is open to all students with a high school diploma or the equivalent.

The Honors College offers a challenging curriculum and an enriched extracurricular environment. It is designed for a limited number of students who have demonstrated a well-developed commitment to learning and who intend to continue their undergraduate education in graduate and/or professional schools. Students who have earned, or expect to earn, a high school academic diploma with an average of at least 90 are eligible to apply for admission to the Honors College.

The College participates in the CUNY Honors College: University Scholars Program. Students who have been accepted into the CUNY Honors Program will participate simultaneously in the Honors Colleges of CSI and the University.

The academic year follows a two-semester pattern, with a separate summer session. Classes are scheduled days, evenings, and weekends. The College has an extensive Continuing Education program and offers off-campus courses with and without credit.

CSI 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 that offered 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 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 comprises 11 senior colleges, six community colleges, a graduate school, a law school, and a medical school. 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.

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; 1.215.662.5606. 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 Computer Science program is accredited by the Computing Accreditation Commission (CAC) of the Accreditation Board for Engineering and Technology (ABET). The Engineering Science program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET), and the Electrical Engineering Technology program is accredited by the Technology Accreditation Commission of ABET. The Medical Technology program utilizes hospital affiliations accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). The baccalaureate and associate degree programs in Nursing are accredited by the National League for Nursing Accrediting Commission, 61 Broadway, New York, NY 10006; 1.212.363.5555. The Physician Assistant program, offered by the College is accredited by the Commission on Accreditation of Allied Health Education. The Physical Therapy program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association. The programs in Education have been accepted into candidacy by the National Council for Accreditation of Teacher Education.

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.
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 Staten Island. Mature trees and woodlands, flowering trees and ornamental plantings, fields and outdoor athletic facilities, the great lawn, sculpture, and seating areas create a rural oasis in an urban setting.

Fourteen renovated neo-Georgian buildings serve as classrooms, laboratories, and offices. The academic buildings house 300 classrooms, laboratories and instructional spaces, study lounges, department and program offices, and faculty offices.

North and South Academic Quadrangles are connected by the Alumni Walk, with the Library and Campus Center as focal points. The Campus Center is 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.

Sixteen 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. The artists and their free-standing sculptures and reliefs are: Vincenzo Amato, Body of Hector/Glaucus; Miriam Bloom, Shooshoo; 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 provides facilities for a complete student life including 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 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, the Library research and study facilities are enhanced by computer data-based operations available to all students. The Library Media Services make 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. On a membership basis, faculty, staff, alumni, and the general public also have access to the facilities.

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 life-long learning, their purposeful participation in the issues that face our society, and their lively commitment to their own physical and spiritual well-being.
Procedures for admission as a first-year or transfer student from another college are outlined below. Campus tours are available Thursdays at 3:30pm, by appointment only, for prospective students and their guests. In addition, special on-campus programs and open houses are scheduled each semester. Students are also invited to visit particular departments by request.

Admissions

Matriculated and Non-Degree (Non-Matriculated) Students:

Students are classified into two groups according to their enrollment status: matriculated and non-degree. Matriculated students are those who have met the College admission requirements and are enrolled in a program of study leading to a degree. Non-degree (non-matriculated) students are those who are enrolled for credit courses but who are not officially registered in a degree program. Credits earned as a non-matriculated student may later be transferred to a degree program.

Students may enroll as candidates for the bachelor’s degree or the associate’s degree. Bachelor's degree programs are designed to be completed in four years and associate's degree programs in two years. The programs for the junior and senior years of study, upper-division programs, are structured for smooth articulation for students graduating with associate's degrees and students transferring from community colleges. The College has also developed auxiliary and pre-entry programs with support systems for those students returning to the classroom after an interruption in their education and for the not-so-recent high school graduate.

Academic Requirements for Admission to Bachelor's Degree Programs (Four-Year)

Freshmen

1. An applicant for admission to a bachelor's degree program must pass the three CUNY Basic Skills Tests, unless he/she qualifies for exemption based on a satisfactory performance on the SAT or ACT standardized tests or Regents Examinations.

2. Admission to a bachelor's degree program is determined by an applicant's score on the College’s admissions index. The index is based on the applicant's high school courses and academic average and the combined verbal and mathematics SAT scores. An applicant whose score reaches or exceeds the College's minimum index number will be admitted to a bachelor's degree program. A faculty admissions committee may consider the admission of applicants whose scores approach the College's minimum index number.

Students admitted directly into four-year bachelor's degree programs are eligible for the Baccalaureate Program and may enroll in designated sections of general education courses. Applicants who are not admitted to a bachelor's degree program may enter an associate's degree program at the College.

Transfer Students

Students are encouraged to continue in bachelor's degree programs from associate's degree programs at CSI, and they may also transfer from other colleges and universities into bachelor's degree programs. Students must have passed the CUNY Basic Skills Tests in mathematics, writing, and reading prior to enrolling in a bachelor's degree program. Final degree credit for transfer work depends on grades earned and College and departmental requirements. With some exceptions, a course with a grade of C or higher may be transferred. In the case of transfers from CUNY colleges, D grades are usually acceptable. Transfer credits carry a grade of Pass (P) on the CSI transcript. Transfer students from other CUNY colleges are encouraged to visit CUNY's online Transfer Information and Program Planning System (CUNY TIPPS) at www.tipps.cuny.edu for information about transfer credits.

Based on University policy, all liberal arts and sciences courses taken in one City University college are considered transferable, with full credit, to each college of The City University, and full credit will be granted for these courses in all departments and programs and recognized for the fulfillment of degree requirements. See section on General Education Requirements for details on transfer of courses in this category.

Students must earn a minimum of 30 credits at the College and, to qualify for a bachelor's degree, at least half of the credits required for the major.

Work completed at other colleges may be used to fulfill general education and other requirements. The Office of the Registrar will evaluate each student’s transcript. Every effort will be made to apply the coursework previously completed by transfer students to the general education requirements at CSI.
In many programs, particularly in professional and scientific disciplines, students are required to complete specific courses before being considered for admission to these programs. Generally, these courses are taken during the first two years of study as necessary preparation for the advanced work required. Students seeking admission to these programs may have to spend additional time completing pre-major courses.

**Academic Requirements for Admission to the CUNY Honors College**

First-time students may apply for admission to the CUNY Honors College at CSI. Applicants are expected to have an academic diploma with an average of at least 90. The admissions committee for the Honors College considers the following documents submitted by applicants: high school transcript; scores on Regents Examinations; scores on the SAT, ACT, and achievement tests; Advanced Placement courses; extracurricular activities; evidence of talents and interests; letters of recommendation; and personal essay. Personal interviews are also required. Admission is limited and competitive.

For information or an application, please visit [www.cuny.edu/honorscollege](http://www.cuny.edu/honorscollege), call 1.718.982.2222, or write the Honors College, CSI/CUNY, South Administration Building (1A), Room 206, 2800 Victory Blvd., Staten Island, NY 10314.

**Academic Requirements for Admission to Associate’s Degree Programs (Two-Year)**

**Freshmen**

Applications for matriculation as a first-time student will be accepted from persons who have never attended any institution of higher education (with the exception of those students who have taken college courses while in high school) and who have either:

1. graduated from an accredited high school, or
2. earned an equivalency diploma (GED), or
3. are currently attending high school and will receive a diploma prior to enrollment.

A diploma from an accredited high school is required for admission to the College. Scores on either the New York State Equivalency Diploma Examination or the General Education Development Examination are accepted as substitutes for the high school diploma provided that the student attains a score of 35 or higher on each of the five tests, with a total score of 225 or higher.

**Transfer Students**

Applicants who have attended another college must file a transfer application. Applications for matriculation will be accepted from transfer students who have an official transcript verifying attendance at another college. As a general rule, the College requires a grade point average equivalent to a C for transfer as a matriculated student.

The Office of the Registrar will evaluate credits of transfer students for advanced standing. Final degree credit for transfer work depends on grades earned and College and departmental requirements. With some exceptions, a course with a grade of C or higher may be transferred. In the case of transfers from CUNY colleges, D grades are usually acceptable. Transfer credits carry a grade of Pass (P) on the CSI transcript. However, all students must complete a minimum of 30 credits at the College, including at least one-half the credits required for the core, in order to earn an associate’s degree.

**Admissions Committee**

An Admissions Committee of six members of the faculty and administrative staff considers all matters affecting the admission of students to the College of Staten Island, including academic requirements.

**Filing an Application**

**Freshman Applications**

Students may obtain a freshman application form from CSI, their high school guidance office, or the CUNY Office of Admissions Services (OAS). The application, a school transcript, and a non-refundable application fee of $65 must be mailed to the UAPC at the following address.

University Application Processing Center (UAPC)
Box 350136
Brooklyn, New York 11235-0001

Applicants may apply online at [www.applyto.uapc.cuny.edu](http://www.applyto.uapc.cuny.edu). CSI has continuous admissions; however, applications should be filed early.

**Transfer Applications**

The College of Staten Island accepts transfer applications from students who have attended an accredited postsecondary institution. Students who are currently attending or who have previously attended a college of The City University of New York should apply through the registrar’s office of the college attended, using the standard transfer application form of the CUNY Office of Admission Services.
Students must meet the standards of proficiency in the basic skills areas of reading, writing, and mathematics established by the University and pass the CUNY Proficiency Examination to transfer to a bachelor’s degree program.

Transfer students from colleges outside CUNY can obtain an application from the CSI Office of Recruitment and Admissions. This form and official transcripts of all previous college work should be sent to the UAPC (address above). The fee for transfer applications is $70. Please see also the statement on the CUNY Proficiency Examination in the section Academic Policies and Procedures.

**Non-Degree (Non-Matriculated) Applications**

Non-matriculated (non-degree) students may obtain an Undergraduate Non-Degree application from the HUB in the North Administration Building 2A Room 106, online at [www.csi.cuny.edu/registrar/importantforms.htm](http://www.csi.cuny.edu/registrar/importantforms.htm) or at the time of registration.

**College Preparatory Initiative (CPI)**

The College Preparatory Initiative (CPI), a collaborative effort between The City University of New York and the New York City Board of Education, was designed to strengthen the academic preparation of high school students. This requirement for all students entering CUNY colleges is 16 units. See section on Degree Requirements for complete details.

High school students should consult with guidance counselors to ascertain which courses meet the CPI requirements. GED students will receive units in English and mathematics based on their test scores. Students who have not completed the CPI requirements prior to enrolling in the University will be required to demonstrate skills and knowledge in the discipline areas in which they lack preparation. In most cases, this will be accomplished by taking college courses in designated academic areas. No student will be eligible for graduation from CSI until all CPI requirements are satisfied.

**Advanced Placement**

The College will grant placement and credits, to a maximum of 30 credits, on the basis of special examinations taken prior to admission. These include approved high school advanced placement examinations, Regents Examinations, Educational Testing Service examinations, Departmental Challenge examinations, New York State College Proficiency examinations, and the College Level Examination Program (CLEP). Further information is available from the Office of Recruitment and Admissions.

**International Students**

The Center for International Service at CSI facilitates admission and registration for international students. The Center is located in the North Administration Building (2A), Room 206; telephone 1.718.982.2100.

**Veterans**

The veterans advisement service is supervised by the Registrar. Assistance is available in interpreting regulations and policies of the Department of Veterans Affairs, and educational and financial counseling is offered. The office of the veterans adviser is in the North Administration Building (2A), Room 110.

**SEEK Program**

The SEEK program (Search for Education, Elevation, and Knowledge) is a New York State program for residents who are in need of both academic and financial assistance in order to obtain a college education. Information about the program and the application procedures may be obtained from the SEEK Office, South Administration Building (1A), Room 112; telephone 1.718.982.2413.

**Readmission**

Undergraduate students who do not register for a semester and then decide to return in a subsequent semester must file an application for readmission with the Registrar. Readmission is routine unless the student is applying for a different curriculum, which may entail a review of qualifications. To qualify for priority registration, applications for readmission must be filed by the deadline specified in the calendar in the Schedule of Classes.

**Special Categories of Registration**

**Permit/Visiting Students**

Permit students from within The City University must submit a valid CUNY permit through the ePERMIT system from their home college to the CSI Registrar’s Office prior to registration. Visiting students from outside the City University must submit the Visiting Student Application available online at [www.csi.cuny.edu/registrar/importantforms.htm](http://www.csi.cuny.edu/registrar/importantforms.htm) along with documentation from their home schools that they have permission to enroll at CSI.
Senior Citizens

Senior citizens, 60 years and older, may be permitted to enroll in undergraduate courses as non-matriculated students, on a space-available basis, without tuition and fees, provided they do so on an audit basis. Senior citizens enrolling as auditors are charged an administrative fee and a Consolidated Service Fee for the semester as indicated in the Fee Schedule.

A senior citizen may enroll in courses for credit but cannot be enrolled in the same semester for courses on both an audit basis (no tuition) and a credit or degree basis (tuition charged).

After Acceptance to the College of Staten Island

Orientation

An orientation program for all new students provides an introduction to the College, its programs, and student life. Orientation sessions are scheduled at the beginning of each semester, before or during the time periods devoted to testing, advisement, and registration.

Testing

CUNY Basic Skills Tests:

All new students are required to take the CUNY Basic Skills Tests in order to become degree (matriculated) students. The scores are used for advisement and placement into college courses. Entering students are scheduled for the Skills Tests. The tests are administered several times during the year by the Testing Office, South Administration Building (1A), Room 104. For information see the section on CUNY Basic Skills Tests in the chapter Academic Policies and Procedures.

 Placement Examinations

Special examinations are given to determine placement at the appropriate course level in several departments, such as Biology and Modern Languages. See the department chairperson or the Testing Office for further information.

Advisement

Upon acceptance into the College of Staten Island, each student is assigned an academic adviser. During the first semester and prior to registration for the second semester it is expected that students will meet with their assigned advisers to discuss educational and career goals and to develop long-range academic plans. Thereafter, students meet with their advisers at least once each semester to discuss the following semester's academic program and to have their advisement registration approved, and to discuss progress toward graduation. Once each semester, students are sent an updated Academic Advisement Plan that details progress toward the degree. Students should review their plan and report any problem immediately to the Academic Advisement Office, South Administration Building (1A), Room 101.

Registration

Students must register each semester. Registration and appointment materials are sent by the Office of the Registrar prior to registration to all current, readmitted, and newly admitted students. An open registration period is scheduled at the beginning of each semester for students who miss their registration appointments or who are returning to CSI too late for an appointment to be scheduled.

Students scheduled for registration using the College’s Web (eSIMS) process may register and perform program changes following the procedures accompanying the registration appointment letter. Instructions for using the Web eSIMS system are also published in the Schedule of Classes.

A detailed registration schedule and class listings are published each semester in the Schedule of Classes. Registration is not complete until all financial obligations have been satisfied. The Registrar’s Office is in the North Administration Building (2A), Room 110.

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 CSI. Information and the immunization forms are available at the Health Center and the Registrar’s Office, and in the Schedule of Classes.

New York State Public Health Law 2167 requires that all college and university students be informed of the meningococcal disease, a potentially fatal bacterial infection commonly referred to as meningitis. The College of Staten Island is required to maintain a record of the following for each student:

- A response to receipt of meningococcal disease and vaccine information signed by the student or if a student is under the age of 18, by the student’s parent or guardian. The information provided to you must include information on the availability and cost of meningococcal meningitis vaccine (Menomune™);
- AND EITHER
- A record of meningococcal meningitis immunization within the past ten years;
- OR
- An acknowledgment of meningococcal disease risks and refusal of meningococcal meningitis immunization signed by the student or if a student is under the age of 18, by the student’s parent or guardian.

Meningitis is rare. However, when it strikes, its flu-like symptoms make diagnosis difficult. If not treated early, meningitis can lead to an increase in fluid surrounding the brain and spinal column as well as severe and permanent disabilities, such as hearing loss, brain damage,
seizures, limb amputation, and even death. Cases of meningitis among teens and young adults 15 to 24 years of age (the age of most college students) have more than doubled since 1991. The disease strikes about 3,000 Americans each year and claims about 300 lives. Between 100 and 125 meningitis cases occur on college campuses and as many as 15 students will die from the disease. A vaccine is available that protects against four types of bacteria that cause meningitis in the United States: types A, C, Y, and W-135. These types account for nearly two thirds of meningitis cases among college students. The College of Staten Island does not offer meningococcal immunization. The meningitis vaccine is provided at the New York City Department of Health Travelers’ clinics, www.cdc.gov/travel/travelclinics. The meningitis vaccine may or may not be covered by insurance. The vaccine cost is approximately $75.00. The Ryan Chelsea Clinton Community Center, 645 Tenth Avenue (between 45th and 46th) New York, NY 10036, 1.212.265.4500, offers the meningitis vaccine at a low and affordable cost. Note: Per public health law, the College may not permit any student to attend the institution in excess of 30 days without complying with this law.
To learn more about meningitis and the vaccine, please consult your physician. You can also find information about the disease at:
The College Health Center’s Website: www.csi.cuny.edu/studentaffairs/healthcenter
New York State Department of Health Website: www.health.state.ny.us/nysdoh/immun/immunization.htm
American College Health Association (ACHA) Website: www.acha.org/projects_programs/meningitis/disease_info.cfm#overview
and the National Meningitis Association (NMA) Website: www.nmaus.org

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 $5.00.

Student Enrollment, Retention, and Graduation
The College has an enrollment of over 11,100 undergraduate students, full-time and part-time. Over 2,900 new undergraduates entered in fall 2004 as first-time freshmen or as transfer students. For the College’s heterogeneous student population, progress toward a degree depends upon a number of factors: preparation for college, goals, and other commitments. These and other factors affect such student outcomes as retention, graduation, and post-collegiate success.
Approximately 64% of all first-time freshmen who entered associate and baccalaureate degree programs in fall 2003 re-enrolled in fall 2004. Members of this cohort who entered as full-time students were retained at a rate of 66%, while members of this cohort who entered as part-time students were retained at a rate of 45%. For full-time transfer students who entered in fall 2003, the retention rate was 68%.
The College awarded 1,386 undergraduate degrees in the 2003-2004 academic year. More than 61% of these were bachelor’s degrees, while 39% were associate’s degrees.
Bursar: Mr. Michael D. Baybusky
North Administration Building (2A), Room 105

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

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 the University Payment Plan, (c) is eligible for a tuition waiver, (d) is in a special registration status (e.g., veteran). The registration dates are printed in the Schedule of Classes for each semester. During the registration process, a student's bill is prepared with a 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.

Residency for Tuition Billing Purposes

A student may qualify for the resident tuition rate if he/she continuously maintained his/her principal place of abode in the State of New York for a period of at least 12 consecutive months immediately preceding the first day of classes. If a student has attended a high school in New York City or State for the two semesters immediately prior to the first day of classes, the student qualifies for the resident rate.

Student Status

Full-Time and Part-Time

Undergraduate students are considered part-time if they are registered for 11 equated credits or less. A student is considered full-time if registered for 12 or more equated credits in a semester. Students applying for TAP should see the requirements for TAP eligibility in the section on Financial Aid and in the Schedule of Classes.

Part-time undergraduate matriculated students are charged the tuition rate on a per equated credit basis (1-11 equated credits).

Undergraduate full-time students are charged tuition on a per semester basis; undergraduate non-resident full-time students are charged tuition on a per equated credit basis.

Summer session and non-degree students are billed on a per equated credit basis regardless of the number of equated credits for which they register. There are no maximum tuition limits for summer session or non-degree students. Non-degree students (as of June 1, 1992) pay a higher rate than matriculated students.

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.

Undergraduate courses: For senior citizens enrolled in undergraduate courses, tuition will not be charged provided credit is not given for the course(s). Senior citizens are enrolled on an audit basis and will receive an “AUD” grade. Senior citizens who wish to enroll for credit must pay the applicable tuition and fees, including the application fee and the Student Activity Fee. Senior citizens cannot be registered on both an audit basis (no tuition) and a credits basis (tuition charged) during the same semester.

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.

Tuition

<table>
<thead>
<tr>
<th>UNDERGRADUATE*</th>
<th>Resident</th>
<th>Non-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>full-time matriculated</td>
<td>$2,000/semester</td>
<td>$360/equated credit</td>
</tr>
<tr>
<td>part-time matriculated</td>
<td>$170/equated credit</td>
<td>$360/equated credit</td>
</tr>
<tr>
<td>non-degree</td>
<td>$250/equated credit</td>
<td>$530/equated credit</td>
</tr>
</tbody>
</table>

*Tuition is subject to change without prior notice by the CUNY Board of Trustees.

Tuition bills may be paid with a credit card: MasterCard or Visa.
The last date for submitting documentation for a residency status change for tuition billing purposes is the last day of final examinations (see the academic calendar in the Schedule of Classes).

**Matriculated Status**

If a student’s matriculation status changes on or after the first day of classes, the lower matriculation tuition charge will not be effective until the next semester’s registration. No refunds will be issued for the semester in which the reclassification occurs. Students who have satisfied their baccalaureate degree requirements (graduated) and wish to take additional credits beyond the degree, will automatically be coded non-degree and charged the higher non-degree rate per credit, unless they have filed for a second undergraduate degree in the Registrar’s Office by the last business day before the first day of classes.

**Non-Instructional Fees***

**Student Activity Fee**
The Student Activity Fee is billed to all students at the following rate:
full-time students: $74.00 part-time students: $48.00
Fees include a $4.00 contribution to the New York Public Interest Research Group (refundable through NYPIRG office) and an 85-cent University Student Government fee. Non-instructional fees are non-refundable.

**Miscellaneous Fees and Charges**

<table>
<thead>
<tr>
<th>Fee</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated Service Fee</td>
<td>$15</td>
</tr>
<tr>
<td>full-time students:</td>
<td>$75</td>
</tr>
<tr>
<td>part-time students:</td>
<td>$37.50</td>
</tr>
<tr>
<td>Technology Fee</td>
<td>$65</td>
</tr>
<tr>
<td>payable upon filing application for admission or at the time of initial registration at the College</td>
<td></td>
</tr>
<tr>
<td>$125</td>
<td>graduate</td>
</tr>
<tr>
<td>$70</td>
<td>undergraduate transfer</td>
</tr>
<tr>
<td>Readmission</td>
<td>$10</td>
</tr>
<tr>
<td>payable upon registration after an absence from the College of one or more semesters</td>
<td></td>
</tr>
<tr>
<td>Program Change</td>
<td>$18</td>
</tr>
<tr>
<td>Senior Citizens</td>
<td>$65</td>
</tr>
<tr>
<td>Cooperating Teacher Waiver</td>
<td>$25</td>
</tr>
<tr>
<td>Late Registration</td>
<td>$25</td>
</tr>
<tr>
<td>charged after the specified registration period or bill due date</td>
<td></td>
</tr>
<tr>
<td>CUNY Accelerated Study Fee for credits in excess of 18 (resident students only):</td>
<td></td>
</tr>
<tr>
<td>less than or equal to two credits</td>
<td>$100</td>
</tr>
<tr>
<td>greater than two but less than or equal to four credits</td>
<td>$230</td>
</tr>
<tr>
<td>greater than four but less than or equal to six credits</td>
<td>$460</td>
</tr>
<tr>
<td>greater than six credits</td>
<td>$690</td>
</tr>
<tr>
<td>Late Payment</td>
<td>$25</td>
</tr>
<tr>
<td>Transcript</td>
<td>$7</td>
</tr>
<tr>
<td>each (except for copies going to other CUNY colleges for which there is no charge)</td>
<td></td>
</tr>
<tr>
<td>Payment Reprocessing</td>
<td>$15</td>
</tr>
<tr>
<td>for bad checks</td>
<td>$5</td>
</tr>
<tr>
<td>Duplicate Bill</td>
<td>$5</td>
</tr>
<tr>
<td>Duplicate Diploma</td>
<td>$15</td>
</tr>
<tr>
<td>Duplicate I.D. Card</td>
<td>$5</td>
</tr>
<tr>
<td>Special Examination</td>
<td>$25</td>
</tr>
<tr>
<td>each</td>
<td></td>
</tr>
</tbody>
</table>

*Fees are subject to change without prior notice by the CUNY Board of Trustees.

**Materials Charges**

Special materials charges of $10 or more are required in some courses. Details may be found in each semester’s Schedule of Classes. Materials charges are not refundable.

**Library Fines**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overdue books:</td>
<td>General circulation: 10 cents per day, including days on which the Library is closed, to a maximum of the current price of the item.</td>
</tr>
<tr>
<td>Reserve items:</td>
<td>$1.20 per overdue hour to a maximum of the current price of the item.</td>
</tr>
<tr>
<td>Damaged book:</td>
<td>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.</td>
</tr>
<tr>
<td>Lost item:</td>
<td>Borrower must pay a $10 processing charge in addition to the current price of the item.</td>
</tr>
</tbody>
</table>
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 withdrawals, 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 and the CUNY accelerated study fee; and withdrawal from the College in order to register at another unit of The City University during the same semester allows a 100 percent refund of tuition and the CUNY accelerated study fee. Information about refunds for withdrawal under other circumstances is shown in the Academic Calendar printed in the Schedule of Classes each semester. Class non-attendance, informing the instructor of withdrawal, or altering the bill to indicate intention to drop a course DOES NOT constitute an official withdrawal. If a portion of the tuition has been paid with federal financial aid funds, that portion of any tuition refund is returned to the appropriate financial aid program.

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 Financial Aid.

Return of Title IV Funds

Title IV (Pell, SEOG, Direct, and Perkins Loans) recipients who withdraw from all courses, officially or unofficially, are subject to a calculation to determine earned Federal Financial Aid. This calculation may require a payment toward tuition and fees that previously were determined to have been satisfied.

Medical Withdrawals

Medical withdrawals, which must include documentation from a physician, should be addressed to the College Health Center. Medical withdrawals are subject to the regular College refund policy. See the Schedule of Classes for more details.
Application Procedures and Deadlines

**Obtain/Use a Federal PIN Number @ www.pin.ed.gov**

Students/spouses and parents should use a federal PIN number to sign the FAFSA (Free Application for Federal Student Aid) and TAP (Tuition Assistance Program) applications. To obtain a PIN number or find out what a previously issued PIN number is, sign onto www.pin.ed.gov. Applicants will receive a PIN number by email in five to seven days or a PIN number will be mailed in nine to 12 days.

**College Codes**

CSI's FAFSA college code is 002698 and the TAP college code is 1417.

**Apply on the Web @ www.fafsa.ed.gov**

Complete the FAFSA and TAP applications online at www.fafsa.ed.gov. When you receive your confirmation after submitting your FAFSA, you will see a paragraph directly below with the heading NY STATE RESIDENTS. Use the hyperlink immediately to get to the Web TAP application. Most of the answers will be filled in with your federal data. Review, revise, and answer any unanswered questions. Submit your form electronically when you are satisfied that the application is complete. You have now applied for federal and state aid.

**CSI Invites You to Use Our Application Lab**

CSI has created a Student Service Center where prospective and current students may make appointments to file for federal and state financial aid on the Web by calling 1.718.982.2601. Remember to bring financial documents, such as federal and state tax returns and information about any income not listed on tax returns. These documents will make it easier to file. The Student Service Center is located in the North Administration Building (2A), Room 407.

**Transfer Students**

Follow the application steps listed above to apply for federal and state financial aid. If you are currently receiving financial aid at another college or university, call the Federal Student Aid Information Center at 1.800.433.3243 and request a duplicate SAR (Student Aid Report). Submit this SAR to the Student Financial Aid Office and request that a TAP change form be sent to you.

**Priority Deadlines**

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

**Withdrawing from Courses May Affect Your Financial Aid**

There are immediate and long-term financial aid consequences when you begin a semester and later withdraw from some or all courses. Review the Federal Satisfactory Academic Progress Guidelines and the TAP/APTS Progress-Pursuit Chart, both of which follow this section, to learn more about the academic side of financial aid.

**Special Information for Recipients of Federal Student Financial Assistance**

Students who withdraw from all classes, either officially or unofficially, will have their records reviewed to determine if the federal aid disbursed to them exceeds the amount they were entitled to receive. Overpayments will be billed to the student. Failure to repay these overpayments within 30 days will result in the College withholding all academic privileges, and the overpayment will be reported to the National Student Loan Data System (NSLDS). This system will withhold all future federal aid until the overpayment is resolved.

**Some Financial Aid Is Taxable**

Federal tax regulations now require that students report some grants, scholarships, and fellowships to the Internal Revenue Service as taxable income. In addition, Federal Work Study wages are taxable. Recipients of funds from these sources are strongly urged to consult their tax advisor or the Internal Revenue Service to determine the impact of such grants on their personal tax circumstances. All students are urged to maintain accurate records of financial aid received and receipts for expenses related to attendance at college, such as books, supplies, tuition, and fees.

**Federal Satisfactory Academic Progress**

In order to make satisfactory academic progress toward a degree, for purposes of receipt of Title IV Federal Student Assistance, an undergraduate student must achieve at least the GPA required for probationary status at the institution: after two years of enrollment at the college, have at least a C average, or its equivalent, or academic standing consistent with the requirements for graduation; and have accumulated credits toward the degree according to the following standards:
Eligibility: To be eligible for any of the federal financial aid programs, a student must:

1. be a U.S. citizen, or
2. be an eligible non-citizen, and
3. be matriculated, and
4. take at least six equated credits a semester, unless otherwise noted below, and
5. not be in default of a Federal Loan (Perkins, Stafford or Direct Loan) or have completed the required process to obtain “Renewed Eligibility” and
6. not owe a refund on any Title IV Grant, and
7. be making satisfactory progress toward a degree, and
8. provide proof of high school graduation or its equivalent.

Federal Programs

Federal PELL Grant Program: For eligible students, the grant will vary depending on whether the student is less than half-time, half-time, three-quarter-time, or full-time. A student must be an undergraduate who has not already earned a bachelor's degree. A student receives half of the Federal Pell Grant in the fall semester and half in the spring semester. College seniors who will graduate at the end of the year will receive assistance for the two academic terms in the academic year of graduation and will be evaluated for future eligibility at the end of the spring term against the appropriate satisfactory progress standard for the degree program in which the student is enrolled. If a student is readmitted after less than one year of non-enrollment, the academic record will be evaluated for satisfactory academic progress under these standards as the record stood at the end of the last term of attendance.

Federal Supplemental Educational Opportunity Grant Program: Grants are targeted to Federal PELL Grant recipients. Students who already have a bachelor's degree are ineligible.

Federal Work-Study Program: This program provides on- and off-campus employment opportunities for needy students. At the time this Catalog was written, on-campus wage rates were $7.00 per hour for undergraduate and $9.00 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. A student pursuing a second undergraduate degree is not precluded from the Federal Work-Study Program.

Federal Perkins Loan Program: This is a loan program and funds received under this program MUST be repaid. All students receiving a Federal Perkins Loan must attend a Federal Perkins Pre-loan conference and take and pass the CUNY 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 report to the Office of Student Financial Aid and request an Exit Interview eight weeks 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 equated credits). Students should be aware that federal regulations require the University to report the disbursement/default of a Federal Perkins Loan to credit bureaus. Deferments and cancellations are available on these loans in certain circumstances and are discussed in detail at the Exit Interview. Federal Perkins Loans are awarded to students by the University. If a student defaults on a loan, all future College services will be withheld.

Federal Direct Loan: The elements listed below are common to all the Federal Direct Loan programs unless otherwise noted:
1. The applications may be obtained from the Financial Aid Office or at a Federal Direct Pre-loan session, for first-time borrowers.

2. Promissory notes must be completed, signed, and returned to the processor before any loan funds are credited to the tuition bill or disbursed to the student.

3. These are loans and must be repaid.

4. For the first loan, a pre-loan interview is required. This can be done on the Web, at [www.ed.gov/offices/OPE/DirectLoan/](http://www.ed.gov/offices/OPE/DirectLoan/).

5. Prior to graduation, transferring to another college, leaving this College for any reason, or taking fewer than six equated credits per term, students must request an Exit Interview.

6. Students must immediately notify the Financial Aid Office and the Federal Direct Loan Service if their address changes.

7. If the College is notified that a student has defaulted on a loan, all College services will be withheld.

Federal Direct Subsidized Loans: FAFSA data must be received before a Federal Direct Loan can be processed. Undergraduate students who:

1. have not completed the freshman year may borrow $2,625 annually, not to exceed need (independent students may borrow up to an additional $4,000 in unsubsidized funds);
2. are in their sophomore year may borrow $3,500 annually, not to exceed need (independent students may borrow up to an additional $4,000 in unsubsidized funds);
3. are in their junior or senior year may borrow $5,500 annually, not to exceed need (independent students may borrow up to an additional $5,000 in unsubsidized funds);
4. the aggregate undergraduate loan limit is $23,000.

Federal Direct Unsubsidized Loans: A student applicant must establish his/her eligibility or ineligibility for the Federal Direct Subsidized Loan before applying for the Federal Direct Unsubsidized Loan. A student may borrow an Unsubsidized Loan, using the same schedule listed under Federal Direct Subsidized Loans, in the amount he/she was ineligible to receive as a Federal Direct Subsidized Loan. For example, a student borrower who has not completed his/her first year and has been determined to be eligible for $1,500 under the Federal Direct Subsidized Loan may borrow the remaining $1,125 from the Federal Direct Unsubsidized Loan if the College budget permits. The difference between these programs is that no interest is due on the Federal Direct Subsidized Loan while the student remains in college in an eligible status. The student pays the interest on the Federal Direct Unsubsidized Loan from the day the loan is disbursed. The student may either pay the interest while in school or capitalize the interest, adding it to the principal each month.

The maximum yearly amount a student can borrow for Federal Direct Subsidized and Direct Unsubsidized Stafford Loans is:

<table>
<thead>
<tr>
<th></th>
<th>Dependent Student</th>
<th>Independent Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st-year undergraduate</td>
<td>$2,625</td>
<td>$6,625</td>
</tr>
<tr>
<td>2nd-year undergraduate</td>
<td>3,500</td>
<td>7,500</td>
</tr>
<tr>
<td>3rd- &amp; 4th-year undergraduate</td>
<td>5,500</td>
<td>10,500</td>
</tr>
</tbody>
</table>

Federal Direct PLUS Loans: Parents of dependent students can borrow Federal Direct PLUS Loans to pay for their children's education. To apply, the students' parents must complete a separate application available at the Office of Student Financial Aid. Before receiving any loan funds, parents will receive promissory notes that must be completed, endorsed, and returned to the processor. The College will verify that the student for whom the parent is borrowing the money meets all applicable loan requirements. Parents are not required to attend a Pre-loan or Exit Interview.

Federal Aid to Native Americans: For information regarding this program, interested students should contact the Office of Student Financial Aid.

New York State Programs

The State of New York offers a number of grant programs that provide assistance to eligible students. To apply, the student must complete the Free Application for Federal Student Aid (FAFSA), which is available at the Office of Student Financial Aid. In addition, the student must complete the TAP/APTS Application and CUNY Supplement, which will be mailed to the student once the FAFSA data has been received by the University. The criteria listed below are common to all State Aid programs listed unless otherwise noted.

A student should:

1. be a New York State resident for the year preceding the award, and
2. be a U.S. citizen or permanent resident alien or paroled refugee, and
3. be a matriculated student, and
4. meet the TAP Progress and Pursuit guidelines, and
5. not be in default on a Federal Loan or if in default, have completed the required process to obtain “Renewed Eligibility,” and
6. be economically eligible based on current New York State criteria.

**Tuition Assistance Program (TAP):** This program is designed to provide tuition grants for full-time students. These grants are awarded by the New York State Higher Education Services Corporation. Students must meet the TAP Progress and Pursuit guidelines prior to the start of each term. These guidelines are also published in the *Schedule of Classes* each semester.

If a student does not meet either the Progress or Pursuit standard(s), he/she loses his/her TAP eligibility. The Registrar will notify a student if he/she fails to meet these standards and outline how he/she may apply for a waiver. The Committee on Course and Standing reviews all appeals. Only one waiver may be issued during a student’s undergraduate years.

Conditions/Restrictions for the waiver are:
1. Student must have a good overall record with academic difficulties concentrated in one term.
2. The appeal must be based on circumstances outside the College, such as a car accident or an eviction.
3. The reason must be extenuating, extraordinary, or unusual. Normal family responsibilities, work, and fear of failing a class do not meet this standard.
4. The student must provide documentation to support the waiver request.

TAP will not pay for a student to repeat a course to get a better passing grade unless the College requires that the course be repeated. Students who take several remedial courses that carry no credits must make sure that they also take at least three degree credits for their first TAP and six degree credits for all other TAP awards. See the TAP/APTS Progress-Pursuit Chart to determine the number of degree credits that must be accumulated before a TAP/APTS award can be credited to the tuition bill.

**Aid for Part-Time Study (APTS):** Undergraduate students enrolled for at least six but not more than 11 equated credits are considered for this award at CUNY. Notification is first provided on the semester bill as a credit against the tuition charge. The award is determined each semester and may vary from semester to semester, based on usage throughout the entire University. This award uses up a portion of a student’s TAP eligibility.

**Part-Time TAP:** At the time this *Catalog* was written, no decision had been made to fund the Part-Time TAP program for CUNY. If funding is approved, for this program a part-time student is defined as one who:
1. is enrolled as a first-time freshman during the 1998-99 academic year or thereafter at CUNY, and
2. has earned at least 24 credits at CUNY by the time of the award, and
3. has a cumulative grade point average of at least 2.00, and
4. is enrolled for at least six but less than 12 credits per semester.

Awards will be calculated as a percentage of the full-time award for which the student would be eligible if enrolled full-time.

**Vietnam Veteran Tuition Awards:** Vietnam Veterans Tuition Awards provide up to $500 per semester (full-time attendance) or $250 per semester (part-time attendance) to Vietnam veterans enrolled in an undergraduate program at a degree-granting institution in New York State. Eligibility:
1. residency in New York State on April 20, 1984, or at the time of entry into service and resumption of residency by September 1, 1987;
2. service in the U.S. Armed Forces in Indochina between January 1, 1963 and May 7, 1975;
3. discharge from the U.S. Armed Forces under other than dishonorable conditions;
4. enrolled in an approved undergraduate program in a degree-granting institution in New York State;
5. files an application for TAP and PELL.

If a TAP award is also received, the combined awards can be no greater than tuition. Where the combined awards exceed tuition, the TAP award will be reduced accordingly.

**Search for Education, Elevation, and Knowledge (SEEK):** Students wishing to enter the SEEK program must meet family income and academic guidelines. When filling out the application for admission, the student should indicate a desire to enter the SEEK program. Applicants will be contacted by the College’s SEEK Office and invited to a SEEK financial aid workshop where the SEEK program will be explained in detail. At this workshop, applicants will be guided through the financial aid applications and asked to supply required documentation. Financial aid reserved for students in the SEEK program is in the form of grants for stipends, to purchase books, and to pay the Student Activity Fee. To be eligible for SEEK financial aid, the student must apply for PELL using the Free Application for Federal Student Aid form (FAFSA) and TAP using the TAP/APTS Application and CUNY Supplement.

**Other New York State Programs:** Regents Nursing Scholarship, Regents Award for Children of Deceased or Disabled Veterans, State Aid to Native Americans. Information on these programs is available from the New York State Higher Education Services Corporation, 99 Washington Avenue, Albany, NY 12255.
TAP/APTS PROGRESS-PURSUIT CHART

1). Before Being Certified for This Payment

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2). To Meet Program Pursuit Standards, a student must have completed this percentage of course 12 eq. cr. if full-time, or this percentage of entire course load if part-time

|      | 0   | 50% | 50% | 75% | 75%   | 100%  | 100%  | 100%  | 100%  | 100%   |

3). To Meet Academic Progress Guidelines, a student must have accrued at least this many credits

|      | 0   | 0   | 6   | 18  | 31    | 45    | 60    | 75    | 90    | 105    |

4). With at least this Grade Point Average

|      | 0   | 0   | 1.00| 1.20| 2.0   | 2.0   | 2.0*  | 2.0*  | 2.0*  | 2.0*   |

*Students in associate's degree programs must have a 2.0 grade point average at the point of graduation.

**A student who has received two academic years of State-funded financial aid including TAP (four semesters/payments) must have a cumulative C average (GPA=2.00) in order to continue to receive payments.
New York City Program

**Peter F. Vallone Academic Scholarship:** Funding for this scholarship is dependent each year on continued funding in the New York City budget.

To receive a Peter F. Vallone Academic Scholarship students must:
1. have a high school college academic average of B or above, and
2. file the FAFSA each year, and
3. enroll initially in CUNY within 12 months of high school graduation, and
4. once enrolled, maintain continuous full-time (12 credits or more) enrollment in CUNY, excluding summer, and
5. in the first semester, enroll and attend classes for 12 credits of which six credits must meet the requirements of the degree, and
6. in the second and all subsequent semesters, enroll and attend classes for at least 12 credits that count toward the degree, and
7. maintain at least a 3.0 cumulative average.

Appeals process: Students who wish to file an appeal may do so at the Office of the Vice President for Student Affairs in the South Administration Building (1A), Room 301.

Payment process: Peter F. Vallone Academic Scholarships are used as a credit against students’ tuition and fee charges. If any/all of the award remains after these charges are satisfied, the balance will be paid by check to the student through the University Financial Aid Payroll System.

Award Renewal Process: To renew the Peter F. Vallone Academic Scholarship, the student must file a Renewal FAFSA each spring by the priority deadline of March 31. CSI encourages all students to use their Federal PIN number to file on the Web. Students may call 1.718.982.2601 to obtain an appointment in the Financial Aid Student Service Center in the North Administration Building (2A), Room 407, or may access the FAFSA Application Website at www.fafsa.ed.gov. Students who wish to file a paper FAFSA may do so.
The scholarship program at the College of Staten Island recognizes academic excellence and college or community service. In addition to scholarships offered directly by the College, the CSI Foundation, and departments and associations of the College, memorial scholarships have been endowed through the generosity of many individuals and organizations who value higher education. Scholarships support, in varying ways, the education of the men and women of our community.

Eligibility: General Standards

Scholarship awards generally require a minimum grade point average of 3.5. College and/or community service is also generally required. Financial need is required only when indicated. Scholarships are awarded to students enrolled for 12 or more credits at all levels of study—first-year students, sophomores, juniors, seniors. Some scholarships may be available for part-time undergraduate and graduate students.

Requirements

- Registered for at least 12 credits (matriculated), with the exception of a few specialized scholarships for part-time and graduate students.
- Academic excellence (GPA 3.5 or above).
- School and/or community service.
- Incoming students: high school average of 90% or above.

Relationship to Financial Aid

In most instances, scholarship awards do not affect TAP awards. New York State TAP regulations require that tuition-based scholarships be used as a resource in determining eligibility for a TAP award. Because most of the awards offered by CSI are not designated as tuition scholarships, they will have no effect on TAP awards. Only awards specifically designated as tuition awards, such as the Williamson Scholarship, affect eligibility for TAP. Students who wish additional information on the relationship between these awards and financial aid should be in touch with the Office of Student Financial Assistance.

How to Apply

Scholarship applicants must be current students at the College of Staten Island or must have applied for admission. Application forms and information about scholarships are available from The Career and Scholarship Center and from department and student services offices. In the high schools, application forms are available from the College Adviser. The scholarship application can also be found online by visiting www.csi.cuny.edu/career/ and clicking on the Scholarships and Awards option on the left toolbar.

Notification to Recipients

Applicants are notified by the Scholarship Committee. An awards presentation ceremony is held every year for scholars and their family and friends.

Other Awards

- Study Abroad: Scholarships and awards for study abroad are available through the Center for International Service. CSI students are also eligible for Study/Travel Opportunities for CUNY Students grants, a CUNY program promoting short-term (summer or January intersession) study abroad, and for scholarships offered by the College Consortium for International Studies. Information is available from the Center for International Service.
- Graduate Students: Assistance is available in the form of financial aid and assistantships to selected students in Master's degree programs in Adult Health Nursing, Gerontological Nursing, Biology, Cinema and Media Studies, Computer Science, Education, English, Environmental Science, History, Liberal Studies, and Physical Therapy. Graduate fellowships and assistantships are available to qualified students enrolled in doctoral programs offered in conjunction with the Graduate School. See the department chairperson or the graduate program coordinator for further information.
- Commencement Awards: Awards and prizes have been established by the faculty to recognize the exceptional achievements of graduating students. Information on commencement awards is available from the Office of the Vice President for Student Affairs and from department chairpersons.
Divisions and Departments

Interrelationships between fields of knowledge are emphasized by grouping academic departments together within the larger categories of humanities and social sciences or science and technology. The Division of Humanities and Social Sciences includes the following departments: Business; Education; English, Speech, and World Literature; History; Media Culture; Modern Languages; Performing and Creative Arts; Political Science, Economics, and Philosophy; Psychology; and Sociology, Anthropology, and Social Work. The Division of Science and Technology includes the following departments: Biology, Chemistry, Computer Science, Engineering Science and Physics, Mathematics, and Nursing.

Offices of the division deans are located in the South Administration Building (1A): Dean Francisco Soto, Division of Humanities and Social Sciences, and Dean Gail Simmons, Division of Science and Technology. Offices of department chairpersons and faculty are located in department buildings.

Department of Biology

Biological Sciences/Chemical Sciences Building (6S) - South Academic Quadrangle

Richard Veit, Chairperson and Professor


The department offers the Bachelor's degree in Biology, Biology with an option in Bioinformatics, and in Physician Assistant; a combined Bachelor of Science/Master of Science degree in Physical Therapy; a Master of Science degree in Biology; and the Associate's degree in Medical Laboratory Technology. A Doctoral degree in Physical Therapy has been approved by the CUNY Board of Trustees to begin spring 2006. Please contact the coordinator of Physical Therapy for further information. The department participates in the joint program for the Bachelor's degree in Biochemistry and a minor in Biochemistry, and in the interdisciplinary program leading to the Bachelor's degree in Medical Technology. The department participates in the University's Doctoral program in Biology (subprogram in Neuroscience). The Medical Technology program utilizes hospital affiliations accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS); the Physician Assistant program is accredited by the Commission on Accreditation of Allied Health Education; and the Physical Therapy program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association.

The BS/MS program in Physical Therapy is coordinated by Professor Jeffrey Rothman. The MS program in Biology is coordinated by Professor Richard Veit. Associate Professor Elena McCoy serves as chair of the advisory committee for pre-medicine students.

Department of Business

Business Building (3N) - North Academic Quadrangle

Laura Nowak, Chairperson and Professor


The department offers the Bachelor of Science degree in Accounting and in Business with concentrations in Finance, International Business, Management, and Marketing; and the Bachelor of Science degree in Information Systems in collaboration with the Department of Computer Science. In cooperation with the Economics faculty, a Business Concentration is offered within the Bachelor's degree program in Economics. The BS degree program in Accounting prepares students for careers in accounting and advanced study toward the CPA examination. The CPA track is New York State accredited, permitting graduates entry to the examination upon completion of 150 credits. The Associate's degree is offered with options in Accounting, Finance, Information Systems, International Business, Management, and Marketing. Graduates with an AAS degree may enter the job market directly or continue to study toward the bachelor's degree, and should consult an adviser and plan their programs accordingly.

Department of Chemistry

Biological Sciences/Chemical Sciences Building (6S) - South Academic Quadrangle

John Olsen, Chairperson and Associate Professor

Distinguished Professor: Fred Naider

Professors: Probal Banerjee, Ruth Stark, Nan-Loh Yang. Associate Professors: Bhunu Chauhan, Qiao-Sheng Hu, Chwen-Yang Shew,
The department offers the Bachelor's degree in Chemistry and participates in the joint program leading to the Bachelor's degree in Biochemistry. Minors are offered in Chemistry and Biochemistry. The department also participates in the interdisciplinary program leading to the Bachelor's degree in Medical Technology. The University's Doctoral program in Polymer Chemistry is coordinated by Professor Nan-Loh Yang.

Department of Computer Science

The department offers programs leading to the Bachelor's and Master's degrees in Computer Science. The Bachelor's degree in Computer Science/Mathematics is offered jointly with the Department of Mathematics; the Bachelor's degree in Information Systems is offered jointly with the Department of Business; and the department participates in the University doctoral program. Baccalaureate students majoring in other disciplines may also minor in Computer Science. The department offers an Associate's degree program in Computer Technology that provides sound career preparation as well as a solid foundation for continued study in the field. Faculty in the department participate with the Interdisciplinary Coordinating Committee for the Associate in Applied Science degree program in Electrical Engineering Technology. The bachelor's degree program is accredited by the Computer Science Accreditation Commission (CSAC) of the Computing Sciences Accreditation Board, Inc. Associate Professor Miriam Tausner is coordinator of the master's degree program.

Department of Education

The department provides initial preparation and graduate programs for teaching at the preschool level and in elementary and secondary schools, and graduate programs in Childhood Education, Adolescence Education, Special Education, and Education Supervision and Administration.

Department of Engineering Science and Physics

The department offers programs leading to the Bachelor's degree in Engineering Science and in Physics and participates in the University Doctoral program in Physics. The Associate's degree is offered in Engineering Science, and faculty in the department participate with the Interdisciplinary Coordinating Committee for the Associate in Applied Science degree program in Electrical Engineering Technology. Courses in astronomy, geology, and integrated science are offered by the department, and faculty in the department direct the programs and research at the Astrophysical Observatory. The BS in Engineering Science is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET), and the Electrical Engineering Technology program is accredited by the Technology Accrediting Commission of ABET. The interdisciplinary Master's degree program in Environmental Science is coordinated by Professor Alfred Levine.
Department of English, Speech, and World Literature

Department of English, Speech, and World Literature/Modern Languages Building (2S) - South Academic Quadrangle
Janet Dudley, Chairperson and Associate Professor

The department offers the Bachelor's degree in English, with options in Literature, Writing, and Linguistics; and the Master's degree. The department offers non-credit courses in reading and writing for both native and non-native speakers of English. A general course of study provides students in career programs and in baccalaureate programs with essentials in the important areas of writing and literature. A more advanced series of courses is available for students interested in obtaining a deeper and broader understanding of the discipline, including those students who will pursue English as a major. Students with majors in other disciplines may minor in English, or English with a literature, linguistics, or writing option. The department offers a program in Communications jointly with the faculty of the Department of Media Culture and programs in Dramatic Arts and Dramatic Literature jointly with faculty of the Department of Performing and Creative Arts. The Master's degree program is coordinated by Professor Richard Currie.

Department of History

History/Political Science, Economics, and Philosophy Building (2N) - North Academic Quadrangle
Howard Weiner, Chairperson and Associate Professor

The department offers a Bachelor's degree and a Master's degree in History. Its courses combine the traditional function of the scholarly examination of the past for its value in general education with the utilitarian concern for preparing students with the basic skills to enable them to live more meaningfully. It seeks to train future historians, to update the teaching of history by secondary school teachers, and to provide opportunities for lifelong education. History may also be taken as a minor. Associate Professor Richard Lufrano coordinates the Master's degree program in History and Professor David Traboulay coordinates the interdisciplinary Master's degree program in Liberal Studies.

Department of the Library

Library (1L) - South Academic Quadrangle
Wilma Jones, Chief Librarian and Associate Professor

The Library supports the entire range of academic programs at the College through its collections, periodical subscriptions, and microforms. Computer facilities for database searching provide access to City University and national catalogs. The Library's own resources are supplemented by an array of modern networking arrangements at regional, state, and national levels. The Library is the center for the implementation of multimedia programs in pedagogy.

Department of Mathematics

Mathematics Building (1S) - South Academic Quadrangle
Arundhati Raychaudhuri, Chairperson and Professor

The department offers the Bachelor of Science degree in Mathematics and the Bachelor of Science degree in Computer Science-Mathematics jointly with the Department of Computer Science. A minor in Mathematics is available for students with majors in other disciplines.
Department of Media Culture

Center for the Arts (1P)
Edward Miller, Chairperson and Associate Professor

The department offers the Bachelor's degrees in Cinema Studies and in Communications and a Master's degree program in Cinema and Media Studies. Programs in this department focus on the principles of media, interactions with the media, and the cultures dependent upon communications technologies. The department serves students interested in the history and theory of film and various electronic and computer-related media, and in producing work with these media. The program in Communications is offered in collaboration with the Department of English. A minor is also awarded in the baccalaureate programs. The Master's degree program in Cinema and Media Studies is coordinated by Assistant Professor David Gerstner.

Department of Modern Languages

English, Speech, World Literature/Modern Languages Building (2S) - South Academic Quadrangle
Kathryn Talarico, Chairperson and Professor

The department offers the Bachelor's degree in Spanish and courses in French and Italian. Minors in these languages are also offered. Courses in American Sign Language are under the aegis of the department. In addition to mastery of the language, through classroom and language laboratory work, the literature, culture, and history of the countries are studied.

Department of Nursing

Marcus Hall (5S) - South Academic Quadrangle
Mary O'Donnell, Chairperson and Associate Professor

The department offers an upper-division program leading to the Bachelor of Science degree in Nursing, a Master of Science degree program in Adult Health Nursing, and the Post-Master's Advanced Certificate in Adult Health Nursing and Gerontological Nursing. The department also offers an associate’s degree program that prepares students for the New York State Board of Nursing Examination for license as a Registered Nurse. The associate’s and bachelor's degree programs are accredited by the National League for Nursing Accrediting Commission and all programs hold New York State Certification. Health education courses and courses fulfilling the Physical Education requirement are offered by this department. Professor Margaret Lunney is coordinator of the Master's program in Adult Health Nursing.

Department of Performing and Creative Arts

Center for the Arts (1P)
Sylvia Kahan, Chairperson and Associate Professor

The department offers Bachelor's degrees in Art, Dramatic Arts, and Music; a concentration in Photography with the Art major; a concentration in Electrical Technology with the BS in Music; and a Dramatic Literature concentration jointly with the Department of English. Students may minor in Art, Dance, Dramatic Arts, and Music; a program for Psychology majors interested in dance therapy provides for a minor in Dance.

The department serves the needs of students who wish to pursue both the practice and the theory of the arts. In addition to preparing students majoring in the arts and those planning to continue in graduate school, the department's courses meet the needs and interests of students in the liberal arts and sciences and in career programs, and foster the role of the arts within the framework of a liberal education.
### Department of Political Science, Economics, and Philosophy

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<tr>
<th>History/Political Science, Economics, and Philosophy Building (2N) - North Academic Quadrangle</th>
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<tr>
<td>Vasilios Petratos, Chairperson and Associate Professor</td>
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<tr>
<td>The department offers Bachelor's degrees in Economics, Political Science, and Philosophy; and it offers Bachelor's degree programs in Economics with a Business specialization and a Finance specialization jointly with the Department of Business. A dual major is offered in Philosophy and Political Science. Minors are offered in Economics, Philosophy, Political Science, and Public Administration; and geography and legal studies courses are offered by this department. Courses meet the needs of students in a variety of programs in the liberal arts and sciences, and the department's programs provide a solid background for a number of careers as well as for graduate or professional school. Lecturer Jonathan McFall serves as the adviser to students planning to apply to law school.</td>
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### Department of Psychology

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<th>Psychology/Sociology, Anthropology, and Social Work Building (4S) - South Academic Quadrangle</th>
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<tr>
<td>Wallace Orlowsky, Chairperson and Associate Professor</td>
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<tr>
<td>The department offers the Bachelor's degree and a minor in Psychology. Students interested in dance therapy may minor in a program offered with the Department of Performing and Creative Arts. The department also participates in the College's Master's program in Neuroscience.</td>
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### Department of Sociology, Anthropology, and Social Work

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<th>Psychology/Sociology, Anthropology, and Social Work Building (4S) - South Academic Quadrangle</th>
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<td>Jacqueline LeBlanc, Chairperson</td>
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<tr>
<td>The department offers a combined Bachelor's degree in Sociology/Anthropology, and the Bachelor's degree in Social Work. A minor is offered in Sociology. The department also participates in interdisciplinary major/minors in Disability Studies; Liberal Studies (MA); Science, Letters, and Society; and Women’s Studies.</td>
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### Department of Student Services

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<td>Carol Jackson, Chairperson, Professor, and Vice President for Student Affairs</td>
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<tr>
<td>The department offers courses in new student orientation, career development, and personal growth and development. The SEEK program and Counseling Center are located in the South Administration Building.</td>
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Division of Student Affairs
Vice President Carol Jackson, South Administration Building (1A), Room 301
Associate Dean, Michael R. Daniels

The Division of Student Affairs is concerned with all aspects of student life at the College and provides a comprehensive program of support services that includes orientation, counseling, career development, job placement, and the SEEK program. The Division coordinates student recruitment and admissions, student activities, services for disabled students, the CLUE program, pluralism and diversity programming, the scholarship and student awards programs, health services, intercollegiate and intramural sports, and the Commencement exercises. Management of the Sports and Recreation Center and the Campus Center are under the auspices of the Division. The Department of Student Services offers courses in Issues in College Life, Career Development, and Personal Growth and Development, and internships.

Campus Center

The Campus Center is the focal point of extra- and co-curricular student life. It houses the Office of Student Life, the CSI Student Government, student clubs, student publications, the CSI Association Inc., and the Auxiliary Services Corporation. Such services as the Bookstore, Cafeteria, Park Café, the College Health Center, the Wellness Program, and the Peer Drop-in Center are located in the Campus Center. Lounges for entertainment and studying, a computer lab, a video game room, conference and meeting rooms, and locker rentals are available for student use. WSIA-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 1.718.982.3071.

The Career and Scholarship Center

The Center provides current students and graduates with career, internship, and placement services such as résumé referral, job fairs, the Mentor Program, the Senior Employment Referral Program, on-campus interviews, and a computer database of full- and part-time jobs, internships, and fellowships. Help is available for organizing job search campaigns, preparing résumés and cover letters, and improving interview skills. Seniors may maintain a dossier file for job referrals at the Center.

Career-related workshops are given throughout the year, and the Center maintains a library of company literature, magazines, and videotapes. The placement Webpage allows students to explore Internet links for employment opportunities with the capability of uploading résumés for employer review.

The Center staff assists with applications and preparation for fellowships, scholarships, and awards, and with writing personal essays and mission statements.

Children’s Center

The Children’s Center is sponsored by the CSI Association and provides educational childcare services for students who may be attending classes, working, participating in other school-related activities, or who need personal time. The programs for infants/toddlers and preschool children are licensed by the Bureau of Day Care of the NYC Department of Health and Mental Hygiene. The program for school-age children is registered with the School Age Division of the NYS Office of Children and Family Services. The Center is funded through the Student Activity Fee; city, state, and federal grant money; and parent fees. The Center is located in Building 2R, adjacent to the Sports and Recreation Center Building, and the telephone number is 1.718.982.3190.

Clubs, Organizations, and Publications

The CSI Student Government and the Office of Student Life charter and recognize student clubs, organizations, and publications. Any group of students with a common interest may request a charter for a student club, organization, or publication from the Student Government Office, and students may join any of the existing groups that receive a charter each year. Members of clubs associate around a broad range of interests and identifications. Approximately 40 clubs are organized by student groups with common interests rising out of academic studies, social commitments, or personal values. Sports-related clubs file for a charter initially with Student Government before applying for funding from the Intramural and Recreation Program. The telephone number is 1.718.982.3088.

College of Staten Island Association, Inc.

The College of Staten Island Association, Inc. is a non-profit corporation that administers the Student Activity Fee. The Association is governed by a board of directors comprised of six students, three administrators, three faculty, and the President or designee. The Association allocates designated portions of the Fee, traditionally applied to graduation exercises, intercollegiate athletics, intramural programs, the Children’s Center, Health and Wellness, WSIA, and the Program Development Committee.
Counseling Services

Comprehensive academic and personal counseling services are provided by professionally trained counselors to help students achieve academic success. In individual or group sessions, students are assisted in improving their study skills, choosing a curriculum compatible with their interests and career goals, and handling problems that impede their progress toward a degree. Career counseling services help students to gain a better understanding of themselves, their career options, and the world of work. Individual counseling may include testing and other assessment techniques. Information and counseling in preparation for graduate and professional schools is also provided by counselors. The Office maintains a library of information on careers and job market resources.

Disability Services

The Office of Disability Services has responsibility for providing services for students with a documented disability. 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, 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 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. The Office is located in the Center for the Arts, Room 101.

Health Services

The College Health Center, located on the main floor of the Campus Center, Room 112, is staffed by part-time nurse practitioners (funded by the Student Activity Fee) in collaboration with Staten Island University Hospital and College personnel. Nurse Practitioners and a full-time Registered Nurse are available for College physicals, emergency care, consultations, immunizations, smoking cessation, HIV/AIDS counseling and testing, contraception and pregnancy counseling, and other services. The telephone is 1.718.982.3045; TTY 1.718.982.3315.

Intercollegiate and Intramural Athletics

CSI fields women’s and men’s teams in competition throughout the East Coast, primarily in the New York/New Jersey metropolitan area. Team and individual sports include baseball, basketball, soccer, softball, swimming, tennis, and volleyball. The College is a member of the National Collegiate Athletic Association (NCAA Division III), the Eastern College Athletic Conference (ECAC), and The City University of New York Athletic Conference (CUNYAC). The intercollegiate athletic program is supported by funding from the CSI Association.

To be eligible for intercollegiate competition, a student must be matriculated as a full-time student. The following criteria must also be met:
1. Proof of good health: physician’s examination and review by CSI medical staff;
2. Academic qualification:
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<td>13-24</td>
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<tr>
<td>25-graduation</td>
<td>2.00</td>
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3. Maintenance of satisfactory progress toward completion of a bachelor’s degree.

The recreation and intramural sports program provides opportunities for all students to participate in individual and team sports, including competitive, non-competitive, and recreational.

Liberty Partnerships Program

The program is a collaborative effort of the College and the Staten Island Branch of the New York Urban League, the local school district, and community-based organizations and individuals that provides a broad range of educational and social services for high school and junior high school students who are at risk of dropping out of school.

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
New Student Orientation/College Life Unit Experience (CLUE) Program

The New Student Orientation/CLUE Office maintains up-to-date records on students’ progress toward meeting the New Student Orientation Requirement as described in the Catalog section on Degree Requirements. Students may obtain information about current and planned CLUE-certified events, programs, and activities, and may also check on their status in meeting the requirement. Two enrichment programs called CLUE Challenge and CLUE Pathways encourage students to commit themselves to a broad involvement in the out-of-the-classroom life of the College and its surrounding community. Information about orientation and the CLUE program is available at the Office, North Administration Building (2A), Room 208.

Pluralism and Diversity

The Office of Pluralism and Diversity seeks to develop in all aspects of the College’s activities a climate that fosters respect for the pluralism and diversity of American society. The Office offers programming, workshops, and training sessions on sensitivity and diversity.

Program Development Committee (PDC)

The Program Development Committee, a joint committee of the CSI Association and the CSI Student Government, is a student programming board that allocates a designated portion of the Student Activity Fee for social, cultural, and educational programs. The Committee develops programs that culturally enlighten, intellectually stimulate, and entertain. The planning and decision making process is one in which students learn many skills, especially those related to working with other students on campus-wide projects. Proposals for programs, events, and activities may be made by students and members of the College community. The telephone number is 1.718.982.2814.

Publications

Students at CSI publish a bi-weekly newspaper, The Banner; a political journal, The College Voice; a politics and literary arts magazine, Third Rail; a literary journal focusing on women’s studies, All Ways a Woman; a literary magazine, The Serpentine; and the Dolphin yearbook. Publications are funded by Student Activity Fees allocated through the Publication Board. Students interested in participating in the production of these publications as writers, photographers, editors, or layout artists are invited to visit the publications’ offices or the Office of Student Life in the Campus Center.

SEEK Program

SEEK (Search for Education, Elevation, and Knowledge) is a special program designed to provide higher education opportunity, through academic and financial support services, for eligible students. The SEEK program provides intensive remediation in basic skills, including special summer classes; special testing, guidance, and counseling; supplemental instruction and tutoring; and financial assistance for students accepted to the program.

Sports and Recreation Center

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.

Student Life

The Office of Student Life assists and advises students involved in student organizations, governance committees, and campus activities to develop a rich and diverse co-curricular campus life. The Student Life team involves also staff from the CSI Association, the Student Government, and the Program Development Committee. The Office sponsors leadership programs for chartered clubs and the general student population and is responsible for the operations of the Campus Center. The telephone number is 1.718.982.3088.

Student Government

The College of Staten Island Student Government is composed of 20 representatives (senators) elected by the student body each spring semester. Organized into commissions with a specific mandate (e.g., Academic and Curricular Affairs; Clubs; Elections; Finance; Part-time, Evening, and Weekend Students; Publications; Student Center; and Student Services), the Student Government represents student interests to the administration and faculty of the College and serves as an advocate for student services. Through its commissions, the Student Government charters and funds all student clubs and associations, administers student elections, allocates a designated portion of the Student
Activity Fee, advocates for the special needs of students, and advises the College on the utilization of Campus Center space to serve students in their co-curricular activities. Student Government senators serve on planning and decision making committees with faculty and members of the CSI administration. The telephone number is 1.718.982.3082.

Wellness Program

The Wellness Program Office presents an integrated array of special events, seminars and workshops, and counseling services with a common goal of educating the College community about wellness issues. Professional counseling and intervention services concerning substance abuse, HIV/AIDS, domestic violence, stress management, date rape, and other wellness issues are coordinated by this Office. A Peer Drop-In Center is staffed by trained Peer Educators who meet with students and provide information.

WSIA - 88.9 FM

WSIA, the only radio station on Staten Island, is licensed to the College. The station is staffed by student volunteers working under the guidance of professional broadcasters and broadcasts at 88.9 FM. The state-of-the-art studios, located in the Campus Center, include a digital recording facility, music studio, computerized news operation, and a 40,000-volume record and CD collection. Station programming emphasizes diverse and creative music, local news and public affairs, and Staten Island sports. Students interested in working as DJs, newscasters, sportscasters, and engineers should visit the studio in Room 106 of the Campus Center and fill out an application. The telephone number is 1.718.982.3050.

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 1.718.982.4080, visit cix.csi.cuny.edu and click on the appropriate links, or visit www.csi.cuny.edu/currentstudents and select the link “Look up CSI’s email & Login ID to access CSI’s computers.”
**Academic Advisement**

Director, Dr. Marianne B. Carlin, South Administration Building (1A), Room 101

The Office of Academic Advisement serves new students as well as those who have not declared a major. Advisement is provided to students in groups and individually. The Office staff also provides students with individualized degree program plans each semester to guide them in their course selections.

**Adults Returning to College Program (ARC)**

Coordinator, Ms. Donna Fauci, North Administration Building (2A), Room 101

The College offers a gateway program for adults returning to college after a hiatus or entering college for the first time. The ARC program provides personalized, comprehensive support services from pre-admission counseling to registration in ARC classes as well as other college courses. The goals of the ARC program are to ease the process of enrolling at the College and to facilitate the transition of adult students into the College.

**Center for the Arts**

Artistic and Managing Director, Ms. Lisa Reilly, Center for the Arts (1P), Room 116

The Center for the Arts contains, in the instructional wing, the Department of Performing and Creative Arts, the Department of Media Culture, studios, performance and rehearsal spaces, a screening room, 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 for the Arts houses the Clara and Arleigh B. Williamson Theatre, a 450-seat, proscenium-stage theater; a 900-seat concert hall; a 150-seat recital hall; a 150-seat lecture hall, and an art gallery. It sponsors an annual performance series, which includes a wide variety of music, theater, comedy, and family programming.

**Center for International Service**

Director, Ms. Ann Helm, North Administration Building (2A), Room 206

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; 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, and college orientation; and assists in off-campus adjustment.

**International Faculty Development Programs**

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

**Study Abroad**

The Center offers a variety of study abroad programs with partner institutions around the world including the following: the University of the West Indies in Barbados; Nanjing University and Shanghai University in China; the Danish International Studies Program (DIS) in Copenhagen, Denmark; the Catholic University of Guayaquil and the University of San Francisco de Quito in Ecuador; Middlesex University in England; the American College of Thessaloniki in Greece; Scuola Lorenzo de Medici in Florence and the American University of Rome in Italy; the Universidad Menendez Pelayo in Spain; and the Hanoi University of Foreign Studies in Vietnam. 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 level of ability. A minimum grade point average of 2.5 is required for participation in most of the CSI-sponsored study abroad programs. The staff of the Study Abroad program provides assistance and information about admissions, financial aid and scholarships, 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 student financial aid plans are applicable to study abroad programs and special scholarship funds are available for eligible students.


Evening, Weekend, and Summer Sessions

Coordinator, Mr. Thomas Brennan, North Administration Building (2A), Room 204

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 evening 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 6:30 pm 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 during June and July. The varied summer session course schedule provides an opportunity for students to accelerate completion of their degree programs.

The FIRST Program

The College offers a special program called Freshman Integrated Resources, Support, and Teaching (FIRST) for new students who, upon entry, have passed the three CUNY assessment tests. Students enroll in a learning community of three or more courses, all of which satisfy the College’s general education requirements. FIRST is designed to provide a student experience that assists in the transition from high school to college and that promotes a sense of belonging to the CSI community. Students develop peer friendships and build relationships with faculty and other key personnel who assist them in their academic pursuits.

Freshman Workshop Program

The Freshman Workshop Program assists students who require comprehensive instruction in reading and writing for college by allowing them to enroll in a block of two or three linked courses: a remedial or English as a Second Language (ESL) reading and/or writing course and a specified compensatory section of an introductory 100-level course such as COM 100, PSY 100, or HST 100. Some blocks may also include a math course.

The compensatory sections incorporate the full content of the regular introductory courses, but they are offered on a four-hour/three-credit basis for four equated credits. The additional hour is devoted to providing instructional support and assisting students with course readings and writing assignments. The linked courses in the block are coordinated to enhance the development of the students’ skills. Students must also attend the Writing Center for at least one hour each week for tutoring.

Honors College

Coordinator: Professor Susan Holak, South Administration Building (1A), Room 206

The Honors College is designed for capable and highly motivated students who meet rigorous admissions criteria. During their first and second years, Honors College students enroll in a variety of innovative and challenging courses and develop with their faculty a cohesive intellectual community. In their third and fourth years, Honors College students pursue their fields of study in a wide range of majors and specializations, and may elect to meet a program’s criteria for graduation with honors. The College participates in the CUNY Honors College: University Scholars Program.

Please see the sections on Admissions and on Programs and Course Descriptions for details about the requirements.

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/Media Services

Chief Librarian, Associate Professor Wilma L. Jones, Library (1L), Room 109

The Library is the focal point of the South Academic Quadrangle. The building, with its distinctive rotunda, is the home for 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 point-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—Thursday  . . . . . .8:00am–10:00pm
Friday . . . . . . . . . . . . . . . . . .8:00am–8:00pm
Saturday ...............................8:30am–5:00pm
Sunday..................................noon–5:00pm

Hours of service during summer session, intersession, and holidays are posted at the Library entrance and on the Library homepage, www.library.csi.cuny.edu.

Borrowing Privileges: Students and faculty from CSI and other CUNY colleges must present current ID cards in order to borrow books. Students and faculty may obtain ID cards from the College Office of Public Safety. Overdue books, lost books, or unpaid fines may result in the suspension of borrowing privileges.

The Collection: The holdings include 210,000 bound volumes of books, 96 online databases (of which more than 30 are full text), 1,100 current print journal subscriptions, 800 titles in microform, 2,000 videos, and over 4,000 sound recordings.

The Online Catalog: The CSI Library is a member of the CUNY-wide integrated library system. Access to CUNY+, the online union catalog portion of the system, is available throughout the campus as well as from offsite.

Reference librarians provide service at the General Reference Desk on the first floor at all times when the library is open. The Library instruction service includes orientation tours, open workshops, presentations to classes by reference specialists in connection with specific course assignments, and the compilation of bibliographic aids.

Media Services

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

Media Services provides viewing and listening facilities and classroom services for its collections of videotapes, DVDs, slides, audiotapes, and recordings. The Media Distribution System provides access to the media collections via fiber-optic technology, connecting over 40 classrooms, laboratories, and conference rooms. Media Services operates the Videoconferencing Lab, a network of wireless laptops for use in the Library, and oversees the Center for Excellence in Learning Technology, which assists faculty in using technology to promote better learning.

Borrowing Privileges:

Borrowing Privileges: Students and faculty from CSI and other CUNY colleges must present current ID cards in order to borrow books. Students and faculty may obtain ID cards from the College Office of Public Safety. Overdue books, lost books, or unpaid fines may result in the suspension of borrowing privileges.

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Reference librarians provide service at the General Reference Desk on the first floor at all times when the library is open. The Library instruction service includes orientation tours, open workshops, presentations to classes by reference specialists in connection with specific course assignments, and the compilation of bibliographic aids.
Alumni Relations  
South Administration Building (1A), Room 110

The Office of Alumni Relations maintains communication with alumni through activities and newsletters. The Office also assists the CSI Alumni Association, which was established in 1977 to develop and maintain a partnership among alumni, students, faculty, and staff of the College. All persons who have received a degree or certificate from the College of Staten Island or its antecedent institutions, Richmond College and Staten Island Community College, are eligible for membership in the Alumni Association. An elected Alumni Council provides leadership for the Association.

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

The Office of Information Technology (OIT) advances and supports the use of information technology at the College. OIT administers 20 general purpose computer laboratories and 23 specialized computing laboratories in conjunction with academic departments for student use. The microcomputers, approximately 2,500 on campus, are connected through a high-speed local area network. This hardware configuration allows students, faculty, and staff full access to specialized software, the Internet, online library resources, and email. Forty-five 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 videoconferencing. Most microcomputers on campus use Windows 2000 or Windows XP. The OIT homepage is [www.csi.cuny.edu/helpdesk/](http://www.csi.cuny.edu/helpdesk/).

Instructional Support Services

The Office of Instructional Support Services offers a variety of programs to enhance the academic preparation of all students, with particular attention to first-year students. The Office coordinates the FIRST program (see page 36), an initiative that targets the needs of new students who have passed the three CUNY assessment tests. The Immersion Program is also offered, providing intensive reading, writing, and mathematics workshops for students who have not passed one or more of the assessment tests. The Brooklyn Educational Opportunity Center/College of Staten Island initiative offers intensive reading, writing, and mathematics instruction to triple remedial students. The CUNY Language Immersion Program offers intensive reading, writing, and other related instruction to English as a Second Language students. Preparatory workshops for the College Proficiency Examination and tutoring in a broad range of areas are offered to all students throughout the academic year.

Discovery Institute

Director, Dean Leonard Ciaccio, South Administration Building (1A), Room 211

The Discovery Institute offers several pre-college programs that strengthen the academic preparation of students while they are still in high school and others that encourage college students to consider teaching careers. The Institute also provides opportunities for teachers to develop new teaching strategies. The programs are supported by the resources of the College and by grants from a variety of state, federal, and private institutions.

**Collegiate Science and Technology Entry Program (CSTEP)**

CSTEP provides academic support and enrichment for minority and/or economically disadvantaged freshmen students considering careers in science and technology.

**Science and Technology Entry Program (STEP)**

STEP provides pre-college preparation in science and technology for minority and economically disadvantaged high school students and staff development for teachers.

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.

**The Women’s Center**

Coordinator, Assistant Professor Ellen J. Goldner

The 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 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 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](http://www.library.csi.cuny.edu/~wrc).
This chapter covers College policies that govern meeting the academic standards and requirements to maintain matriculated status and to qualify for a degree.

Grades

**Grading Symbols**
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>Good</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td></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>D</td>
<td>Pass</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>Failing/unsuccessful completion of course</td>
<td>0.0</td>
</tr>
<tr>
<td>P</td>
<td>Passing</td>
<td>-</td>
</tr>
<tr>
<td>W</td>
<td>Withdrew with no penalty</td>
<td>-</td>
</tr>
<tr>
<td>WA</td>
<td>Administrative Withdrawal</td>
<td>-</td>
</tr>
<tr>
<td>WU</td>
<td>Withdrew Unofficially (counts as failure)</td>
<td>0.0</td>
</tr>
<tr>
<td>INC</td>
<td>Incomplete (temporary grade)</td>
<td>-</td>
</tr>
<tr>
<td>AUD</td>
<td>Auditor</td>
<td>-</td>
</tr>
<tr>
<td>Z</td>
<td>No grade submitted by instructor</td>
<td>-</td>
</tr>
<tr>
<td>PEN</td>
<td>Grade Pending</td>
<td>-</td>
</tr>
<tr>
<td>FIN</td>
<td>Failure (changed from Incomplete)</td>
<td>0.0</td>
</tr>
</tbody>
</table>

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

- **F**: No credit is received for a course in which the student is assigned a grade of F. If a student wishes to receive credit for the course, it must be repeated with a passing grade; however, the F remains on the transcript (see section on Repeating Courses).
- **P**: Course requirements have been satisfied. This grade is used only for specially designated courses and for courses taken at another college for which a student receives advanced standing.
- **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 date); 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 Medical Office for a medical withdrawal. Under no circumstances will a W be assigned after the last day of classes without positive action by the Committee on Course and Standing 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.
- **WU**: 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.
- **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.
- **AUD**: Students may audit courses for which they are registered by presenting a written statement to the Registrar declaring their status as auditors within the first three weeks of the semester. This statement must be countersigned by the instructor of the course. No credit is received for an audited course.
- **Z**: An administrative symbol assigned when no grade has been submitted by the instructor.
- **PEN**: The pending grade is used in the first semester of a two-semester course.
Grade Appeals

Students wishing to appeal a grade other than WU or FIN 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.

This Committee on Grade Appeals shall review all information presented by the student and shall meet with the instructor. The committee shall render a decision within 30 days after the student requested the grade review by the committee because the student and instructor had not resolved the matter. 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 an academic and personal counselor.

Students wishing to appeal a WU or a FIN grade must file a written petition supported by documentation to the Committee on Course and Standing.

Grade Point Average (GPA)

The grade point average (GPA) is determined by dividing the total quality points earned by the total number of credits attempted. All credits for which the student is officially registered after the change of program period of each semester shall be considered “attempted credits,” except where the grades carry no penalty (i.e., grades of W, WA, INC, AUD, and PEN). For example:

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Credits</th>
<th>Quality Points per credit</th>
<th>Total Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>A</td>
<td>3</td>
<td>x</td>
<td>4</td>
</tr>
<tr>
<td>COR 100</td>
<td>B</td>
<td>4</td>
<td>x</td>
<td>3</td>
</tr>
<tr>
<td>ART 100</td>
<td>C</td>
<td>3</td>
<td>x</td>
<td>2</td>
</tr>
<tr>
<td>ANT 100</td>
<td>D</td>
<td>3</td>
<td>x</td>
<td>1</td>
</tr>
<tr>
<td>PED 190</td>
<td>F</td>
<td>1</td>
<td>x</td>
<td>0</td>
</tr>
<tr>
<td>Total Credits</td>
<td>14</td>
<td></td>
<td></td>
<td>Total Quality Points</td>
</tr>
<tr>
<td>GPA = Quality Points</td>
<td>=</td>
<td>33</td>
<td>=</td>
<td>2.36</td>
</tr>
</tbody>
</table>

Total Credits Attempted 14

Students may calculate current and prospective grade point averages using the GPA calculator feature on the College’s Website, www.csi.cuny.edu.

Transcripts and Grade Reports

At the end of each semester, students earn grades that reflect academic work undertaken. Students may access their transcript records and review semester grades in eSIMS via the CUNY Portal (www.cuny.edu). Email notification is sent to students each semester when grades are available in eSIMS.

Students may request that their transcript be sent to other institutions (see Fee Schedule). To be official, transcripts must be signed and sealed by the Registrar. There is no fee for transcript requests to be sent to another CUNY institution. Requests to be sent to another CUNY institution may be submitted online at www.csi.cuny.edu/registrar/importantforms.

The Major

Declaration of Major

Each matriculated student in the College is recorded in the Registrar’s Office as enrolled in a specific curriculum or major leading to a degree. Students are responsible for informing the Registrar of their specific curriculum or major. Assignment of an academic adviser is based upon this official listing. All students who have completed 60 credits and have passed all three CUNY Basic Skills Tests who expect to receive a bachelor’s degree from the College should declare a bachelor’s degree major. Students who have completed fewer than 60 credits may also declare a bachelor’s degree major provided they meet the following criteria:

- have passed the three CUNY Basic Skills Tests
- 13–24 credits completed and 3.0 Grade Point Average
- 25–39 credits completed and 2.5 Grade Point Average
- 40–59 credits completed and 2.0 Grade Point Average

Change of Curriculum or Major

Students who wish to change their major or whose academic advisement plan or transcript shows that they are recorded incorrectly in
a curriculum or major should file a Change of Curriculum or Major form with the Registrar's Office. There is no fee.

**Credits toward the Major**

All courses listed as major requirements, including courses that apply toward concentrations, specializations, or options are counted toward completion of the minimum credits meeting requirements for the major. Credits for pre-major courses are not included.

**GPA in the Major**

The GPA in the major is calculated in the same manner as the overall GPA using only the courses that fulfill major requirements: all courses listed in the major requirements, including courses in concentrations, specializations, options, and all courses taken in the discipline other than those in the pre-major. Students are required to achieve at least a 2.0 GPA in their core or major requirements in order to earn an undergraduate degree. Some programs require a GPA higher than 2.0.

**Second Major**

Students wishing to declare a second major may do so by completing a form available from the Office of the Registrar.

**Credit Load**

Students may attend full-time or part-time as either matriculated or non-degree students. They may attend day, evening, or weekend sessions in any combination.

A full-time student is one registered for 12 or more equated credits in a semester; six must be degree credits (three in the case of first-time freshmen). Equated credits are generally the same as degree credits except for courses below the 100 level. In courses below the 100 level, equated credits are equivalent to the contact hours of the course.

Students with less than a 3.0 (B) average and/or fewer than 30 credits who wish to take more than 18 credits must request permission. The Registrar's Office, North Administration Building (2A), Room 110, will direct such students to the appropriate office. Students on academic warning or probation may not register for more than 14 credits per semester. In the summer sessions, they may not register for more than a total of eight credits and may not register for two four-week courses simultaneously.

**Class or Standing**

Class, or standing, as freshman, sophomore, junior, and senior is determined by the number of credits completed:

- **Freshman:** 0 - 27.5 credits completed
- **Sophomore:** 28 - 60.5 credits completed
- **Junior:** 61 - 93.5 credits completed
- **Senior:** 94+ credits completed.

Standing is sometimes listed as a course prerequisite.

**Dean's List**

A matriculated undergraduate student, full-time or part-time, merits inclusion on the annual dean's list by: a) for full-time, attaining a GPA of 3.5 or above during the preceding academic year, provided at least 24 credits were earned during that period; b) for part-time, attaining a GPA of 3.5 or above over the last two academic years, provided at least 24 credits were earned during that period. Only credits earned at the College of Staten Island will enter the computation. Students who have received a grade of F, WU, or INC during the period under consideration are not eligible.

**Committee on Course and Standing**

The Committee on Course and Standing is chaired by the Vice President for Academic Affairs or a designee; and its membership consists of the Registrar and one member of the faculty from each instructional department. In addition to reviewing student records, the Committee considers student appeals related to readmission, graduation, and CPE issues.

Students can petition the Committee through an appeals counselor in the Division of Student Affairs. The appeals counselors, whose names are available through the Registrar's Office, will advise the students in the preparation of their petition, which will then be referred to the Committee.

**Minimum GPA**

Students are expected to maintain a minimum GPA of 2.0 (C) throughout their academic careers at the College. Whenever a student's GPA falls below 2.0, the student's record will be reviewed by the Committee on Course and Standing. Students must achieve a GPA of 2.0 in the courses in the core or major requirements; some majors require a higher minimum GPA.

**Midterm Warnings**

Students with an excessive number of absences and students with grades of D or F in 200- or lower-level courses receive midterm warnings. Students receiving a warning are expected to consult their course instructor; they may also wish to consult their faculty adviser.
Academic Standards Policy

At the end of each semester, students must meet the following academic standards:

<table>
<thead>
<tr>
<th>Credits Attempted</th>
<th>Minimum Grade Point Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-12</td>
<td>1.50</td>
</tr>
<tr>
<td>13-24</td>
<td>1.75</td>
</tr>
<tr>
<td>25-above</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Academic Warning

Students with 0 to 24 credits attempted will be placed on academic warning if they meet the academic standards (above) but fail to achieve a 2.00 grade point average.

Academic Probation

Students will be placed on academic probation if their grade point average falls below the minimum grade point average for the number of credits attempted: 0-12 attempted credits, 1.50 grade point average; 13-24 attempted credits, 1.75 grade point average; 25 credits-above, 2.00 grade point average.

Students on academic probation who meet the College's academic standards at the end of the probation semester will be removed from academic probation. Students on academic probation will not be dismissed but automatically continued on probation as long as they achieve a grade point average of 2.5 or better each semester until they have reached the required minimum grade point average. Students who fail to achieve the minimum 2.5 grade point average for any semester while on probation will be dismissed.

Students on academic warning or academic probation may not register for more than 14 credits a semester. Summer session students may not register for more than a total of eight credits in the summer session and may not register for two four-week courses simultaneously.

Academic Dismissal

Students who do not meet the academic standards outlined above at the end of the probation semester will be dismissed from the College.

Readmission after Academic Dismissal

Students dismissed from the College for failure to meet the standards set forth in this policy may apply for readmission after a separation from the College of at least one fall or spring semester. Students who apply for readmission after this separation period must have their application reviewed by the Committee on Course and Standing. Students wishing to apply for readmission should obtain information from the Counseling Center, South Administration Building (1A), Room 109.

Testing

CUNY Basic Skills Tests

Each undergraduate student must successfully complete The City University of New York Basic Skills Tests in reading, writing, and mathematics unless exempted. All students, including transfer students, must take the tests before they may register for the first time as matriculated students.

Students are exempted from taking the CUNY/ACT Basic Skills Tests in reading and writing if their verbal score on the SAT is 480 or higher; if their verbal score on the ACT is 20 or higher; or if their score on the New York State Regents Examination in English is 75 or higher.

Students are considered proficient in the Math Basic Skills Test if their mathematics score on the SAT is 480 or higher; if their mathematics score on the ACT is 20 or higher; or if their score on the New York State Regents Examination in Mathematics A or Sequential II or III is 75 or higher. However, all students must take Part III of the COMPASS Mathematics Test for placement into appropriate mathematics courses.

External, non-CUNY transfer students who have completed 45 or more credits at another institution are exempted from all three tests provided that the students are transferring from United States accredited colleges or universities. However, all transfer students must take Part III of the COMPASS Mathematics Test for placement purposes. External transfer students with foreign credentials are subject to the basic skills testing upon entry.

Students admitted to associate's degree programs who fail one or more of the tests are expected to complete the remedial courses that qualify them to enter college-level writing and mathematics courses in one year, which may include, in addition to semesters, a pre-freshman and a post-freshman summer immersion course and a winter intersession workshop. Students for whom English is a second language (ESL students) have two academic years to pass the basic skills tests in reading and writing. The tests are administered at the end of every academic intervention that students complete (remedial or ESL courses, summer immersion, January intersession, or tutorial workshops). Students who do not pass the basic skills tests within this time limit will be dismissed from the College.

Students may not enroll in college-level English or mathematics courses until the appropriate test has been passed. In addition, some courses require passage of one or more of the tests as prerequisites. A passing score on the CUNY/ACT reading skills test is a prerequisite to all courses at the 200 level or higher.

No associate's or bachelor's degree will be awarded unless the tests have been passed.
COMPASS Reading Test
Students who fail the COMPASS Reading Test on entrance are required to take the appropriate 0-level reading course in their first semester.

CUNY ACT/Writing Sample
Students who score 6 on the CUNY/ACT Writing Sample Test on entrance are required to take the appropriate 0-level writing course within their first 12 equated credits. Students who score 5 or below on the C/AWST on entrance are required to take the appropriate 0-level writing course within their first eight equated credits.

COMPASS Mathematics Test
Students who have not passed each of the first two parts of the COMPASS Mathematics Test are required to take the appropriate 0-level mathematics course.

Placement Examinations
Placement examinations are offered by the Department of Biology and the Department of Modern Languages. These examinations determine placement at the appropriate course level. Students entering the Health Sciences programs in which BIO 150 Human Anatomy and Physiology I is a pre-major requirement must take the Biology Department Placement Examination. Students are referred to the Testing Office for information.

See the section on Attendance Policies for information on the special attendance policies that apply to 0-level courses.

CUNY Proficiency Examination
Effective fall 2003, all students admitted to a degree program, regardless of date of entry, are required to pass the CUNY Proficiency Examination to graduate from associate's degree programs, transfer into a senior college, or advance from the lower division to the upper division of a senior college.

Exemptions are granted to students holding bachelor's or other advanced degrees from an accredited institution. Exemptions may be granted for accommodations to comply with Section 504 of the Rehabilitation Act.

The University will administer the Proficiency Examination at the College several times each year. For information concerning the examination, students should consult the Testing Office, 1A-104.

Students are required to take the CPE each semester once they have completed 45 credits until they pass the exam. Students who do not sit for a required exam fail that exam. Students who fail the exam three times will lose their matriculation as a degree student and will be coded as a non-degree student. The Committee on Course and Standing considers appeals concerning the CPE. Students should consult a counselor in the Counseling Center, 1A-109 with CPE concerns.

Graduation
Application for Graduation
Students must file for graduation by the date published in the College academic calendar in the Schedule of Classes. There is no fee for this application. Application cards for graduation may be obtained at the Registrar's Office or from the College's Website. Bachelor's degree candidates who have completed a second major or a minor and wish it to appear on their transcript should list the second major or minor on their application for graduation.

Students who have satisfied the degree requirements but wish to take additional credits beyond the degree will be charged the higher non-degree rate per credit unless they have filed for a second degree prior to the first day of classes. A change from non-degree to degree status on or after the first day of classes will not take effect until the next semester for tuition billing purposes. Non-degree students are not entitled to state or federal financial aid including federal loans.

Requirements for Graduation
Bachelor's degree programs require a minimum of 120 credits with a minimum grade point average of 2.0 (C). Associate's degree programs require a minimum of 60 credits with a minimum grade point average of 2.0 (C). All degree programs require at least a 2.0 grade point average in the core or major course requirements to qualify for the degree. Some majors require a grade point average above 2.0. Please consult the specific degree program. The successful completion of the College Preparatory Initiative (CPI) and all general education and core or major requirements is required for graduation. All students must pass the three CUNY Basic Skill exams and the CUNY Proficiency Exam.

Minimum Credits in Residence Requirement
To obtain a degree, associate's or baccalaureate, from the College of Staten Island, students must earn a minimum of 30 credits through courses taken at the College. To qualify for a bachelor's degree from the College, students must also earn at least half (50%) of the credits required for the major through courses taken at the College. To obtain a One-Year Certificate from the College of Staten Island, at least half (50%) of the required credits must be earned in courses taken at the College.

En-Route Associate's Degree
The associate's degree will be awarded to matriculated students who have neither applied for nor been awarded the AA, AS, or AAS degree
but who have completed all of the degree requirements including at least 30 credits earned in residence. Students who meet these
requirements will be notified of their eligibility for the degree and given the opportunity to decline.

**Graduation with Honors**

Undergraduates who meet the qualifications will receive the associate’s or bachelor’s degree summa cum laude, magna cum laude, or
cum laude as follows:
- Cumulative GPA of at least 3.90: summa cum laude
- Cumulative GPA of at least 3.75: magna cum laude
- Cumulative GPA of at least 3.50: cum laude.

Students who have completed all the requirements for the bachelor's degree may graduate with honors in their major provided they
meet the requirements of the department as explained in the section on Degree Requirements.

**Second Degree Requirements**

To receive a second baccalaureate degree or a second associate degree from the College of Staten Island, students must complete a
minimum of 30 credits in addition to the number of credits required for the first degree.

**The “Grandfather” Clause**

Requirements in this Catalog were approved effective summer/fall 2005. The “Grandfather” clause is designed for students who
matriculated in a degree program, major, or curriculum prior to that academic year. 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. For general education degree
requirements only, students may choose to follow requirements of the Catalog in effect the first time they matriculated at the College, provided
that no more than ten years have elapsed from initial matriculation to the change of major or curriculum. Students must notify the Registrar
in writing that they are exercising this option.

Students who hold the associate in arts degree, students who hold the associate in science degree, or students who hold a baccalaureate
degree from an accredited post-secondary institution are considered to have completed general education requirements. Students who hold
the associate in applied science degree must complete the general education requirements specified by further degrees.

**General Policies**

**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
for more than 15 percent of the class hours in the semester will be assigned a grade of WU (withdrew unofficially), subject to the discretion
of the instructor.

Special attendance policies apply to all remedial courses in reading, writing, mathematics, and in English as a Second Language, as follows:
1. for courses meeting four hours per week, seven hours of absences will be allowed; students with an eighth hour of absence will be considered
   excessively absent and will receive a WU grade, unless excused by the instructor;
2. for courses meeting three hours per week, four hours of absences will be allowed; students with a fifth hour of absence will be considered
   excessively absent and will receive a WU grade, unless excused by the instructor.

**Withdrawal from College and Leave of Absence**

Students who leave the College before the end of a term must file an official withdrawal request. Failure to do so will result in WU grades
for all courses in progress, and the result will be a negative impact on the grade point average. Students intending to withdraw from the
College must see a counselor and complete the required forms. There is no fee. Registration materials for the semester following withdrawal
will be sent automatically. There is no formal leave of absence from the College for undergraduates.

**Readmission**

Undergraduate students who do not register for a semester and then decide to return must file an application for readmission to qualify
for a priority registration appointment. Generally, readmission is routine. Students requesting a change in curriculum or major may be
subject to a review of qualifications. To qualify for early registration, application for readmission must be filed by the deadline specified in
the academic calendar published in the Schedule of Classes. Students who do not apply for readmission by the deadline may be readmitted
and register during the walk-in registration dates published in the Schedule of Classes. Students who have been academically dismissed by
the College will be readmitted only upon successful appeal to the Committee on Course and Standing.

**Repeating Courses**

Remedial courses: Students may repeat a given remedial course only once.

Passing Grade: Students who receive a passing grade in a course (D or better) sometimes wish to repeat the course in the expectation
of improving the grade. If a course is repeated, both grades will remain on the student's transcript and both grades will be computed in the
student's grade point average, but the student will receive credit only once for the course. For example: a student takes HST 100 for three
Internships are experiences in a work situation that integrate an academic area of study with work experience. Courses designated as internships (numbered 595-598 in the discipline) require an on-site supervisor as well as a full-time faculty member. All Independent Study courses will be designated as liberal arts and sciences courses. Independent Study undergraduate courses are numbered 591-594 and Internships are numbered 595-598. Both are awarded one to four credits.

To arrange for such courses, students must take the initiative in approaching faculty sponsors and in defining the project. Independent study and internship forms are available in the Registrar's Office. Independent study and internships in most of the fields of study in the College's curriculum. Current matriculated students may arrange independent study and internships in most of the fields of study in the College's curriculum. To arrange for such courses, students must take the initiative in approaching faculty sponsors and in defining the project. Independent study and internship forms are available in the Registrar's Office. Independent Study undergraduate courses are numbered 591-594 and Internships are numbered 595-598. Both are awarded one to four credits.

The following definitions and policies apply:

**Independent Study (numbered 591-594 in the discipline)**

Independent Study is defined as an individual library or laboratory research or creative arts project under the direct supervision of a full-time faculty member. All Independent Study courses will be designated as liberal arts and sciences courses.

**Internships (numbered 595-598 in the discipline)**

Internships are experiences in a work situation that integrate an academic area of study with work experience. Courses designated as internships are individual, non-classroom, extended learning projects. They require an on-site supervisor as well as a full-time faculty member.
Credit by Examination

Credit-by-examination is a program that allows students to earn college credits by demonstrating their knowledge of a subject area. This can be done through various means, including prior learning assessments and tests developed by educational institutions and organizations.

The College grants credit for designated CLEP General Examinations. For CLEP introductory subject exams with separate essay test, the College requires that students take both the multiple-choice objective test and the separate essay test. Award of credit is based on performance on both parts of the subject exam. In order to receive credit, students must pass the subject examinations with a scaled score in at least the 50th percentile and minimally equivalent to a passing grade of C.

External Agencies:

The College will grant matriculated students a maximum of 30 credits on the basis of, among others, the following: Advanced Placement Courses (AP), Regents College Examinations, American College Testing Proficiency (ACT-PEP), and College Level Examination Programs (CLEP).

The College grants credit for designated CLEP General Examinations. For CLEP introductory subject exams with separate essay test, the College requires that students take both the multiple-choice objective test and the separate essay test. Award of credit is based on performance on both parts of the subject exam. In order to receive credit, students must pass the subject examinations with a scaled score in at least the 50th percentile and minimally equivalent to a passing grade of C.

Academic departments or programs may authorize the assignment of specific course equivalents for credit-by-examination through outside agencies. Otherwise, such credits will be acceptable only as elective credits. Credits granted by examination through outside agencies will appear on student records appropriately identified by type of exam, subject, number of credits, and P (passing) grade. No credit will be awarded for a subject area examination in which the student has already taken an equivalent college course or completed a higher-level, more advanced college course. Based on faculty review and recommendations, the Office of Recruitment and Admissions monitors and advises the office of the appropriate department on the implementation of uniform College policy on credit-by-examination.

Policies on Independent Study and Internships

1. Credit for Independent Study is awarded for study or research outside normal course offerings; credit for Internships is awarded for work experience related to an academic program, not for performing a job.
2. Students must have at least one introductory course or equivalent experience in an area as a prerequisite to Independent Study and Internships. Independent Study students are required to spend at least three hours of work per week per credit. Internship students are expected to spend at least two hours per week per credit at the on-site location and at least one additional hour per week per credit in reading, study, and preparation.
3. No more than four credits will be granted for an Independent Study or Internship. Credit will be granted only once for the same or a similar work situation or placement. No more than nine credits of Independent Study and Internship coursework will be accepted toward the 60+ credits required for the associate's degree; no more than 15 credits of Independent Study and Internship coursework will be accepted toward the 120+ credits for the baccalaureate degree. The nine- and 15-credit limits are the maximum for the combined number of Independent Study and Internship credits. Enrollment in more than four credits of coursework in Independent Study and an Internship in any given semester is not encouraged; permission will be granted only in unusual circumstances.
4. Students interested in Independent Study or an Internship must make arrangements with a full-time faculty member to sponsor the project. Internship students also require an on-site supervisor to evaluate their project. The individuals involved will sign a contract stipulating the expectations for completion of the course, evaluation criteria, and awarding of credit.
5. Arrangements for Independent Study and Internships must be made during the semester before the student wishes to enroll in these courses and must be approved by the faculty sponsor, on-site supervisor (where applicable), and the chairperson of the department or coordinator of the program.
6. For Internships, at least one on-site visit must be made by the faculty sponsor during the semester. At this time a joint conference with all participants in the project will be held for evaluation. For all Independent Study and Internship students a meeting and an evaluation of progress with the faculty sponsor is expected at least bimonthly.
7. Independent Study and Internship proposals are kept on file in the Registrar's Office. Registration for Independent Study and Internship courses must be completed within the first three weeks of the semester.
8. Independent Study and Internship courses may not be used to satisfy general education requirements for any degree program.

Experiential Learning

Matriculated students who have completed 15 credits may receive a maximum of 15 credits for experiential learning. This learning must be at college level; it may match the content of specific courses or not. Credit is awarded by the appropriate department after detailed assessment of the documentation provided by the student to that department. Further information is available at the Office of Recruitment and Admissions, North Administration Building (2A), Room 406.

Credit by Examination

External Agencies:

The College will grant matriculated students a maximum of 30 credits on the basis of, among others, the following: Advanced Placement Courses (AP), Regents College Examinations, American College Testing Proficiency (ACT-PEP), and College Level Examination Programs (CLEP).

The College grants credit for designated CLEP General Examinations. For CLEP introductory subject exams with separate essay test, the College requires that students take both the multiple-choice objective test and the separate essay test. Award of credit is based on performance on both parts of the subject exam. In order to receive credit, students must pass the subject examinations with a scaled score in at least the 50th percentile and minimally equivalent to a passing grade of C.

Academic departments or programs may authorize the assignment of specific course equivalents for credit-by-examination through outside agencies. Otherwise, such credits will be acceptable only as elective credits. Credits granted by examination through outside agencies will appear on student records appropriately identified by type of exam, subject, number of credits, and P (passing) grade. No credit will be awarded for a subject area examination in which the student has already taken an equivalent college course or completed a higher-level, more advanced college course. Based on faculty review and recommendations, the Office of Recruitment and Admissions monitors and coordinates the awarding of credit by examinations taken through outside agencies and the implementation of uniform College policy on credit-by-examination.
Departmental Challenge Examinations

At the discretion of academic departments or programs, students may take departmental challenge examinations to demonstrate college-level competency in courses that have not been taken at CSI (or at any other college), and for which no credit has already been received.

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 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.
Degree Programs

**Associate In Arts (AA)**
- Liberal Arts and Sciences

**Associate in Science (AS)**
- Architectural Studies
- Engineering Science
- Liberal Arts and Sciences

**Associate in Applied Science (AAS)**
- Business
- Computer Technology
- Electrical Engineering Technology
- Medical Laboratory Technology
- Nursing

**Bachelor of Arts (BA) and Bachelor of Science (BS)**
- Accounting (BS)
- African American Studies (BA)
- American Studies (BA)
- Art (BA) and (BS)
  - Art/Photography Concentration
- Biochemistry (BS)
- Biology (BS)
  - Bioinformatics Option
- Business (BS)
  - Business/Finance Concentration
  - Business/International Business Concentration
  - Business/Management Concentration
  - Business/Marketing Concentration
- Chemistry (BS)
- Cinema Studies (BA)
- Communications (BS)
- Computer Science (BS)
- Computer Science-Mathematics (BS)
- Dramatic Arts (BS)
- Economics (BA) and (BS)
  - Economics/Business Specialization (BS)
  - Economics/Finance Specialization (BS)
- Education (Education students major in an academic discipline)
- Engineering Science (BS)
- English (BA)
  - English/Dramatic Literature Concentration
- History (BA)
- Information Systems (BS)
- International Studies (BA)
- Mathematics (BS)
- Medical Technology (BS)
- Music (BA) and (BS)
  - Music/Electrical Technology Concentration (BS)
- Nursing (BS)
- Philosophy (BA)
- Philosophy/Political Science (BA)
- Physician Assistant (BS)
- Physics (BS)
Political Science (BA)
Psychology (BA)
Science, Letters, and Society (BA)
Social Work (BA)
Sociology-Anthropology (BA)
Spanish (BA)
Women’s Studies (BA)

Graduate Degrees and Professional Certificate Program
See Graduate Catalog for details.)
- Biology (MS)
- Business Management (MS)*
- Cinema and Media Studies (MA)
- Computer Science (MS)
- Education
  - Childhood Education (MSEd)
  - Adolescence Education (MSEd)
  - Special Education (MSEd)
  - Leadership in Education (Advanced Certificate)
- English (MA)
- Environmental Science (MS)
- History (MA)
- Liberal Studies (MA)
- Neuroscience, Mental Retardation, and Developmental Disabilities (MS)
- Nursing, Adult Health and Gerontological (MS)
- Nursing, Adult Health and Gerontological (Advanced Certificate)
- Physical Therapy (DPT) offered jointly with Hunter College and the CUNY Graduate Center
- Computer Science (PhD) offered with the CUNY Graduate Center
- Learning Processes (PhD) offered as a subprogram of the Psychology program of the CUNY Graduate Center
- Neuroscience (PhD) offered as a subprogram of the Biology program of the CUNY Graduate Center
- Physics (PhD) offered with the CUNY Graduate Center
- Polymer Chemistry (PhD) offered jointly with Brooklyn College and the CUNY Graduate Center
*Approved University governance pending SED approval.

Certificate Awards
- Modern China Studies
This chapter provides detailed information on college preparation, testing, and orientation; requirements applicable to all degree programs—general education, liberal arts and sciences, core/major, minor, and honors—and information about the course numbering system at CSI.

**College Preparatory Initiative (CPI)**

The College Preparatory Initiative (CPI) is a collaborative effort between CUNY and the New York City Board of Education designed to strengthen the academic preparation of high school students. Bachelor's degree students and associate's degree students entering CSI are expected to have a minimum of 16 CPI units, including four units of English, three units of mathematics, two units of laboratory science, four units of social sciences, two units of foreign language, and one unit of fine arts.

**CUNY Basic Skills Tests**

**ENGLISH:** Each student must successfully complete The City University of New York/American College Testing Reading Skills Test (C/ARST). Each student must successfully complete The City University of New York/American College Testing Writing Sample Test (C/AWST).

**MATHEMATICS:** Each student must successfully complete The City University of New York Mathematics Assessment Test (CMAT), which tests proficiency in basic mathematics skills.

(See section on Testing in the chapter on Academic Policies and Procedures.)

Students needing remediation are expected to complete the remedial courses that qualify them to enter college-level writing and mathematics courses in one year, which may include, in addition to two semesters, a pre-freshman and a post-freshman summer immersion course and a winter intersession workshop.

**New Student Orientation Requirement**

Students who enter the College with fewer than six credits are required to complete the orientation requirement. Students are expected to complete this requirement during their first semester or prior to the completion of 12 equated credits.

To satisfy the requirement, students may choose between two options:

(A) Successful completion of a one-credit freshman orientation course:

- SPD 101 Issues in College Life (2 hours; 1 credit)
  or
- SKO 100 Freshman Orientation (2 hours; 1 credit)
  (open only to SEEK students)

or

(B) Complete the five components of the non-credit College Life Unit Experiences (CLUE) program, which include:

Attendance at a general orientation session on such topics as the purposes of higher education, an overview of College policies and services, and an appreciation of diversity. Students should attend the orientation session prior to the beginning of classes.

and

Attendance at four CLUE-certified events: two Personal Growth Experiences and two Co-curricular Experiences. Personal Growth topics include study skills, career development, self-development, substance abuse, and pluralism. Co-curricular Experiences include events offered in conjunction with the scholarly, cultural, and civic programs presented regularly at the College.

**Writing Across the Curriculum**

Students develop college-level writing skills in courses that are chosen across the curriculum. Quality writing skills are learned in courses that include a significant writing component in the laboratory sciences, social sciences, literature, and languages.

**Technology in Teaching and Learning**

Technology is used in classes at the College of Staten Island to enhance students’ learning experience, reinforce class discussion, and provide better communication. In order for the College to successfully infuse technology in teaching and learning to enhance the College experience the following applications are used: Blackboard, Internet search/research, Excel, Access, Email (with attachments), Word, PowerPoint.

Students should anticipate using these applications and are expected to have some knowledge of them. The College requires and cultivates technological literacy in its students and employees. The Office of Information Technology at CSI offers tutorials and workshops for students. More information on technology tutorials and workshops is available on the College Website at [www.csi.cuny.edu/studenthelpdesk/Training.htm](http://www.csi.cuny.edu/studenthelpdesk/Training.htm) or call 1.718.982.3695.

**Credit Requirements**

With some exceptions, baccalaureate degree programs require the successful completion of 120 credits and associate’s degree programs require the successful completion of 60 credits. Exceptions are the following programs: Bachelor of Science (BS): Biology, Computer Science, Engineering Science, Physician Assistant; Associate in Applied Science (AAS): Computer Technology, Electrical Engineering Technology, Medical Laboratory Technology, Nursing; Associate in Science (AS): Architectural Studies.
Core/Major Requirements

Programs leading to a degree (with the exception of the AA and AS degrees in Liberal Arts and Sciences) require a concentrated study of a particular subject. This requirement is called the core requirement for associate's degrees and the major requirement for bachelor's degrees. The core and major requirements for each degree are listed under the degree.

Electives

Each associate's and bachelor's degree program requires a specified total number of credits. Credits not counted toward general education, pre-major, or core/major requirements are electives. Students may freely choose their elective courses from among the courses offered at the College. However, students should keep in mind the liberal arts and sciences requirement; in some programs it may be necessary to choose as electives only those courses that are designated as liberal arts and sciences courses in order to accumulate the required number of liberal arts and sciences credits to qualify for the degree. Several programs have particular courses or groups of courses that are recommended as electives. Students should consult their adviser when choosing elective courses.

Double Majors/Double Degrees

For students who wish to major in more than one field of study, complete a double major, or to earn two degrees (double degrees), the following policies apply:

To major in more than one field of study, students must complete all of the core or major requirements for each of the fields. If the general education requirements of the two fields differ, the student must complete the more restrictive and demanding of the two. If the total credits required differ, the student must complete the larger number. To have the second core or major recorded on the final transcript the student must apply for both fields when filing for graduation. Upon satisfactory completion of the requirements, both fields of study will be recorded on the final transcript.

To receive a second degree, it is necessary to complete the requirements of the second field of study and to complete at least 30 credits more than the number of credits required to complete the first degree.

Minor Requirements

In addition to completing the requirements of a major for a bachelor's degree, students may choose to minor in a discipline related to or complementary to their major field of study. Minors may be completed in almost all areas of study offered by the College. Requirements for completing a particular minor may be found in the section describing programs and courses in that field. Students are encouraged to consider taking a minor to guide their choice of elective courses into a coherent package and to enhance their career opportunities.

To have a minor recorded on the student's final transcript, the student must apply for the minor when filing for graduation.

GPA

All students are required to achieve at least a 2.0 grade point average in their core or major requirements in order to earn an undergraduate degree at the College. Some programs require a higher GPA. Some cores and majors require courses that must be taken during the freshman and sophomore years to provide the background necessary for the required core or major courses. These courses are identified as pre-major and listed under the degree description.

Courses used to fulfill pre-major requirements may also be used to fulfill general education requirements but may not be used to fulfill major requirements. Courses used to fulfill core or major requirements may also be used to fulfill the Pluralism and Diversity requirement but may not be used to fulfill other general education requirements.

Honors Requirements

Departmental Honors

Students may graduate with honors in their field of study in most bachelor's degree majors. To receive honors, the student must have at least a 3.5 grade point average in courses taken in the major and/or pass a comprehensive examination in the subject. The student must also complete an honors thesis or project. This last requirement is the heart of the honors program, for each student must work closely with a faculty member to define the project, carry out the research and investigation, and write the final report or prepare the final project. Students may receive credit through independent study for their work on an honors project. The projects must be accepted by the department. Students who successfully complete these requirements will receive the notation on their transcript that they have graduated with honors in their field of study. For specific requirements, see the section on Honors Requirements under the bachelor's degree program description.

Graduation with Honors

Undergraduates who meet the qualifications will receive the associate's or bachelor's degree summa cum laude, magna cum laude, or cum laude as follows:

Cumulative GPA of at least 3.90: summa cum laude
Cumulative GPA of at least 3.75: magna cum laude
Cumulative GPA of at least 3.50: cum laude.
Course Numbering

ALPHA Designation
The section on Programs and Course Descriptions lists the requirements and courses for the degree programs in alphabetical order by the ALPHA designation for the courses in the discipline, from ACC for Accounting to WMS for Women’s Studies. The description of core or major requirements is followed by the course descriptions in numerical order from 001-to 400-level courses.

500-Level Courses
Topics courses, independent study, and individual internships are designated at the 500 level with the alpha symbol for the discipline. 500-level courses, by their very nature, have no registered description and are not listed under courses descriptions for the disciplines. Topics courses may be taught for a maximum of three semesters and may not be used to fulfill requirements. The designations are topics courses: 500-590 (1 - 4 credits); independent study courses, 591-594 (1 - 4 credits); internships, 595-598 (1 - 4 credits).
Students in American colleges and universities are required to take courses in what is called general education. These courses provide a broad and comprehensive introduction to knowledge as it is organized by academic disciplines. General education provides students with the skills and knowledge expected of educated persons to:

- read challenging texts in English and to write clearly and expressively;
- experience at least one laboratory science as well as mathematics;
- explore one or more social sciences and to comprehend their different perspectives on individuals and societies;
- have an introduction to the systematic study of literature and the arts;
- gain competence in at least one foreign language and knowledge of its cultural contexts;
- understand the historical development of United States institutions and relationships among contemporary world cultures.

General education also serves as an introduction to more specialized kinds of knowledge. Students finish general education courses with the skills and vocabulary that enable them to complete successfully courses in their majors in both associate's and bachelor's degree programs.

The general education requirements at CSI are arranged in the following categories: Required Courses; Scientific Analysis; Social Scientific Analysis; The Contemporary World; Textual, Aesthetic, and Linguistic Analysis; Foreign Language; and Pluralism and Diversity.

The general education courses comprise 33 to 59 credits of the total credits required for associate’s and bachelor’s degrees. Some of the courses are to be taken within the student’s first 36 credits; all general education courses should be taken within the student’s first 60 credits.

To receive an Associate in Arts, a Bachelor of Arts, or a Bachelor of Science degree at the College of Staten Island, students must complete the general education requirements as indicated below, including four required courses that should be completed within the first 36 credits. These required courses are: ENG 111, ENG 151, COR 100, and PED 190. In addition, each associate’s and bachelor’s degree offered by the College has a set of requirements providing for courses outside the student’s major field of study. These course offerings are grouped in the categories listed below; the category each course satisfies is identified in the course descriptions by the designation in parenthesis. With the exception of the Pluralism and Diversity requirement, courses used to meet the general education requirements may not count toward core or major requirements. Courses that are marked with an asterisk (*) may also fulfill the Pluralism and Diversity requirement.

For the Honors College and for the Associate in Science and Associate in Applied Science degree programs, the general education requirements vary. Please see the general education requirements of the following programs appearing in the major requirements section of the Catalog: Associate in Science (AS): Architectural Studies, Engineering Science, Liberal Arts and Sciences; Associate in Applied Science (AAS): Business, Computer Technology, Electrical Engineering Technology, Medical Laboratory Technology, and Nursing.
Courses fulfilling the Scientific Analysis requirement belong to the disciplines of Natural and Applied Science, Technology and Mathematics. These courses are designed to enhance the students’ knowledge and understanding of scientific concepts, methods, practices, and applications, seeking to develop a basic understanding and appreciation of science in general, as well as of a particular science field. These courses are intended to give students the opportunity to develop their ability to reason and their capacity for rigorous critical analysis.

A. Science and Technology: 8 credits

Courses fulfilling this requirement are in the disciplines of astronomy, biology, chemistry, electrical technology, geology, integrated science, and physics. One group of courses is designated as appropriate for students who do not intend to continue with advanced courses; another group is for students who do intend to continue.

Two semesters of laboratory science at the 100 level chosen from among the courses listed below, all of which have MTH 020 or its equivalent through placement as a prerequisite. Where appropriate, these courses will have experiments that incorporate the use of computers. They subscribe to the principle of writing across the curriculum and to the use of word processing in laboratory reports. Courses satisfying this requirement are marked (science) at the end of the course descriptions.

Scientific Analysis Courses

Science and Technology: courses are identified as (science) at the end of the course descriptions.

Courses designed for students seeking an introduction to the sciences whose curriculum does not require the study of science beyond the introductory level; these courses are not suitable as prerequisites for further study in the sciences:

- BIO 106/107 Principles of Biology I/Laboratory
- BIO 108/109 Principles of Biology II/Laboratory
- CHM 106/107 Chemistry for Today I/Laboratory
- CHM 108/109 Chemistry for Today II/Laboratory
- GEO 105 Environmental Geology
- PHY 102 Sound and Light
- PHY 103 Matter and Antimatter
- PHY 105 Galileo to Newton and Beyond
- PHY 107 Maxwell to Einstein and Beyond
- INS 100/101 Integrated Physical Science I/ Laboratory
- INS 110/111 Integrated Physical Science II/ Laboratory

Courses that provide the foundation for further study in the sciences:

- AST 100/101 Contemporary Theories of the Solar System/Planetary Laboratory
- AST 102/103 Contemporary Theories of the Universe/Galactic Laboratory
- AST 105 Observational Astronomy
- AST 120 Space Science I
- AST 160 Space Science II
- BIO 170/171 General Biology I/Laboratory
- BIO 180/181 General Biology II/Laboratory
- CHM 141/121 General Chemistry I/Laboratory
- CHM 142/127 General Chemistry II/Laboratory
- GEO 100/101 Physical Geology/Laboratory
- GEO 102/103 Historical Geology/Laboratory
- PHY 120/121 General Physics I/Laboratory
- PHY 160/161 General Physics II/Laboratory

Courses designed as introductory science sequences for students in particular programs; these courses are intended to be taken only by students in the programs for which they have been designed:

- CHM 110/111 Principles of Chemistry I/Laboratory
- CHM 116/117 Principles of Chemistry II/Laboratory
  (for Nursing and Physician Assistant students)
- PHY 110/111 College Physics I/Laboratory
- PHY 150/151 College Physics II/Laboratory
- PHY 153 Waves, Optics, and Modern Physics
  (for Engineering Technology students)
- PHY 114 Introduction to Physics (for Nursing students)
- PHY 116 Physics I
- PHY 156 Physics II (for Health Science and Life Science students)

Courses designed to introduce students to the application of science in technology:

- ELT 102 Introduction to Electrical and Electronic Technology
- ELT 124/121 Principles of Electricity Fundamentals/Laboratory
- ELT 240/241 Principles of Digital Electronics/Laboratory
- SCI 106 Power, Pollution, and Energy
B. Mathematics: 3-4 credits

Courses fulfilling this requirement are broadly divided into four categories and choices should be based on the student’s intended field of study. In selecting a course appropriate to a specific major, refer to the section on Mathematics for information on placement tests, course descriptions, and prerequisites. Courses numbered at 100 or higher that fulfill this requirement are marked (math) at the end of the course description.

Mathematics Courses
One course numbered 100 or higher with three credits or more:

100-level courses that satisfy this requirement:
- MTH 102 Mathematics for Liberal Arts Students
- MTH 109 Mathematics and the Environment
- MTH 113 Introduction to Probability with Statistics and Computer Applications
- MTH 121 Finite Mathematics
- MTH 123 College Algebra and Trigonometry
- MTH 130 Pre-Calculus Mathematics

200-level courses that satisfy this requirement include:
- MTH 214 Applied Statistics Using Computers
- MTH 230 Calculus I with Pre-Calculus
- MTH 231 Analytic Geometry and Calculus I
- MTH 235 Accelerated Calculus I

Students should consult the Department of Mathematics to determine appropriate placement in this sequence of courses for further study of mathematics. Please note that some degree programs have specific requirements in mathematics. MTH 230, 231, and 235 each have MTH 229 Calculus Computer Laboratory as a corequisite.

Social Scientific Analysis AA, BA, and BS 3 - 8 credits

These courses provide an introduction to the social sciences: the role of institutions, groups, and individuals in society. They examine human behavior and thought in its political, economic, social, cultural, and/or geographic context. Students are introduced to the fundamental methodologies of the social sciences, such as, hypothesis development, data collection and analysis, and the critical evaluation of evidence. Courses fulfilling this requirement are in the disciplines of African American studies, American studies, anthropology, communications, economics, geography, history, philosophy, political science, psychology, sociology, and women’s studies. Courses satisfying this requirement are marked (social science) at the end of the course description.

For Associate in Arts; Bachelor of Arts; Bachelor of Science in Art, Communications, Dramatic Arts, Information Systems, Music: 7 - 8 credits

Two courses to be selected from those offered in the social sciences, at least one of which must be at the 200 level. The 200-level courses have a significant writing component and subscribe to the principle of writing across the curriculum.

For Bachelor of Science with the exception of the Bachelor of Science in Art, Communications, Dramatic Arts, Information Systems, and Music: 3 - 4 credits

One course at the 100 or 200 level from the lists of those offered in the social sciences, with ENG 111 as prerequisite for the 200-level course. The 200-level courses have a significant writing component and subscribe to the principle of writing across the curriculum.

Social Scientific Analysis Courses
Courses are identified as (social science) at the end of the course descriptions. Courses that are marked with an asterisk (*) also fulfill the Pluralism and Diversity requirement and are identified as (p&d) at the end of the course descriptions.

100-level courses
- AFA 160 African American History: 1619 to the Present
- AMS 101 America: An Introduction
- ANT 100 Introduction to Anthropology
- ECO 101 Introduction to Economics
- GEG 100 Introduction to Geography
- HST 100 Past and Present
- HST 116 Freshman Seminar in History
- HST 160 African American History: 1619 to the Present
HST 182  Women's History and Feminist Theory
INT 100  International Studies
PHI 101  Introduction to Philosophy
PHI 130  Introduction to Ethics
POL 100  American Government and Politics
POL 103  Understanding the Political World: An Introduction to Political Science

PSY 100  Introduction to Psychology
SOC 100  Introduction to Sociology
SOC 120  Social Problems
WMS 100  Women's History and Feminist Theory

200-level courses with ENG 111 as a prerequisite (see course description for other prerequisites, which may include COR 100):

AFA 211*  American Culture in Black and White
AFA 262*  African American History: 1619-1865
AFA 263*  African American History: 1865-Present
AFA 265*  History of the Caribbean
AFA 269*  Blacks in Urban America: 1900-Present
AMS 210  American Philosophy
AMS 211*  American Culture in Black and White
AMS 212  Twentieth-Century America
AMS 214  America in the World
AMS 215  Geography and the United States
AMS 220  The American Dream
AMS 221  The City in American Culture

AMS 224  Religion in America
AMS 231  American Myths and Realities
AMS 251  American Ideas
AMS 258  Vietnam and America: 1945-1975

ANT 201*  Cultural Anthropology
ANT 202  Physical Anthropology
ANT 225*  Multicultural Literacy
CIN 204  Politics and Film
COM 225*  Multicultural Literacy
ECO 257*  Japanese Economy
ECO 285  Economics for Engineers
EDD 252*  History of Education in the U.S.
GEG 222  Geography of the United States
GEG 223  American Landscapes
GEG 260  Urban Geography
HST 201  History of Western Civilization I
HST 202  History of Western Civilization II
HST 204*  Introduction to Asian Civilization
HST 211*  Japanese Civilization
HST 212  History of the Ancient Near East
HST 213*  Chinese Civilization
HST 214  Greece and the Hellenistic World
HST 215  The Origins of Western Europe: 400-100 CE
HST 216  Byzantine Thought and Civilization
HST 217*  Introduction to Women's History
HST 218  The Roman World
HST 219  Greek and Roman Mythology
HST 220  Medieval Thought and Civilization
HST 221  The American Dream
HST 222  American Landscapes
HST 224  Jewish History
HST 225  History of Christianity

HST 228  Renaissance-Reformation Europe
HST 229  History of Religion from Antiquity to Our Times
HST 230  Early Modern England
HST 235*  The Modern Middle East
HST 236*  Asian American History
HST 240  American Ideas
HST 244  U.S. History: 1607-1865
HST 245  U.S. History: 1865-1945
HST 246  Religion in America
HST 248*  NYC: History and Problems
HST 249*  Italian American History
HST 251*  History of the U.S. City
HST 252*  History of Education in the U.S.
HST 257*  The History of American Immigration
HST 258  Vietnam and America: 1945-1975
HST 262*  African American History: 1619-1865
HST 263*  African American History: 1865-Present
HST 265  History of the Caribbean
HST 269  Blacks in Urban America: 1900-Present
HST 270  Modern British History: 1700-1900
HST 273  Medieval Russia
HST 274  History of Modern Russia
HST 276  History of Italy
HST 277  Europe: 1815-1914
HST 286*  History of Education in the U.S.
MTG 223  Public Administration
PHL 200  Early Political Theory
PHL 202  Modern Political Theory
PHL 204  American Political and Legal Thought
PHL 210  American Philosophy
PHL 213  Existentialism
PHL 216  Ideas of the World: 600 BC-1600 CE
PHL 217  Ideas of the World: 1600 to the Present
PHL 220  Experience and Knowledge
PHL 221  Logic and Scientific Method
PHL 223  Philosophical Thinking
PHL 224  Selected Issues in Metaphysics
PHL 236  Life and Death
PHL 237  The Tragic Dilemma
PHL 240  Philosophy of Religion
PHL 243*  Comparative Religion
POL 201  Early Political Theory
POL 202  Modern Political Theory
POL 204  American Political and Legal Thought
POL 219  Politics and Film
POL 221  The American Presidency
The Contemporary World AA, BA, and BS 4 credits

Courses fulfilling this requirement are designed to provide an understanding of global and regional contexts. As COR 100 explores issues, ideas, and institutions in the United States, so this requirement will cover contemporary global issues, ideas, and institutions. The courses will emphasize the interactions of societies along political, economic, and cultural dimensions. Courses will cover the development, formation, and impact of the global context and ways in which different nations, societies, and cultures influence and are influenced by global forces. Students will use comparative and historical analytic frameworks for understanding the contemporary world.

A 200-level course to be selected from the list below. These courses have ENG 151 and COR 100 as prerequisites and have a significant writing component and subscribe to the principle of writing-across-the-curriculum. Courses satisfying this requirement are marked (cont. wld.) at the end of the course description.

The Contemporary World Courses
Courses that are marked with an asterisk (*) also fulfill the Pluralism and Diversity Requirement and are identified (p&d) at the end of the course descriptions.
These courses introduce students to the literary, visual, and performing arts. Students will examine the historical and cultural aspects of various works, as well as methods for their analysis and/or creation. This requirement aims to encourage active inquiry into the complexity of language, art, and communication. Courses included in this category are of a general, fundamental nature. The 200-level courses have a significant writing component and subscribe to the principle of writing across the curriculum. Courses satisfying this requirement are marked (literature) or (arts & com.) at the end of the course description.

For Associate in Arts; Bachelor of Arts; Bachelor of Science in Art, Communications, Dramatic Arts, Information Systems, Music: 6 - 8 credits
Two courses, one from the list of offerings in literature and one from the list of offerings in the arts or communications at the 100 and 200 level, with ENG 111 and, in some cases, ENG 151 as prerequisite for the 200-level course.

For Bachelor of Science with the exception of the Bachelor of Science in Art, Communications, Dramatic Arts, Information Systems, and Music: 3 - 4 credits
One course at the 100 or 200 level from the lists of those offered in literature, the arts, or communications with ENG 111 and in some cases English 151, as prerequisite for the 200-level course.

Textual, Aesthetic, and Linguistic Analysis Courses
Courses that are marked with an asterisk (*) also fulfill the Pluralism and Diversity Requirement and are identified (p&d) at the end of the course descriptions.

Literature: Courses are identified as (literature) at the end of the course descriptions.

200-level courses
- AFA 221* African American Literature
- AFA 225 Contemporary Third World Literature
- AMS 243 American Humor
- DRA 215 Modes of Drama
- DRA 260 History of Theater I
- DRA 261 History of Theater II
- ENH 201 English Literature to 1800
- ENH 202 English Literature since 1800
- ENH 203 Literary History of the U.S. to 1855
- ENH 204 Literary History of the U.S. since 1855
- ENH 205 Classics of European Literature
- ENH 206 Classics of Modern World Literature
- ENH 207* Classics of Asian Literature
- ENH 208 Contemporary Literature
- ENH 210 Modes of Fiction
- ENH 211 Modes of Poetry
- ENH 212 Modes of Drama
- ENH 213 Nonfiction
- ENH 214 Trends in Literature and Film
- ENH 215 Literature and Humanities
- ENH 216 The Bible and Later Literature
- ENH 217 Introduction to Shakespeare
- ENH 221* African American Literature
- ENH 222* Women and Literature
- ENH 223* Mythology of Women

Arts and Communications: Courses are identified as (arts & com.) at the end of the course descriptions:

100-level courses
- AMS 150 Dance History: 20th-Century Survey
- ART 100 Introduction to the Visual Arts
- ART 120 Introductory Drawing
- ART 130 Introductory Painting
- ART 150 Introductory Sculpture
- CIN 100 Introduction to Film
- CIN 111 Basic Video Production
- COM 100 Introduction to Media

Any 300- or 400-level course in foreign literature (FRN, ITL, SPN) or equivalent courses in other languages if offered. Some of these courses require a reading knowledge of the language; others allow students without knowledge of the language to read the works in English translation. Foreign language courses at the 300- or 400-level are included since many students place directly into these upper-level courses and need not pass through the prerequisite language courses.
**DEGREE REQUIREMENTS**

**Pluralism and Diversity  AA, BA, and BS  0 - 4 credits**

Pluralism and Diversity courses focus on questions of difference. More specifically, they examine issues of race, gender, sexual orientation, class, ethnicity, and ability. These courses deploy historical, theoretical, and critical scholarship to study the issues listed above. Courses may be 200-, 300-, or 400-level. Prerequisite: a minimum of ENG 111.

One course at the 200 level or above, which subscribes to the principle of writing across the curriculum, to be selected either from those courses marked with an asterisk on the lists for Social Scientific Analysis; The West and the World; Textual, Aesthetic, and Linguistic Analysis; or from among those listed under Pluralism and Diversity. These courses deal significantly with pluralism and diversity. They may be selected so as to fulfill one of the other requirements as well. Courses satisfying this requirement are marked (p&d) at the end of the course descriptions.

### Pluralism and Diversity Courses

One course to be selected either from those marked with an asterisk (*) in the lists above or from among the following. These courses can be selected so as to fulfill one of the other requirements as well. Courses are identified (p&d) at the end of the course descriptions:

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<td>AFA 247</td>
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<td>AFA 253</td>
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<td>ENL 366</td>
<td>Walt Whitman</td>
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<td>MUS 120</td>
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<td>COM 201</td>
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<td>AMS 237</td>
<td>American Musical Theater</td>
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<td>AMS 241</td>
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<td>AMS 252</td>
<td>American Art</td>
<td>DRA 260</td>
<td>History of Theater I</td>
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<td>History of Art to the Renaissance</td>
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<td>ART 210</td>
<td>The Architect and Society</td>
<td>POL 219</td>
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**200-level courses**

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<td>Art and Society in America</td>
<td>CIN 230</td>
<td>American Film and American Myth</td>
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<tr>
<td>AMS 230</td>
<td>American Film and American Myth</td>
<td>COM 200</td>
<td>Media and Culture</td>
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<td>AMS 236</td>
<td>Music in American Life</td>
<td>COM 201</td>
<td>History and Theory of Television</td>
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<tr>
<td>AMS 237</td>
<td>American Musical Theater</td>
<td>COM 225*</td>
<td>Multicultural Literacy</td>
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<tr>
<td>AMS 241</td>
<td>Popular Culture and Mass Society</td>
<td>DRA 215</td>
<td>Modes of Drama</td>
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<td>AMS 252</td>
<td>American Art</td>
<td>DRA 260</td>
<td>History of Theater I</td>
</tr>
<tr>
<td>ANT 225</td>
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<td>ART 200</td>
<td>History of Art to the Renaissance</td>
<td>ENH 212</td>
<td>Modes of Drama</td>
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<tr>
<td>ART 201</td>
<td>History of Art after the Renaissance</td>
<td>MUS 211</td>
<td>History of Music to 1750</td>
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<td>ART 203</td>
<td>Art of the Ancient World</td>
<td>MUS 212</td>
<td>History of Music from 1730</td>
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<td>ART 207</td>
<td>19th-Century Art</td>
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<td>Music in American Life</td>
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<td>ART 208</td>
<td>20th-Century Art</td>
<td>MUS 237</td>
<td>American Musical Theater</td>
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<td>ART 209</td>
<td>Art and Society in America</td>
<td>MUS 239*</td>
<td>History of Jazz</td>
</tr>
<tr>
<td>ART 210</td>
<td>The Architect and Society</td>
<td>POL 219</td>
<td>Politics and Film</td>
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</tbody>
</table>

**DAN 150** | Dance History: 20th-Century Survey                  | **MUS 108** | Introduction to Jazz History                      |
**DRA 100** | Introduction to the Theater                         | **MUS 110** | Introduction to Music History                     |
**MUS 105** | World Music                                       | **MUS 120** | Rudiments of Music                                |
DEGREE REQUIREMENTS

Demonstration of proficiency through the intermediate level, 213. Students may complete this requirement by achieving a passing grade on the proficiency examination (see below); or by taking three or fewer four-credit courses through level 213, depending on the results of their placement examination.

The Department of Modern Languages offers proficiency examinations in French, Italian, and Spanish. Students continuing with a language taken in high school are required to take the proficiency examination administered through the Modern Languages Media Center, 2S-114.

Other students may take the proficiency examination to receive exemption from the language requirement or to be placed at an appropriate level to fulfill the requirement. Students wishing to demonstrate proficiency at the 213-level in a language for which CSI does not administer an exam may take exams elsewhere. In all cases, students who pass a proficiency exam at the 213-level will receive an exemption only. No credit will be granted.

Students possessing a foreign high school degree from a non-English speaking country will receive an automatic exemption from the foreign language requirement, although they will receive no credit toward their degree. (Not required for BS degree program in Information Systems.)

Foreign Language Courses
Demonstration of proficiency is required through the intermediate level, 213. Courses are identified (foreign lang.) at the end of the course descriptions.

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Liberal Arts and Sciences Requirements

Courses are classified as liberal arts and sciences or as non-liberal arts and sciences. For undergraduate degrees, the New York State Department of Education requires that a portion of the credit hours in the degree program must be in the liberal arts and sciences. These requirements are:

1) Associate in Arts (AA) and Bachelor of Arts (BA), three-quarters of the credits shall be in the liberal arts and sciences;
2) Associate in Science (AS) and Bachelor of Science (BS), one-half of the credits shall be in the liberal arts and sciences;
3) Associate in Applied Science (AAS), one-third of the credits shall be in the liberal arts and sciences.

CSI courses are classified as follows:

<table>
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<tr>
<th>Liberal Arts and Sciences Courses</th>
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<td>AFA</td>
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<td>SOC</td>
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<td>SPN</td>
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<td>WMS</td>
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Non-Liberal Arts and Sciences Courses

| AFA     | African American Studies (only AFA 122, 230) |
| ARC     | Architecture |
| BIO     | Biology (only BIO 316) |
| BUS     | Business |
| CIN     | Cinema Studies (CIN 111, 112, 113, 211, 311, 411) |
| CET     | Civil Engineering Technology |
| COM     | Communications (COM 210, 240, 249, 250, 251, 260, 261, 270, 271, 290) |
| CSC     | Computer Science |
| DAN     | Dance (except DAN 150) |
| DRA     | Dramatic Arts (DRA 110, 131, 210, 213, 214, 220, 230, 231, 320, 323, 270, 271, 310, 320, 370, 371, 410, 420, 421, 430) |
| EDC     | Early Childhood Education (except EDC 215, 216) |
| EDD     | Education - General (except EDD 400) |
| EDE     | Elementary Education (except EDE 200, 260) |
DEGREE REQUIREMENTS

<table>
<thead>
<tr>
<th>Code</th>
<th>Program</th>
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<tr>
<td>EDS</td>
<td>Secondary Education (except EDS 200, 201, 202)</td>
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<tr>
<td>ELT</td>
<td>Electrical Engineering Technology</td>
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<td>FNC</td>
<td>Finance (only FNC 220, 350)</td>
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<td>HED</td>
<td>Health Education</td>
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<td>LGS</td>
<td>Legal Studies</td>
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<td>MGT</td>
<td>Management (except MGT/POL 223, MGT/ECO 230, MGT/ECO 261, MGT/POL 323, MGT/POL 339)</td>
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<tr>
<td>MKT</td>
<td>Marketing</td>
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<td>MDT</td>
<td>Medical Technology</td>
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<td>HMA</td>
<td>Medical Assistant</td>
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<tr>
<td>ENT</td>
<td>Engineering Technology</td>
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<td>NRS</td>
<td>Nursing</td>
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<td>PAT</td>
<td>Physician Assistant</td>
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<td>PED</td>
<td>Fitness for Life</td>
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<tr>
<td>PHO</td>
<td>Photography</td>
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<td>PHT</td>
<td>Physical Therapy</td>
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<tr>
<td>POL</td>
<td>Political Science (only POL 335, 394)</td>
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<tr>
<td>PSY</td>
<td>Psychology (only PSY 211, 318, 340, 368)</td>
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<td>SKO</td>
<td>SEEK Orientation</td>
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<td>SPD</td>
<td>Student Services</td>
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<tr>
<td>SWK</td>
<td>Social Work</td>
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</tbody>
</table>

Internships and field study courses are non-liberal arts and sciences.
ACCOUNTING
(Bachelor of Science, Minor)
Department of Business
Chair, Professor Laura Nowak, Business Building (3N), Room 219
The program offers preparation for careers in finance and accounting and meets the New York State education requirements for sitting for the CPA examination. A minimum GPA of 2.5 is required for admission to and continuation in the Accounting major and for graduation. A 2.5 GPA is not a requirement for students to enroll in the AAS program, for students pursuing an Accounting minor, or for students enrolling in individual courses.

Accounting (BS)

General Education Requirements for the BS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The Contemporary World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
   Chosen from: MTH 121, MTH 123, MTH 130, MTH 230, MTH 231, MTH 235
2. Social Scientific Analysis: (3-4 credits)
   ECO 101 Introduction to Economics required
3. The Contemporary World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
See section on general education requirements for approved course lists and complete details.

Pre-Major Requirements: 35-38 credits
Business Courses
- MGT 110 Organizational Theory and Management 3 credits
- MKT 111 Marketing 3 credits
- FNC/ECO 240 Managerial Finance I 3 credits
Economics Courses
- ECO 210 Price Theory 4 credits
- ECO 212 Income and Employment Theory 4 credits
Quantitative and Computer Courses
- ACC 114 Introduction to Accounting I 4 credits
- ACC 121 Introduction to Accounting II 4 credits
- BUS 150 Essential Software Tools for Business 3 credits
- CSC 102 Computing for Today 4 credits
- CSC 126 Introduction to Computer Science 4 credits
- MGT/ECO 230 Introduction to Economic and Managerial Statistics 4 credits

One mathematics course following the course taken to fulfill the Mathematics general education requirement chosen from:
- MTH 130 Pre-Calculus Mathematics
- MTH 221 Applied Finite Mathematics and Business Calculus
- MTH 223 Technical Calculus
- MTH 230 Calculus I with Pre-Calculus
- MTH 231 Analytic Geometry and Calculus I
- MTH 232 Analytic Geometry and Calculus II
- MTH 236 Accelerated Calculus II 3-5 credits

Major Requirements: 40 credits
A. Accounting
- ACC 215 Intermediate Accounting I 4 credits
- ACC 225 Intermediate Accounting II 4 credits
- ACC 241 Federal Income Taxation I 3 credits
- ACC 310 Cost Accounting I 3 credits
- BUS 160 Business Law I 3 credits
- BUS 260 Business Law II 3 credits
- FNC/ECO 345 Managerial Finance II 4 credits
Plus 16 additional credits in related subjects chosen with the written approval of the student's adviser.

B. Certified Public Accountancy
Accounting majors who wish to apply for admission to the State examination for public accountancy must complete all courses specified under the accounting concentration and must include the following among the 16 credits of related subjects:
- ACC 414 Advanced Accounting 4 credits
- ACC 422 Standards and Procedures of Financial Audits 4 credits

Managerial Accounting
Note: Accounting majors may wish to take the examination for Certified Managerial Accountant.

Electives: 3-12 credits
Total Credits Required: 120

Honors
To graduate with Honors in Accounting a student must have a 3.5 grade point average in business courses and must have a 3.25 grade point average overall. An honors thesis or project supervised by a member of the business faculty must be completed.

Minor
At least 18 credits of courses including:
- ACC 114 Introduction to Accounting I 4 credits
- ACC 121 Introduction to Accounting II 4 credits
- ACC 215 Intermediate Accounting I 4 credits
Two courses in accounting at the 200 or 300 level 6 credits
Courses

ACC 114 Introduction to Accounting I
4 hours; 4 credits
Introduction to the concepts and principles of accounting. Data accumulation technique. Emphasis on preparation and interpretation of financial statements. Areas of concentration include the accounting cycle, accounting for sole proprietorship, and introduction to partnership and corporate accounting.
Prerequisite: MTH 030 or an appropriate score on the CUNY Math Assessment Test, and successful completion of C/ACT Writing Skills Test, and C/ACT Reading Sample Test or the equivalent.

ACC 121 Introduction to Accounting II
4 hours; 4 credits
A continuation of ACC 114. Partnership, corporations, and an introduction to cost accounting. Other topics discussed are current and long-term liabilities and statements of cash flow.
Prerequisite: ACC 114

ACC 215 Intermediate Accounting I
4 hours; 4 credits
Intense coverage of accounting principles, valuation, and accounting for current assets, plant assets, acquisitions, disposals, depreciation and depletion, intangible assets, current and long-term liabilities, and concepts of present and future value. Emphasis is placed on pronouncements of the Financial Accounting Standards Board and Accounting Principles Board.
Prerequisite: ACC 121
Pre- or corequisite: BUS 150 or CSC 102 or CSC 126

ACC 225 Intermediate Accounting II
4 hours; 4 credits
In-depth examination of long-term liabilities, stockholders’ equity, and income determination. Topics include bonds, stock issuance, retained earnings, leases, pensions, deferred taxes, and analysis of the statement of cash flow.
Prerequisite: ACC 215

ACC 235 Government and Not-for-Profit Accounting
3 hours; 3 credits
Thorough discussion and analysis of accounting for state and local governments and other not-for-profit institutions such as universities, hospitals, and voluntary health and welfare organizations. Topics discussed will include budgetary accounting, fund accounting, account groups, and financial statements.
Prerequisite: ACC 215

ACC 241 Federal Income Taxation I
3 hours; 3 credits
A comprehensive study of federal income tax principles and concepts as they apply to individuals. Tax treatment of the individual is stressed initially with emphasis on rates and exemptions, concepts of gross income, recognition and realization of income, and capital gain and loss concepts. Additional topics include exclusions, deductions and credits, analysis of property transactions, federal tax research, preparation of individual federal income tax returns, and computer tax returns.
Prerequisites: ACC 121

ACC 250 Accounting Information Systems
4 credits; 4 hours
This course introduces the concept of computer information systems in accounting. The course has a two-pronged approach. First, the general accounting cycles (general ledger, A/R, A/P, etc.), in an accounting information system are introduced. Second, the accounting cycles are then related to the use of computer information technology. Concepts such as flow charting, data flow diagrams, security, and control are stressed.
Prerequisites: ACC 121 and one of the following: BUS 150, CSC 102, or CSC 108/116/118, or CSC 126

ACC 251 Federal Income Taxation II
3 hours; 3 credits
A broad study of the federal income tax pertaining to corporations and partnerships. A comprehensive study of tax accounting principles as applied to corporations and partnerships, corporate organization and reorganizations, corporate liquidations, corporate distributions, and special classes of corporations. Includes such areas as special deductions and computation of the normal tax, surtax, and tax on net long-term capital gains.
Prerequisite: ACC 241

ACC 300 International Accounting
4 hours; 4 credits
An overall view of the significant areas of transnational accounting that are relevant to accounting practices, procedures, and requirements of enterprises engaged in international operations. These areas include: foreign currency translation, accounting for inflation, financial reporting and disclosure, analyzing foreign financial statements, transfer pricing, and international taxation. (Offered only at the American University of Rome.)
Prerequisites: ACC 114 and ACC 121

ACC 310 Cost Accounting I
3 hours; 3 credits
Principles of cost accounting applicable to job order and process cost systems. Additional topics include cost-volume-profit relationships, standard costing, variable costing, and budgets. Prerequisite: ACC 121

ACC 315 Analysis of Financial Statements
3 hours; 3 credits
The tools and techniques needed to explore the balance sheet, income statement, and the statement of cash flow. Heavy emphasis is on the use of ratios to evaluate the statements.
Prerequisite: ACC 225

ACC 318 New York State and Local Taxes
3 hours; 3 credits
A comprehensive study of various forms of State and municipal taxation, including personal income, unincorporated business, franchise, unemployment insurance, and occupancy taxes.
Prerequisite: ACC 121

ACC 414 Advanced Accounting
4 hours; 4 credits
An intensive course in specialized areas of accounting. Current topics, which have influenced the accounting profession and the financial community, such as partnerships, accounting for business combinations, government accounting, and foreign operations, are studied. Emphasis is placed on areas stressed on the CPA examination. The authoritative pronouncements of the Financial Accounting Standards Board and of its predecessor, the Accounting Principles Board, are interwoven into class discussions and problems assigned throughout the course. The application of advanced accounting theories to complex, practical problems is an integral part of the course.
Prerequisite: ACC 225
AFRICAN AMERICAN STUDIES

(Bachelor of Arts, Minor)
Interdisciplinary Program
Coordinator: Professor Calvin Holder, History/Political Science, Economics, and Philosophy Building (2N), Room 210
The purpose of this interdisciplinary program is to provide an understanding of selected aspects of African civilization, socio-cultural, and political institutions; contributions of African Americans; and their unique role in the United States.

The program includes courses in the history, music, art, drama, literature, and social-political life of Africa and the African Americans. The interdisciplinary approach is based on the premise that genuine understanding of the historical and cultural heritage of African Americans requires thorough and systematic training, control of the theoretical and methodological aspects of particular disciplines, as well as knowledge of the major assumptions of related disciplines. The program stresses the African continuity and the concept of the “African Diaspora.”

AFRICAN AMERICAN STUDIES (BA)
General Education Requirements for the BA
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The Contemporary World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28-47 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The Contemporary World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
      Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)
See section on general education requirements for approved course lists and complete details.

Major Requirements: 31 credits
Students majoring in African American Studies must complete:
1. AFA/HST 160 African American History: 1619 to Present 3 credits
2. Five courses at the 200 level including at least one in each of the following categories:
   Africa: AFA 247, 253, 260
   Caribbean: AFA 223, 225, 265
   United States: AFA 202, 204, 221, 229, 262, 263, 267, 269, 323, 361, 365 20 credits
3. Two courses at the 300 level or above, one of which may be an independent study course 8 credits

Electives: 30 - 52 credits
Total Credits Required: 120

Minor
Sixteen credits at the 200 level or above including one course on each of the following: Africa, the Caribbean, the United States.

Courses
AFA 122 Black Dance Workshop
(Also DAN 122)
4 hours; 3 credits
Based on traditions of the peoples of Africa and the Caribbean, this course develops the technical language of Black dance, emphasizing the cultural interaction of native tradition and Western influence; the retelling of legends and tales through dance while weaving intricate designs and rhythms disguised in unrecognizable symbolism.

AFA 160 African American History: 1619 to the Present
(Also HST 160)
3 hours; 3 credits
From the forced migration of the first Africans in the 17th century to the contemporary struggles for equality; emphasis on such topics as slavery, abolition, Reconstruction, the origins of Jim Crow, urban migrations, the struggle for civil rights, non-violence, and the new militancy. (social science)

AFA 202 African American Drama
(Also DRA 202)
4 hours; 4 credits
A study of the emergence of the Black Theater in the United States and an examination of the theater as a manifestation of the black genius.

AFA 203 Workshop in Black Theater
4 hours; 4 credits
A workshop expressly designed to explore experimental improvisational techniques and methods by utilizing a wide range of movements, sources, and materials. The workshop is concerned with the development of individual awareness and creativity through the active and personal discovery of movement and is open to all students interested in the potentialities of ethnic dance for attaining freedom of movement.

AFA 204 Ethnomusicology of African Americans
4 hours; 4 credits
History of African American music with emphasis on its relation to religion and culture. Examination and analysis of the musical styles of spirituals, gospel hymns, blues, and jazz in their cultural setting.
AFA 205  African American Musical Theater
(Also DRA 205)
4 hours; 4 credits
A study of the musical theater of African Americans from its early beginnings in African culture to genius manifested in the 19th century, its influence on early vaudeville, its unique contribution to American musical theater, and the present-day popularity of its style. Current productions will be attended by the class and studied in detail when available.

AFA 211  American Culture in Black and White
(Also AMS 211)
4 hours; 4 credits
Mutual perceptions of Blacks and Whites in 19th- and 20th-century America, how these perceptions were born, and how they have changed. (social science) (p&d)
Prerequisites: ENG 111, COR 100

AFA 213  African American Literature
(Also ENH 223)
4 hours; 4 credits
A sociological examination of African American literature as it has developed from the dynamic interaction between Black and White communities and movements within the Black community. Works by African American authors will be analyzed with respect to the dominant social forces of their times and the ideas about the historically persistent polemics of assimilation, separation, or cultural pluralism; and their relevance for Americans of African descent in their struggle for equality. (literature) (p&d)
Prerequisites: ENG 111, ENG 151

AFA 223  Comparative Black Literature
4 hours; 4 credits
The works of African, African American, and Caribbean writers are examined. The poetry and fiction of modern African writers are considered with particular reference to the African personality, presence africaine, and negritude, the vision and image of Africa.
Prerequisite: ENG 111

AFA 225  Contemporary Third World Literature
4 hours; 4 credits
A study of the literature of the world of the politically and economically oppressed and exploited. The course will deal with such themes as oppression and protest; violence; the crisis of identity; music, language, and rhythm; humorous distance; ritual and magic; and conceptualization and abstraction. (literature)
Prerequisite: ENG 111

AFA 247  Peoples and Cultures of Africa
(Also HST 266)
4 hours; 4 credits
A descriptive survey of the peoples and cultures of the African continent. Emphasis is on those features and/or qualities of the African pattern of life that are common to the African people as a whole. (p&d)
Prerequisites: ENG 111, plus any college-level history course or COR 100

AFA 253  African Politics
(Also POL 253)
4 hours; 4 credits
An examination of the colonial and post-colonial problems of Africa, and the developmental process in general. Other topics to be discussed include the socio-political and historical-philosophical appeal of communism to Africa; ideology, strategy, and the communist model of development; and the idea of revolution as an agent of rapid transformation versus the Euro-American model of evolutionary change. (p&d)

AFA 260  History of Africa
(Also HST 207)
4 hours; 4 credits
Nineteenth-century African history, the story of European imperialism, and the emergence of modern, independent Africa and its problems. (p&d)
Prerequisites: ENG 111, and COR 100 or any college-level history course

AFA 262  African American History: 1619-1865
(Also HST 262)
4 hours; 4 credits
A study of the African American experience in the Western hemisphere. Emphasis on the slave trade, slave life, slave revolts, and the struggle for freedom. For history majors and minors, this is designated as a United States history course. (social science) (p&d)
Prerequisites: ENG 111, and COR 100 or any college-level history course

AFA 263  African American History: 1865 to the Present
(Also HST 265)
4 hours; 4 credits
Continuing role of African Americans in the building of their own nations. Emphasis on freedom movements as shown in literature, in civil rights movements, and in nationalist and other political organizations. (social science) (p&d)
Prerequisites: ENG 111, and COR 100 or any college-level history course

AFA 265  History of the Caribbean
(Also HST 265)
4 hours; 4 credits
Precolonial and colonial history of the Caribbean; an examination of the policies of the metropolitan powers, and the emergence of anticolonialist movements. For history majors and minors, this is designated as a World history course. (social science) (p&d)
Prerequisites: ENG 111, and COR 100 or any college-level history course

AFA 267  The Black Experience
4 hours; 4 credits
A workshop designed especially for teachers, students, and professionals working in the Black community. The course will cover a wide range of topics in literature, music, dance, drama, economics, history, and anthropology.

AFA 269  Blacks in Urban America: 1900-Present
(Also HST 269)
4 hours; 4 credits
An examination of various aspects of Black life in major American cities. Particular emphasis will be placed on the causes of the migration; ecological development of Black communities; urban violence; Blacks’ participation in conventional and radical politics; Blacks in the labor force; and the impact of urbanization on the Black family. For history majors and minors this is designated as a United States history course. (social science) (p&d)
Prerequisites: ENG 111, and COR 100, or any college-level history course
AFA 323  The Black Writer in the Modern World  
(Also ENL 392)  
4 hours; 4 credits  
An intensive study of various recent and contemporary Black authors, writing in all the literary genres, and their grappling with traditional and changing environments. (p&d)  
Prerequisite: An ENH 200-level course

AFA 361  The Heritage of Marcus Garvey and W.E.B. DuBois  
(Also HST 361)  
4 hours; 4 credits  
Marcus Garvey, the man and the idealist, his influence on African American consciousness; W.E.B. DuBois, the man and the thinker, his influence on African American consciousness and Pan-Americanism. (p&d)  
Prerequisites: Any 200-level history course and ENG 151

AMERICAN SIGN LANGUAGE COURSES  
Department of Modern Languages  
Chair: Professor Kathryn Talarico, English, Speech, and World Literature/Modern Languages Building (2S), Room 109

ASL 113  American Sign Language I  
4 class hours, 2 laboratory hours; 5 credits  
An introduction to the fundamentals of American Sign Language (ASL) with particular attention to the grammar of the language and the culture of American deaf persons. Two additional language laboratory hours per week are required. (foreign lang.)  
Prerequisite: Passing the CUNY/ACT Reading and Writing tests

ASL 114  American Sign Language II  
4 class hours, 2 laboratory hours; 5 credits  
A continuation of American Sign Language I emphasizing vocabulary development and increased fluency in the language's structure; regional and stylistic variations in ASL. Advanced work in deaf culture, folklore, and literature. Two additional language laboratory hours per week are required. (foreign lang.)  
Prerequisite: Passing the CUNY/ACT Reading and Writing tests and successful completion of ASL 113 or equivalent

ASL 213  American Sign Language III  
4 class hours, 2 laboratory hours; 5 credits  
A continuation of American Sign Language II emphasizing stylistic variations; a command of the various registers available in the language; and expanded use of classifiers. Advanced work in deaf culture, folklore, and literature. Two additional language laboratory hours per week are required. (foreign lang.)  
Prerequisite: Successful completion of ASL 114 or equivalent

ASL 215  American Sign Language IV  
4 class hours, 2 laboratory hours; 5 credits  
A continuation of American Sign Language III preparing students to enter interpreter education programs. An analysis of the discourse of native signers emphasizing language variation as it correlates with varying life experiences of deaf people. Two additional language laboratory hours per week are required. (foreign lang.)  
Prerequisite: Successful completion of ASL 213 or equivalent

AMERICAN STUDIES  
(Bachelor of Arts, Minor)  
Interdisciplinary Program  
Coordinator: Assistant Professor Catherine Lavender, History/Political Science, Economics, and Philosophy Building (2N), Room 203  
American Studies is the interdisciplinary study of American cultures, both past and present. American Studies courses examine the arts, literature, history, and popular culture of the United States and, more generally, North America. American Studies provides a strong foundation and essential skills for those preparing for careers in law, government, public history, archival management, education, social service, journalism, publishing, and communications. Individual courses in American Studies are recommended as cultural background for students in any major.  

American Studies (BA)  

General Education Requirements for the BA  
ENG 111, ENG 151, COR 100, PED 190: 12 credits  
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The Contemporary World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28-47 credits  
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)  
   a. Science and Technology: (8 credits)  
   b. Mathematics: (3 credits)

2. Social Scientific Analysis: (7-8 credits)

3. The Contemporary World: (4 credits)

4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)  
   a. Literature: 200-level  
   b. Arts and Communications: 100-level  
   Arts and Communications: 200-level

5. Pluralism and Diversity Requirement: (0-4 credits)

6. Foreign Language: (0-12 credits)

See section on general education requirements for approved course lists and complete details.

Pre-Major Requirements: 3 credits  
AMS 101  America: An Introduction 3 credits

Major Requirements: 32 credits  
American literature (8 credits):  
ENH 203  Literary History of the United States to 1855 4 credits  
ENH 204  Literary History of the United States since 1855 4 credits

American history (8 credits):  
HST 244  United States History: 1607-1865 4 credits  
HST 245  United States History: 1865-present 4 credits

American Studies (16 credits):  
16 credits beyond AMS 101, including at least two courses at the 300 level or above.
Electives: 26 - 48 credits
Total Credits Required: 120

Minor
AMS 101 America: An Introduction 3 credits
American literature (8 credits):
ENH 203 Literary History of the United States to 1855 4 credits
ENH 204 Literary History of the United States since 1855 4 credits
American history (8 credits):
HST 244 United States History: 1607-1865 4 credits
HST 245 United States History: 1865-present 4 credits
American Studies (4 credits)

Courses
AMS 101 America: An Introduction 3 hours; 3 credits
Classic interpretations of American culture through a broad interdisciplinary survey of the men and women, ideas, and events that have contributed to the American experience. The abiding ideas, values, and myths that have shaped the nation’s arts, actions, and beliefs, drawing from painting, architecture, film, music, history, and literature. From 17th-century witchcraft to 20th-century witch hunts, from General Washington to General Hospital, from the assembly line to assembler language, from Revere to Rambo. (social science)

AMS 150 Dance History: Twentieth-Century Survey (Also DAN 150) 4 hours; 3 credits
Concentrating on the “pioneers of modern dance”—Duncan, Denishawn, Graham, Humphrey, Weidman and others—as well as on the experimental and avant-garde, using lectures, demonstrations, video, and film to illustrate examples of outstanding choreography. The course includes the dance of India and Black dance coordinated with professional concerts and student reports. Includes “Happenings in Today’s World of Dance.” No dance background required. (arts & com.)

AMS 209 Art and Society in America (Also ART 209) 4 hours; 4 credits
Three hundred years of American art, studied as an expression of American life. Works of art are viewed in terms of style and also as guides to the complexities of American history and culture. (arts & com.)
Prerequisites: ENG 111; and ART 100 or ART 200 or ART 201 or AMS 101

AMS 210 American Philosophy (Also PHIL 210) 4 hours; 4 credits
A study of philosophy in America. Topics of inquiry will be selected from such movements and figures as the following: Puritanism, empiricism, idealism, and pragmatism; Jonathan Edwards, Ralph Waldo Emerson, Josiah Royce, Charles S. Peirce, William James, John Dewey, George Santayana, and Alfred North Whitehead. (social science)
Prerequisites: ENG 111, COR 100

AMS 211 American Culture in Black and White (Also AFA 211) 4 hours; 4 credits
Mutual perceptions of Blacks and Whites in 19th- and 20th-century America; how these perceptions were born, and how they have changed. (social science) (p&d)
Prerequisites: ENG 111, COR 100

AMS 212 Twentieth-Century America 4 hours; 4 credits
An examination of selected works that are landmarks in the development of 20th century American culture. Authors will include Hemingway; Faulkner; Ellison, Wright, Miller, Mailer, and Beattie; Harrington, Friedan, and Galbraith. (social science)
Prerequisites: ENG 111, COR 100

AMS 214 America in the World 4 hours; 4 credits
Cross-cultural perspectives on American values, arts, and events. What foreign observers have thought about the United States. How our experience has paralleled, or differed from, that of Europe since the 18th century. What the important similarities, differences, and influences are between Western and Eastern cultures. (social science)
Prerequisites: ENG 111, COR 100

AMS 220 Geography of the United States (Also GEG 222) 4 hours; 4 credits
This course explores the geographic variety of the United States. The country's physical characteristics are regionally diverse and provide an array of resources. Different populations have put them to use in various ways. The course traces who lives where, why, what they have found there, what have they done with it. Emphasis is placed on the contrasting threads of regional variation and national homogenization. (social science)
Prerequisite: ENG 111 and COR 100

AMS 221 The American Dream (Also HST 221) 4 hours; 4 credits
The hopes, the frustrations, and, particularly, the dreams of American society as observed by foreign and native commentators in the past and present. This course will attempt to assess not only the idealization of the American dream but also disillusionment with it as expressed by such writers as Franklin, Tocqueville, Emerson, Whitman, Henry Adams, and Norman Mailer. (social science)
Prerequisites: ENG 111 and COR 100 or any American Studies or history course

AMS 222 The City in American Culture 4 hours; 4 credits
Impressions and analyses (literary, social, historical, cinematic, and photographic) of the varied cultures, institutions, and environments that are the substance of American urban life. A course that posits few facile solutions to the urban crisis but knows which questions are to be asked and which myths must be demolished if cities are ever to become humane and pleasurable organisms rather than death- and profit-bound ones. (social science)
Prerequisites: ENG 111, COR 100
AMS 224 Religion in America
(Also HST 246)
4 hours; 4 credits
Addresses the development of religion—Protestant, Catholic, Jewish, and others—in the context of American social, cultural, and intellectual history. (social science)
Prerequisites: ENG 111, COR 100

AMS 230 American Film and American Myth
(Also GIN 230)
4 hours; 4 credits
The American film and its relationship to American myth, society, and culture. Topics to be included are: the American West, the gangster, rural and urban life, the nature of war, race and class, comic views of America. (arts & com.)
Prerequisite: ENG 111

AMS 231 American Myths and Realities
4 hours; 4 credits
American society, chiefly in the 19th and 20th centuries, and its problems, including democracy in an industrial order, the class stratification, and racial conflict, as seen by such representative realistic writers as Henry James, Dreiser, Veblen, William Dean Howells, and W.E.B. DuBois. (social science)
Prerequisites: ENG 111, COR 100

AMS 236 Music in American Life
(Also MUS 236)
4 hours; 4 credits
The music-making and listening habits of the American people, examining the musical activities, the musicians, and the social setting. The course focuses on the history and significance of rock as an American and international phenomenon, exploring issues of gender, race, and the multicultural musical traditions that have enriched American popular music. This course develops the ability to understand music as an expression of cultural values, and does not require instrumental training or the ability to read music. This course does not meet requirements for the major or the minor in Music. (arts & com.)
Prerequisite: ENG 111

AMS 237 American Musical Theater
(Also MUS 237)
3 hours; 3 credits
A survey of American musical theater and its development from the second half of the 19th century to our own times, considered in the context of a changing America. Sousa, Herbert, Friml, Cohan, Kern, Gershwin, Bernstein, Arlen, Weill, Thomson, and Copland are some of the composers whose works will be covered. (arts & com.)
Prerequisites: ENG 111; for Music majors, MUS 120 or permission of the instructor

AMS 239 The American Civil War
(Also POL 239)
4 hours; 4 credits
The course focuses on the civil and military aspects of the Civil War, including the events and issues leading up to the war, the struggle over the expansion of slavery, the Union’s and the Confederacy’s military strategies, and analysis of key battles. The course will examine the presidency of Lincoln and will explore major constitutional issues, such as the right of secession and the problems of maintaining civil liberties during a civil war.
Prerequisites: ENG 111, COR 100

AMS 241 Popular Culture and Mass Society
4 hours; 4 credits
Popular entertainment as the expression of American cultural values: television, radio, music, and sports; westerns, detective stories, and soap operas. Functional analysis of entertainment as the myth and ritual of mass society. The problems of aesthetic standards in a culture dominated by commercialized taste. Relationships between popular entertainment and political values. Readings from Durkheim, Ellul, McLuhan, Nye, and Browne. (arts & com.)
Prerequisite: ENG 111

AMS 243 American Humor
4 hours; 4 credits
Humor in America shares some characteristics found in all cultures, past and present, and sometimes has seemed peculiarly “native.” This course traces the variety and development of American humor from colonial days to the present through literature, drama, art, cartoons, and film. Humor will be examined as psychological phenomenon, as philosophical outlook, and as intellectual history. (literature)
Prerequisite: ENG 111

AMS 251 American Ideas
(Also HST 240)
4 hours; 4 credits
A major idea in American intellectual history will be examined from the perspective of two or more disciplines. This course will demonstrate the interdisciplinary method and philosophy of American Studies. Puritanism, transcendentalism, the idea of freedom, social Darwinism, Freudianism, and socialism are possible topics. (social science)
Prerequisites: ENG 111, and COR 100 or AMS 101 or any history course.

AMS 252 American Arts
4 hours; 4 credits
A major artistic theme will be traced through two or more of the American arts. This course will demonstrate the interdisciplinary method and philosophy of American Studies. Realism and romanticism, functionalism and formalism, naturalism and the genteel tradition, and organic form are possible topics. (arts & com.)
Prerequisites: ENG 111 and COR 100

AMS 258 Vietnam and America: 1945-1975
(Also HST 258)
4 hours; 4 credits
An examination of the history of American involvement in Vietnam, the experience of Americans and Vietnamese who fought the Second Indochina war on American society. For History majors and minors, this is designated as a United States history course. (social science)
Prerequisites: ENG 111, COR 100 or any college-level history course

AMS 308 American Art since 1945
(Also ART 308)
4 hours; 4 credits
The course will examine the development of American art since World War II.
Prerequisite: ART/AMS 209 or AMS 212 or ART 307 or permission of the instructor
AMS 311   The American Cultural Experience
4 hours; 4 credits
A senior seminar for American Studies majors who will do independent
research on a common theme of the American experience and meet to
discuss and analyze their findings. Examples of such topics are Puritan
religion, the frontier, slavery, reform, feminism, big business, radicalism,
literary naturalism, imperialism, and popular culture.
Prerequisite: A 200-level American studies course.

AMS 335   Society and Culture in the United States
(Also HST 335)
4 hours; 4 credits
Major artistic and intellectual developments in America from the 18th
century to the present, and their relationship to changing social and
political realities. For History majors and minors, this is designated as a
United States history course.
Prerequisites: Any 200-level history course or any 200-level American
studies course and ENG 151

ANTHROPOLOGY COURSES
(See Sociology-Anthropology for Bachelor of Arts degree.)
Department of Sociology, Anthropology, and Social Work
Chair: Professor Jacqueline LeBlanc, Psychology/Sociology, Anthropology,
and Social Work Building (4S), Room 223

Courses

ANT 100   Introduction to Anthropology
3 hours; 3 credits
An overview of human physical and social evolution, and the range of
diversity in contemporary human societies. The development of language
and communication, tribal and peasant societies in the modern world;
ethnicity, race and gender, migration and urbanization. (social science)

ANT 201   Cultural Anthropology
4 hours; 4 credits
Case studies of specific societies—tribal, peasant, and urban—to illustrate
the variety of anthropological approaches to understanding social
relations. Discussion of contemporary social issues in comparative
perspective. (social science) (p&d)
Prerequisites: ENG 111, COR 100, and either ANT 100 or SOC 100

ANT 202   Physical Anthropology
4 hours; 4 credits
The evolution of non-human primates and human populations, with
special focus on physical variation and its sources among contemporary
human groups. The emergence of human forms of social organization and
symbolic communication. (social science)
Prerequisites: ENG 111, COR 100, and either ANT 100 or SOC 100

ANT 205   Native American Societies
4 hours; 4 credits
Origins of Native North American societies and their transformation
following contact with Europeans. Special emphasis on the diverse ways
native people have coped with, adapted to, and resisted continually
changing circumstances from colonial times to the present. (p&d)
Prerequisites: ENG 111, COR 100, and either ANT 100 or SOC 100

ANT 225   Multicultural Literacy
(Also COM 225)
4 hours; 4 credits
This course will explore the nature of culture as it is defined by various
disciplines and affected by class, race, gender, and ethnicity. Readings will
include texts in anthropology, sociology, literary theory, media studies, and
women’s studies. (social science) (p&d) (arts & com.)
Prerequisites: ENG 151, COR 100, and either ANT 100, COM 100, HST 100,
POL 100, SOC 100, or WMS 100

ANT 331   Women and Work
(Also SOC 330, WMS 330)
4 hours; 4 credits
The social and cultural constraints affecting women’s participation and
attainments in the world of work. Conflicts between work role expectations
and gender role expectations (e.g., femininity, nurturance, maternity). The
effects of class background and race/ethnicity on women’s occupations,
professions, and incomes. (p&d)
Prerequisites: Any 100-level sociology or anthropology course and any 200-
level sociology or anthropology course or permission of the instructor

ANT 345   Early Civilizations
4 hours; 4 credits
Case studies in the rise of civilization, in light of anthropological theory,
using examples from Mesopotamia, Egypt, India, China, and Central and
South America. The social and cultural changes associated with the rise
of cities and empires, slavery, the emergence of writing and monumental
architecture.
Prerequisites: ANT or SOC 100 and any of the following: ANT 201, SOC 200,
SLS 240, or permission of the instructor

ANT 350   Foraging Societies
4 hours; 4 credits
Studies of small bands of hunters and gatherers in which basic human
biological evolution and cultural development have taken place over three
million years. Their social organization, gender and family relations, the
tensions and alliances of gift-based economies, religions without leaders,
and politics without chiefs. The contemporary situation of such societies.
(p&d)
Prerequisites: ANT or SOC 100 and ANT 201 or permission of the instructor

ANT 365   Political Anthropology
4 hours; 4 credits
The central topic in political anthropology is the emergence of the state and
urban society from tribal societies. This course will examine different
explanations for the emergence of states and show the importance of this
problem to anthropology as a whole.
Prerequisites: Any 100-level sociology or anthropology course and any 200-
level sociology or anthropology course or permission of the instructor

ANT 370   Urban Anthropology
4 hours; 4 credits
The social and cultural organization of urban life examined from two
perspectives: detailed and comparative studies of households, neighborhoods,
homesless shelters, and other urban institutions, and the transformations in the Third World involving mass migrations and
industrial relocation.
Prerequisites: Any 100-level sociology or anthropology course and any 200-
level sociology or anthropology course or permission of the instructor
ANT 390 Human Evolution
4 hours; 4 credits
The evolution of Homo sapiens. Close reference to the actual fossil record and archaeological sites as grounds for inferences that can be drawn concerning the social life of prehistoric peoples and the development of language and culture.
Prerequisites: ANT 202 or BIO 108 or BIO 180, or permission of the instructor

ANT 450 Anthropology of Philosophy and Religion
4 hours; 4 credits
The intellectual confrontation with nature and the attempt to reduce nature to a knowable and controllable form. A survey of philosophical and religious systems as efforts by people to define their place in the world. Special topics will include witchcraft, magic, ritual, and esoteric religious systems.
Prerequisite: Any 100-level sociology or anthropology course and any 200-level sociology or anthropology course or permission of the instructor.

ANT 460 Personality and Culture
4 hours; 4 credits
Examination of the different ways of understanding “human nature” in specific social contexts. Topics will include the development of anthropological theories of personality and culture, and Western and non-Western concepts of personhood and mental health. (p&d)
Prerequisites: ANT 201 and any of the following: PSY 212, PSY 226, PSY 236, PSY 242, SOC 200, SOC 201, SOC 226, SOC 292, or permission of the instructor.

ARCHITECTURAL STUDIES*
Department of Performing and Creative Arts
Program Coordinator: Associate Professor Frank Galati, Engineering Technologies Building (5N), Room 213
The Associate in Science degree program in Architectural Studies provides a fundamental and broad educational background as preparation for continuation of study toward the BS degree in Architecture. The curriculum provides seamless articulation with the BS degree program in Architecture at the City College of New York. It offers as well, preparation for entry-level work as an architect assistant.
*This program is under review and may not be offered.

Architectural Studies (AS)
Retention standards:
Students must maintain a minimum GPA of 2.5 upon completion of 32 credits, which include the following courses: ARC 111, ARC 200, ENG 111, MTH 123.

General Education Requirements for the AS
ENG 111, ENG 151, PED 190: 8 credits
Whenever possible these three courses should be completed within the first 36 credits.
1. Scientific Analysis
   a. Science and Technology (4 credits)
   PHY 110 College Physics I
   PHY 111 College Physics Laboratory I
   or
   PHY 116 Physics I
   b. Mathematics (4 credits)
   MTH 123* College Algebra and Trigonometry
2. Social Scientific Analysis (3 credits)
   PHL 101 Introduction to Philosophy
3. Textual, Aesthetic, and Linguistic Analysis (2 credits)
   ART 120 Introductory Drawing
4. Pluralism and Diversity (8 credits)
   HST 238 World Civilization I
   HST 239 World Civilization II

Core Requirements: 31 credits
ARC 111 Architectural Graphics Workshop 2 credits
ENS 110 Engineering Graphics 2 credits
ELT 101 Introduction to Measurement and 2 credits
Instrumentation
ARC 112 The Built Environment of New York City 2 credits
ARC 200 Environmental Concepts I 4 credits
ARC 212 History, Theory, and Technology of 4 credits
the Built Environment
ARC 300 Environmental Concepts II 4 credits
ARC 400 Environmental Concepts II 4 credits
CET 230 Statics 2 credits
CET 360 Strength of Materials 3 credits
MTH 223* Technical Calculus 4 credits
*MTH 123 or any regular mathematics sequence of no less than eight credits ending with the calculus mathematics courses of either MTH 223 or MTH 230 or MTH 231 or equivalent or higher.

Guided Electives:
SLS 301 Humanities: Ancient Culture 4 credits
SLS 302 Humanities II: Medieval/Early 4 credits
Modern Culture

Total Credits Required: 68
All courses designated ARC, ENT, CET are non-liberal arts and sciences.

Courses
ARC 111 Architectural Graphics Workshop
4 hours; 2 credits
Students will be introduced to and will learn to use fundamental verbal and graphic skills necessary for recording and transmitting ideas about architecture and the urban environment. Short exercises using verbal and graphic techniques learned in the workshop will introduce the student to basic concepts in design and presentation. The student will develop skills in diagramming, sketching, drafting, and perspective drawing, and will make models for interpreting such conceptual images as activity patterns, circulation systems, and built form.

ARC 112 The Built Environment of New York City
2 hours; 2 credits
Exploring the conditions and factors that have led to the development of New York City and its world renowned architecture and open spaces. Field trips, papers, and investigation of the creation of New York City.
ARC 200  Environmental Concepts I
8 hours; 4 credits
The course will focus on the analysis, description, and design of the student's personal physical surroundings such as room, house, and school. Students will develop communication skills such as architectural drawing, sketching, diagramming, model making, and photography and will analyze and discuss environmental design problems. The student will become familiar with problem solving methods and a variety of design concepts and will propose design solutions. The presentation of these ideas will be verbal as well as graphic, using techniques learned in class.
Prerequisite: ARC 111
Pre or corequisite: ENG 111 and MTH 123

ARC 212  History, Theory, and Technology of the Built Environment
2 hours; 2 credits
Survey of architecture, building traditions, and technologies from the Medieval Period through the Renaissance culminating in the 20th century with the development of modern architecture.
Prerequisite: ENG 111 or permission of the instructors

ARC 300  Environmental Concepts II
8 hours; 4 credits
Students will analyze, describe, and design the physical settings of family and small group activities, such as an office, an apartment, a daycare center, and related open spaces and landscaping. They will learn to develop written and diagrammatic programs of user requirements and space needs for the activities in such settings. Physical design solutions meeting the criteria developed will be proposed and presented. Such presentations will make use of both previously developed communication skills and additional skills including the use of presentation models. Problem solving methods and technology used for buildings, open space, and landscape will be further developed.
Prerequisite: ARC 200, ENG 111, and MTH 123

ARC 400  Environmental Concepts III
8 hours; 4 credits
Students will analyze, describe, and design the physical settings for neighborhood and city-wide activities such as community facilities and transportation networks. Problem identification and the development and presentation of physical design solutions for buildings; open space, landscape, and urban design aspects of these problems will be studied.
Prerequisite: ARC 300

ART
(Bachelor of Arts, Bachelor of Science, Photography Concentration, Minor)
Department of Performing and Creative Arts
Chair: Associate Professor Sylvia Kahan, Center for the Arts (1P), Room 203
The Art program is designed for students interested in both studio art and art history. The department is located in the Center for the Arts with outstanding studio and workshop spaces.

Art (BA or BS)
General Education Requirements for the BA and BS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The Contemporary World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28–47 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7–8 credits)
3. The Contemporary World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6–8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0–4 credits)
6. Foreign Language: (0–12 credits)
See section on general education requirements for approved course lists and complete details.

Art (BA)
Pre-Major Requirements: 14 credits
Students planning to major in Art must complete the following pre-major courses, some of which may also satisfy general education requirements:
ART 200  History of Art to the Renaissance 4 credits
ART 201  History of Art since the Renaissance 4 credits
ART 120  Introductory Drawing 2 credits
ART 130  Introductory Painting 2 credits
ART 150  Introductory Sculpture 2 credits

Major Requirements: 34 credits
At least four credits of art history courses at the 300 level and four credits of art history courses at the 400 level
ART 300  Medieval and Renaissance Art
ART 301  Baroque Art
ART 303  History of Photography
ART 305  Museum and Gallery Training
ART 306  Nineteenth-Century Art
ART 307  Twentieth-Century Art
ART 308  American Art since 1945
ART 410  Major Artist I
ART 411  Major Artist II
ART 440  Contemporary Art Theory I
ART 441  Contemporary Art Theory II

At least six credits of studio art courses beyond the 100 level:
ART 220  Intermediate Drawing
ART 225  Portrait Drawing II
ART 230  Intermediate Painting
ART 245  Printmaking
ART 250  Intermediate Sculpture
ART 275  Studio Art Theory and Practice
ART 320  Advanced Drawing
ART 325  Portrait Drawing III
ART 330  Advanced Painting
ART 345  Intermediate Printmaking
ART 350  Advanced Sculpture  
ART 375  Intermediate Studio Art Theory and Practice  
ART 445  Advanced Printmaking

And an additional 20 credits from art history or studio art courses beyond the 100 level.

**Electives: 13-34 credits**  
**Total Credits Required: 120**

**Liberal Arts and Sciences Requirement**  
All studio art courses are non-liberal arts and sciences.

**Art (BS)**

**Pre-Major Requirements: 14 credits**

Students planning to major in Art must complete the following pre-major courses, some of which may also satisfy general education requirements:

- ART 200  History of Art to the Renaissance  4 credits
- ART 201  History of Art since the Renaissance  4 credits
- ART 120  Introductory Drawing  2 credits
- ART 130  Introductory Painting  2 credits
- ART 150  Introductory Sculpture  2 credits

**Major Requirements: 34 credits**

At least eight credits of art history courses beyond the 100 level:

- ART 203  Art of the Ancient World  
- ART 209  Art and Society in America  
- ART 210  The Architect and Society  
- ART 211  History of Printmaking  
- ART 240  Women and the Fine Arts  
- ART 300  Medieval and Renaissance Art  
- ART 301  Baroque Art  
- ART 303  History of Photography  
- ART 305  Museum and Gallery Training  
- ART 306  Nineteenth-Century Art  
- ART 307  Twentieth-Century Art  
- ART 308  American Art since 1945  
- ART 410  Major Artist I  
- ART 411  Major Artist II  
- ART 440  Contemporary Art Theory I  
- ART 441  Contemporary Art Theory II  

At least 26 credits of studio art courses beyond the 100 level:

- ART 220  Intermediate Drawing  
- ART 225  Portrait Drawing II  
- ART 230  Intermediate Painting  
- ART 245  Printmaking  
- ART 250  Intermediate Sculpture  
- ART 275  Studio Art Theory and Practice  
- ART 320  Advanced Drawing  
- ART 325  Portrait Drawing III  
- ART 330  Advanced Painting  
- ART 345  Intermediate Printmaking  
- ART 350  Advanced Sculpture  
- ART 375  Intermediate Studio Art Theory and Practice  
- ART 445  Advanced Printmaking

**Electives: 13 - 34 credits**  
**Total Credits Required: 120**

**Liberal Arts and Sciences Requirement**  
All studio art courses are non-liberal arts and sciences.

**Art (BA or BS) Photography Concentration**

This concentration allows students interested in photography to receive the Bachelor's degree in Art with a concentration in courses dealing with photographic technique, theory, and history.

**General Education Requirements listed above for Art BA or BS**

**Pre-Major Requirements: 15 credits**

Students planning to major in Art with the photography concentration must complete the following pre-major courses, some of which may also satisfy general education requirements:

- ART 200  History of Art to the Renaissance  4 credits
- ART 201  History of Art since the Renaissance  4 credits
- PHO 120  Basic Photography  3 credits

and two of the following:

- ART 120  Introductory Drawing  
- ART 130  Introductory Painting  
- ART 150  Introductory Sculpture

**Major Requirements: 34 credits**

At least eight credits of art history courses beyond the 100 level including:

- ART 303  History of Photography  

The remaining course may be chosen from:

- ART 203  Art of the Ancient World  
- ART 209  Art and Society in America  
- ART 210  The Architect and Society  
- ART 211  History of Printmaking  
- ART 240  Women and the Fine Arts  
- ART 300  Medieval and Renaissance Art  
- ART 301  Baroque Art  
- ART 303  History of Photography  
- ART 305  Museum and Gallery Training  
- ART 306  Nineteenth-Century Art  
- ART 307  Twentieth-Century Art  
- ART 308  American Art since 1945  
- ART 410  Major Artist I  
- ART 411  Major Artist II  
- ART 440  Contemporary Art Theory I  
- ART 441  Contemporary Art Theory II

At least nine credits of photography courses beyond the 100 level chosen from:

- PHO 220  Intermediate Photography  
- PHO 230  Color Photography  
- PHO 240  Photographic Journalism  
- PHO 250  Studio Photography I  
- PHO 320  The Photographic Portfolio  
- PHO 360  Studio Photography II

including at least one course at the 300 or 400 level.

The remaining 17 credits may be chosen from courses in art and photography beyond the 100 level.

**Electives: 12 - 33 credits**  
**Total Credits Required: 120**
Liberal Arts and Sciences Requirement
All studio art and photography courses are non-liberal arts and sciences.

Honors
To graduate with Honors in Art a student must have a 3.5 grade point average in art courses and must complete a body of independent work approved by one or more full-time art faculty advisers. The work should be presented in an exhibition if possible. Art history students may undertake the writing of a research paper with the approval and supervision of a faculty adviser.

Minor (18 credits)
Two different paths may be taken to complete an Art minor:

Path I: Art History
ART 200 History of Art to the Renaissance 4 credits
ART 201 History of Art since the Renaissance 4 credits
and
at least 10 credits of art history beyond the 100 level:
ART 203 Art of the Ancient World
ART 209 Art and Society in America
ART 210 The Architect and Society
ART 211 History of Printmaking
ART 240 Women and the Fine Arts
ART 300 Medieval and Renaissance Art
ART 301 Baroque Art
ART 303 History of Photography
ART 305 Museum and Gallery Training
ART 306 Nineteenth-Century Art
ART 307 Twentieth-Century Art
ART 308 American Art since 1945
ART 410 Major Artist I
ART 411 Major Artist II
ART 440 Contemporary Art Theory I
ART 441 Contemporary Art Theory II

Path II: Studio Art
ART 120 Introductory Drawing 2 credits
ART 130 Introductory Painting 2 credits
ART 150 Introductory Sculpture 2 credits
and
at least 12 credits of studio art courses beyond the 100 level:
ART 220 Intermediate Drawing
ART 225 Portrait Drawing II
ART 230 Intermediate Painting
ART 245 Printmaking
ART 250 Intermediate Sculpture
ART 275 Studio Art Theory and Practice
ART 320 Advanced Drawing
ART 325 Portrait Drawing III
ART 330 Advanced Painting
ART 345 Intermediate Printmaking
ART 350 Advanced Sculpture
ART 375 Intermediate Studio Art Theory and Practice
ART 445 Advanced Printmaking

Courses
(See Photography for photography course descriptions.)

ART 100 Introduction to the Visual Arts
3 hours; 3 credits
A selective examination of the materials and forms of painting, sculpture, architecture, and cinema designed to provide students with a critical and historical framework for evaluating visual experience. The course will combine slide lectures and films with a number of museum and gallery visits. (arts & com.)

ART 106 Art in Rome
3 hours; 3 credits
A course designed to familiarize students with the vast artistic patrimony of Rome. Visits to archaeological sites, churches, palaces, museums, and galleries. The course is for the non-art major. It is conducted almost entirely on site. (Offered only at the American University of Rome.)

ART 120 Introductory Drawing
4 hours; 2 credits
This course studies drawing as a primary tool of vision and consequently as a means of apprehending the world around us. The essentials of perspective, anatomy, and drawing from observation are followed by an introduction to the analysis of compositional dynamics. Students may work from the human form, still life, and/or landscape. Studio classes are tutorial by nature but may be supplemented by group critiques. Students are familiarized with various drawing media, which may include charcoal, conte crayon, pastel, ink, and graphite. (arts & com.)

ART 125 Portrait Drawing I
4 hours; 2 credits
Basic study of the human head and facial expressions with particular attention to the problems of portraiture. For beginning students.

ART 130 Introductory Painting
4 hours; 2 credits
The course is an introduction to the fundamentals of painting a picture. Students are first familiarized with materials, equipment, and studio maintenance. Basic pictorial concepts such as color, composition, perspective, space, and the picture plane are introduced. Studio classes are tutorial by nature but may be supplemented by group critiques. Students choose from a wide variety of unusual still lifes. They allow the student to return to his/her picture repeatedly over several weeks and outside of class time. Late-term gleanings can be re-applied to earlier efforts. Prolonged work allows the imagination to generate new possibilities from the initial attempt as the student is made to see as an artist does. (arts & com.)

ART 150 Introductory Sculpture
4 hours; 2 credits
An examination of the relationship between two-dimensional design and three-dimensional structures. Ideas will be realized through work in a series of media. Flat simple drawings will be converted into digital images on the computer, these will be turned into oaktag models, and finally reproduced in metal. Students will be required to build a minimum of two finished steel sculptures and two color digital images. (arts & com.)
ART 200  History of Art to the Renaissance  
4 hours; 4 credits  
This survey course will trace the development of painting, sculpture, and architecture from their beginnings in the Stone Age to the Early Renaissance. Emphasis will be placed on the relationship between the historical setting and the works themselves. Introduction to the history of the visual arts. (arts & com.)  
Prerequisite: ENG 111

ART 201  History of Art after the Renaissance  
4 hours; 4 credits  
A continuation of ART 200, this survey course traces further developments in the visual arts from the Renaissance to the works of the 20th-century masters. (arts & com.)  
Prerequisite: ENG 111

ART 203  Art of the Ancient World  
4 hours; 4 credits  
An examination of the art and architecture of predynastic Egypt, the Near East, the Aegean, mainland Greece, and Republican and Imperial Rome. While the course is, of necessity, a survey, particular emphasis will be placed on the evolution of the classical tradition. (arts & com.)  
Prerequisites: ART 100 or 103 or 104 or permission of the instructor and ENG 111

ART 209  Art and Society in America  
(Also AMS 209)  
4 hours; 4 credits  
Three hundred years of American art, studied as an expression of American life. Works of art are viewed in terms of style and also as guides to the complexities of American history and culture. (arts & com.)  
Prerequisites: ENG 111, and ART 100 or ART 200 or ART 201 or AMS 101

ART 210  The Architect and Society  
4 hours; 4 credits  
A selective review of the practice of architecture from antiquity to the present. The course will analyze changing formal and aesthetic concepts in the light of contemporaneous social and economic factors. (arts & com.)  
Prerequisites: ENG 111, and ART 100 or 200 or 201 or permission of the instructor

ART 211  History of Printmaking  
4 hours; 4 credits  
The history of printmaking from its origins in the 15th century to the present. While the main emphasis will be placed on the relation of printmaking to contemporaneous activity in paintings, an effort will be made to define the individual character of such techniques as woodblock printing, engraving, etching, mezzotint, aquatint, lithography, and screenprinting. The course will encourage connoisseurship by combining slide lectures with visits to museums and graphics studios.  
Prerequisite: ENG 111, and ART 100 or 200 or 201 or permission of the instructor

ART 220  Intermediate Drawing  
4 hours; 3 credits  
Concentrated study of the figure, complex problems in perspective and composition, detailed rendering in light and shade, and work in ink with brush and pen.  
Prerequisite: ART 120

ART 225  Portrait Drawing II  
4 hours; 3 credits  
Basic study of the human head and facial expressions with particular attention to the problems of portraiture. For intermediate students.  
Prerequisite: ART 125

ART 230  Intermediate Painting  
4 hours; 3 credits  
Representation of complex textures, problems of color, composition from figurative to abstract, and expression in the medium.  
Prerequisite: ART 130

ART 240  Women and the Fine Arts  
(Also WMS 240)  
4 hours; 4 credits  
This course examines the two-fold relationship of women to the fine arts; their role as subjects and as artists. Topics such as the portrayal of women as goddess, mother, and housewife, and as artist will be undertaken with a view to the social and historical input and implication of this imagery. The circumstances of women artists from the Renaissance to the present will also be considered.  
Prerequisites: ENG 111, and WMS 100 or ART 100 200 or 201 or the permission of the instructor

ART 245  Printmaking  
4 hours; 3 credits  
Instruction and practice in the fundamentals of the intaglio process; its relationship to the design and meaning of the print.

ART 250  Intermediate Sculpture  
4 hours; 3 credits  
Further techniques in subtractive and additive sculpture through production of works in stone and/or wood.  
Prerequisite: ART 150

ART 275  Studio Art Theory and Practice  
4 hours; 3 credits  
The aim of this course is to open a thorough understanding of two-dimensional organization in painting and drawing and, by extension, of three-dimensional concepts in sculpture. The study will involve a design analysis of selected paintings from the 15th and 16th centuries. Students are expected to produce drawings and paintings based on these explorations.  
Prerequisite: ART 120

ART 300  Medieval and Renaissance Art  
4 hours; 4 credits  
An attempt to differentiate and define the major stylistic developments in medieval and Renaissance art and architecture and to locate them within the broader context of contemporaneous European culture.  
Prerequisites: ENG 111, and ART 100 or 200 or 201 or permission of the instructor

ART 301  Baroque Art  
4 hours; 4 credits  
An analysis of the Baroque style, which developed in Italy at the beginning of the 17th century and spread throughout Europe. Particular emphasis will be placed on discussion of the varying intellectual, religious, and socioeconomic factors that affected such important questions as the role of patronage.  
Prerequisites: ENG 111, and ART 100 or 200 or 201 or permission of the instructor
ART 302  Garden Architecture in Italy
3 hours; 3 credits
An examination of the evolution of Italian garden architecture from the late Republican period to Neoclassicism with special emphasis placed on literary sources and with extensive site visits. (Offered only in the Study Abroad program at the Scuola Lorenzo di Medici in Florence.) Prerequisite: ART 100 or ART 200 or ART 201

ART 303  History of Photography
4 hours; 4 credits
A critical study of the history of photography from its beginning in the early 19th century through contemporary developments. Topics to be covered include the aesthetic relation of form and content, portraiture, the documentary and abstract approaches, and color photography. The primary emphasis will be on photography as an art, but emphasis will be given to the development of photographic equipment, materials, and techniques as they influence the art. Students will utilize slides and books to study the work of major artists. No previous study of photography is necessary. Prerequisites: ENG 111, and ART 100 or 200 or 201 or permission of the instructor.

ART 305  Museum and Gallery Training
4 hours; 4 credits
Students interested in studio art or art history are given an opportunity to combine theory and practical experience by working with an adviser at the College and in selected museums and private galleries in New York City. Since serious commitment is essential, prospective students will be interviewed by the adviser before registration. Hours will be arranged. This course may be repeated once for credit, with permission of the instructor. Prerequisites: ENG 111, and ART 100 or 200 or 201 or permission of the instructor.

ART 306  Nineteenth-Century Art
4 hours; 4 credits
An analysis of the principal currents of European and American art from the revolutionary period through the origins of modernism in the last years of the century. Topics to be covered include Neoclassicism, Romanticism, Realism, and Impressionism. Prerequisite: ENG 111; and ART 100 or 200 or 201 or permission of the instructor.

ART 307  Twentieth-Century Art
4 hours; 4 credits
An analysis of the principal developments in art from the end of the 19th century through the present. Prerequisite: ENG 111; and ART 100 or 200 or 201 or permission of the instructor.

ART 308  American Art since 1945
(Also AMS 308)
4 hours; 4 credits
The course will examine the development of American art since World War II. Prerequisite: ART/AMS 209 or AMS 212 or ART 307 or permission of the instructor.

ART 310  Aspects of Renaissance Art
3 hours; 3 credits
This course examines the development of European art and architecture from 1400 to 1520, stressing the Italian contribution and focusing particularly on style, iconography, and patronage. (Offered only at the American University of Rome.) Prerequisites: ENG 111, and ART 100 or 200 or 201 or permission of the instructor.

ART 311  Baroque Art and Architecture
3 hours; 3 credits
An analysis of the Baroque style that developed in Italy at the beginning of the 17th century and spread throughout Europe. Particular emphasis will be placed on discussion of the varying intellectual, religious, and socio-economic factors that affected such important issues as patronage. The role played by the city of Rome will be given particular consideration. (Offered only at the American University of Rome.) Prerequisite: ART 100 or 200 or 201 or permission of the instructor.

ART 319  The Role of Art in the Modern World
3 hours; 3 credits
A seminar exploring the current ideas and debates regarding art's role in the world. The class will investigate the nature of what the art activity was and is, as well as what purpose it served in the past and what purpose it serves currently. Oral presentations will be made. Concepts such as modernism, postmodernism, multiculturalism, and deconstruction will be introduced and discussed. Prerequisites: Any 200- or 300-level studio art course and ART 100 or ART 201, or permission of the instructor.

ART 320  Advanced Drawing
4 hours; 3 credits
Individual studio projects and advanced figure compositions in all drawing media. This course may be repeated for credit. Prerequisite: ART 220.

ART 325  Portrait Drawing III
4 hours; 3 credits
Basic study of the human head and facial expressions with particular attention to the problems of portraiture. For advanced students. This course may be repeated for credit. Prerequisite: ART 225.

ART 330  Advanced Painting
4 hours; 3 credits
Individual studio projects with emphasis on development of personal direction. This course may be repeated for credit. Prerequisite: ART 230.

ART 340  Design Workshop I
4 hours; 3 credits
Introduces the student to the basic conceptual and executional skills necessary in the field of graphic design. Areas to be covered will include two-dimensional space, color relationships, space relationships, and three-dimensional construction. Prerequisite: ART 340.

ART 341  Design Workshop II
4 hours; 3 credits
More advanced two- and three-dimensional problem solving with emphasis on the technical skills necessary for reproduction. Areas to be covered will include design problems and applications, typography, and methods of reproduction. Prerequisite: ART 340.
ART 345  Intermediate Printmaking
4 hours; 3 credits
Development of technical and expressive skills through selected areas of study in one or more of the graphic processes.
Prerequisite: ART 245

ART 350  Advanced Sculpture
4 hours; 3 credits
A continuation of ART 250 based upon a project approved by both student and instructor. Students will have the opportunity to work with an arc welder and plasma cutter, and to work in heavier steel. This course may be repeated for credit.
Prerequisite: ART 250

ART 375  Intermediate Studio Art Theory and Practice
4 hours; 3 credits
A continuation of the study of two-dimensional systems and concepts. The central focus will be an understanding of the development and structure of Cubism and fragmented patterns. Studies will be made in both black and white and in color. Students are expected to produce drawings and paintings that transpose realist paintings into Cubist manner.
Prerequisite: ART 275

ART 410  Major Artist I
4 hours; 3 credits
This course will explore the work of an artist of established historical importance as well as the context in which the artist worked and the art-historical and art-theoretical issues bearing on our effort to understand that artist. May be repeated for credit with the approval of the instructor.
Prerequisite: ENG 151; and ART 200 and ART 201 and a 300-level art history course or permission of the instructor.

ART 411  Major Artist II
4 hours; 3 credits
This course will explore the work of an artist of established historical importance as well as the context in which the artist worked and the art-historical and art-theoretical issues bearing on our effort to understand that artist. May be repeated for credit with the approval of the instructor.
Prerequisite: ENG 151; and ART 200 and ART 201 and a 300-level art history course or permission of the instructor.

ART 440  Contemporary Art Theory I
4 hours; 3 credits
A seminar for advanced students in the arts. Part I will review the historical developments that led to the establishment of the New York School.
Prerequisite: Permission of the instructor.

ART 441  Contemporary Art Theory II
4 hours; 3 credits
The seminar will continue with an attempt to correlate individual student research on recent movements with the shifts in aesthetic theory from the 1930s to the present.
Prerequisite: ART 440 or permission of the instructor.

ART 475  Advanced Studio Art Theory and Practice
4 hours; 3 credits
This course will probe the inter-relationship of realist and abstract painting. Realism and abstraction will be compared and explored for the elements they share as well as for their differences. From a simple still life the student will develop studies that result in two distinct series of paintings, one abstract, the other realist. This course may be repeated for credit.
Prerequisite: ART 375

ASTRONOMY COURSES
Department of Engineering Science and Physics
Program Coordinator and Director of the Astrophysical Observatory: Associate Professor Irving Robbins, Computer Science/Engineering Science and Physics Building (1N), Room 233
Astrophysical Observatory: A 16” f/10 Telescope housed in a fully equipped 16-foot domed building near the track. The observatory is station #294 for the Astronomical Union and tracks hazardous asteroids and comets.

AST 100  Contemporary Theories of the Solar System
3 hours; 3 credits
The nature of the sun, moon, planets, comets, meteors and meteorites; early and modern history of the Earth; the origin of the solar system; evolution of life on Earth and in the cosmos. Field trips and/or day and evening astronomical observation sessions will be required. Students may not receive credit for both INS 100 and AST 100. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test
Corequisite: AST 101

AST 101  Planetary Laboratory
2 laboratory hours; 1 credit
Experiments on the properties of light and telescopes, the celestial sphere and time, eclipses, planetary orbits, meteors, sunspots, lunar geography, and observation work. (science)
Corequisite: AST 101

AST 102  Contemporary Theories of the Universe
3 hours; 3 credits
A presentation of the galaxy, atomic structure, star populations, nuclear energy, stellar evolution, galactic structure, and the universe. Field trips and/or day and evening astronomical observation sessions will be required. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test
Corequisite: AST 103

AST 103  Galactic Laboratory
2 laboratory hours; 1 credit
Experiments on atomic properties of matter, stellar atmosphere, variable and nova stars, galaxy classification, stellar clusters, and observation work. (science)
Corequisite: AST 102

AST 105  Observational Astronomy
3 class hours, 2 laboratory hours; 4 credits
Topics covered are aligning and using computerized telescopes; celestial coordinate systems, time keeping, observations of the planets, moon, sun, asteroidal motions, and variable stars; astrophotography with CCD imaging.
cameras; photometric techniques. Day and evening astronomical observation sessions will be required beyond regularly scheduled hours. (science)

Prerequisites: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test, AST 100 or AST 102 or permission of the instructor

AST 120      Space Science I
3 class hours, 2 laboratory hours; 4 credits
Observations and telescopes. The structure and origin of the solar system, the sun-Earth connection, and space physics; space weather, comparative planetology. Laboratory emphasis will be on quantitative measures of celestial positions (i.e., astrometry, as well as solar system photometry). Field trips and/or day and evening astronomical observation sessions will be required. (science)
Pre- or corequisite: MTH 230 or MTH 231

AST 160      Space Science II
3 class hours, 2 laboratory hours; 4 credits
Energy transport; stellar structure and evolution and origins; interstellar medium and star birth; galactic and extragalactic astronomy and cosmology; the Big Bang and beyond. Laboratory emphasis will be on stellar photometry and spectroscopy. Field trips and/or day and evening astronomical observation sessions will be required. (science)
Prerequisite: AST 120
Corequisite: MTH 232

AST 396      Introduction to Astrophysics
3 hours; 3 credits
Celestial mechanics, electromagnetic radiations; their detectors and remote sensing; special relativity, stellar pulsation, general relativity and black holes, the nature and evolution of galaxies, origins, Newtonian and relativistic cosmology. Field trips and/or day and evening astronomical observation sessions will be required.
Prerequisite: AST 160

BIOCHEMISTRY

(Bachelor of Science, Minor)
Department of Biology
Chair: Professor Richard Veit, Biological/Chemical Sciences Building (6S), Room 143

Department of Chemistry
Chair: Associate Professor John Olsen, Biological/Chemical Sciences Building (6S), Room 235

A degree in Biochemistry prepares students interested in working in the fast growing biotechnology field, in the chemical and pharmaceutical industries, in research, product development, marketing and sales, and in such related fields as teaching. For students who wish to pursue graduate study in the sciences or enter professional schools (medicine, dentistry, optometry, pharmacy), a BS degree in Biochemistry is viewed quite favorably by admissions committees.

Biochemistry (BS)
General Education Requirements for the BS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The Contemporary World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (3-4 credits)
3. The Contemporary World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
See section on general education requirements for approved course lists and complete details.

Pre-Major Requirements: 34 credits
Students planning to major in Biochemistry must complete the following requirements. These courses may also be used to satisfy general education requirements. A detailed guide to course choices for Biochemistry and Chemistry majors is available from the Department of Chemistry.

CHM 141    General Chemistry I 3 credits
CHM 121    General Chemistry I Laboratory 1 credit
CHM 142    General Chemistry II 3 credits
CHM 127    General Chemistry II Laboratory 1 credit
BIO 170    General Biology I 5 credits
BIO 171    General Biology I Laboratory 1 credit
BIO 180    General Biology II 5 credits
BIO 181    General Biology II Laboratory 1 credit
PHY 120    General Physics I 3 credits
PHY 121    General Physics I Laboratory 1 credit
PHY 160    General Physics II 3 credits
PHY 161    General Physics II Laboratory 1 credit
Calculus sequence chosen from the following:
MTH 229    Calculus Computer Laboratory
MTH 230    Calculus I and Pre-Calculus
or
MTH 231    Analytic Geometry and Calculus I
and
MTH 232    Analytic Geometry and Calculus II
MTH 233    Analytic Geometry and Calculus III
or
MTH 235    Accelerated Calculus I
MTH 236    Accelerated Calculus II

Major Requirements: 40 credits

CHM 250    Organic Chemistry I 4 credits
CHM 256    Organic Chemistry II 4 credits
CHM 240    Analytical Chemistry 4 credits
CHM/     
BIO 370    Biochemistry I 4 credits
CHM/     
BIO 376    Biochemistry II 4 credits
CHM 330    Physical Chemistry: Equilibria 4 credits
CHM 336  Physical Chemistry: Processes 4 credits
and
CHM 337  Experimental Methods in Physical Chemistry 4 credits
or
CHM 377  Biochemistry Laboratory 4 credits

Two biology electives chosen from:
BIO 312  Genetics*
BIO 322  Evolution
BIO 332  Advanced Physiology*
BIO 352  Cell Biology*
BIO 428  Plant Physiology 8 credits

* BIO 205 is a prerequisite:

Electives: 7 - 24 credits
All biochemistry majors are encouraged to take Independent Study (CHM 591-4 or BIO 591-4) as an elective.

Total Credits Required: 120

Honors
A student may be eligible for admission to the Honors program in Biochemistry if he or she enters the senior year with a 3.5 grade point average. With the concurrence of a faculty supervisor, the student must submit (by September 1) a one-page summary of a proposed research project. The chairperson of the department and the faculty supervisor will appoint a three-member committee to evaluate and/or modify the proposal (by September 15), then grant or deny admission to the Honors program.

While pursuing Honors research the student may receive eight credits for Independent Study (BIO 594 or CHM 594), four each in the fall and spring semesters. Additionally, it is highly recommended that the student begin work on the project during the summer or spring semester that immediately precedes the senior year. Progress of the research will be monitored as follows: (1) the student will meet with his or her committee by November 1 of the first semester; (2) the student will submit a five-page progress report by January 15; (3) the committee will recommend for or against continuation in the program by February 1; (4) the student will submit a thesis, following the style of major journals, by May 1; (5) the student will present an oral defense of the thesis to the committee, by the end of the final exam period.

The deadline dates noted above are based on a June graduation date, but corresponding guidelines may be designed for January graduation. In either case, it is expected that completion of the Honors program will require at least one year of student research.

Minor
Prerequisite Courses:
- CHM 141, 142, 142, 127 8 credits
- BIO 170, 171, 180, 181 8 credits

Requirements
- CHM 240  Analytical Chemistry 4 credits
  or
- CHM 340  Instrumental Analysis 4 credits
- CHM 250  Organic Chemistry I 4 credits
- CHM 256  Organic Chemistry II 4 credits
- CHM 370  Biochemistry I 4 credits

Biochemistry Courses
Courses in biochemistry are listed under Biology and Chemistry.

BIOLOGY

(Bachelor of Science, Biology/Bioinformatics, Secondary Education Preparation, Master of Science - see Graduate Catalog for information on graduate programs)
Department of Biology
Chair: Professor Richard Veit, Biological/Chemical Sciences Building (6S), Room 145

Study of the biological sciences is a major requirement for students who wish to specialize in such fields as plant or animal research, and for students who plan to enter various health professions, such as medicine, nursing, dentistry, medical technology, physician assistant, and physical therapy. The Department offers a varied and balanced program for biology and health profession majors, and three options in the BS degree program in Biology: biology major, biology/adolescence education, and bioinformatics.

Biology (BS)

General Education Requirements for the BS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The Contemporary World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (3-4 credits)
3. The Contemporary World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
See section on general education requirements for approved course lists and complete details.

Option I - Biology Major

Pre-Major Requirements: 15-19 credits

A. All four of the following courses:
   BIO 170  General Biology I 3 credits
   BIO 171  General Biology I Laboratory 1 credit
   BIO 180  General Biology II 3 credits
   BIO 181  General Biology II Laboratory 1 credit

B. One of the following three units:
   MTH 230  Calculus I with Pre-Calculus 6 credits
   MTH 229  Calculus Computer Laboratory 1 credit
   or
   MTH 231  Analytical Geometry and Calculus I 3 credits
Major Requirements: 63 credits
A minimum grade of C is required for a biology course to be used to satisfy a prerequisite for a biology course required for the major requirements for the BS in Biology.

A. Required courses
- BIO 205 General Physiology 4 credits
- BIO 312 Genetics 4 credits
- BIO 322 Evolution 4 credits
- BIO 352 Cell Biology 4 credits
- BIO 360 Ecology 4 credits

B. One of the following courses: 4 credits
- BIO 370 Biochemistry
- BIO 372 Cell Biochemistry
- BIO 213 Comparative Vertebrate Anatomy
- BIO 215 Invertebrate Zoology and Paleontology
- BIO 228 Botany

C. One advanced six-hour laboratory course from the following: 3 credits
- BIO 424 Molecular Biology and Biotechnology Laboratory
- BIO 450 Experimental Methods in Animal Physiology
- BIO 452 Experimental Methods in Behavioral Biology
- BIO 454 Advanced Methods in Cell Biology
- BIO 456 Experimental Methods in Ecology
- BIO 458 Experimental Methods in Cell Biochemistry
- BIO 460 Experimental Methods in Advanced Genetics

D. Four courses selected from the following: 12 credits
Courses not selected in groups A, B, or C and these additional courses:
- BIO 222 Field Biology
- BIO 240 Biology of Disease
- BIO 314 General Microbiology
- BIO 318 Histology
- BIO 324 Developmental Biology
- BIO 325/ MDT 325 Diagnostic Molecular Biology
- BIO 326 Introduction to Bioinformatics and Genomics
- BIO 327 Molecular Biology
- BIO 332 Advanced Physiology
- BIO 338 Behavioral Biology
- BIO 365 Principles of Neurobiology
- BIO 415 Mathematical Biology
- BIO 420 Comparative Endocrinology
- BIO 425 Computational Molecular Biology
- BIO 428 Plant Physiology
- BIO 434 Comparative Physiology

Electives: 7 - 28 credits
Total Credits Required: 128

Option II - Biology/Adolescence Education, grades 7-12
In addition to completing the pre-major and major requirements in Option I above, students wishing to be recommended by the College for teacher certification must complete the following sequence of education courses for 24 credits:
- EDS 201 Social Foundations of Secondary Education 4 credits
- EDS 202 Psychological Foundations of Secondary Education 4 credits
- EDS 304 The Teaching of Secondary School Curriculum in Science 4 credits
- EDS 307 Discovery Learning and Interdisciplinary Instruction 4 credits
- EDS 400 Student Teaching in Secondary Education 6 credits
- EDS 401 Reflection and Analysis in Student Teaching in Secondary Education 2 credits

A minimum grade of C is required for a biology course to be used to satisfy a prerequisite for a biology course required for the major requirements for the BS in Biology/Adolescence Education.

Total Credits Required: 128

Option III - Biology/Bioinformatics
General Education Requirements: same as for Option I as shown above.

Pre-Major Requirements: 20-23 credits
A. All four of the following courses:
- BIO 170 General Biology I 3 credits
- BIO 171 General Biology I Laboratory 1 credit
- BIO 180 General Biology II 3 credits
- BIO 181 General Biology II Laboratory 1 credit

B. One of the following three units:
- MTH 230 Calculus I with Pre-Calculus 6 credits
- MTH 229 Calculus Computer Laboratory 1 credit
  or
- MTH 231 Analytical Geometry and Calculus I 3 credits
MTH 229 Calculus Computer Laboratory 1 credit
or
MTH 235 Accelerated Calculus I 5 credits
MTH 229 Calculus Computer Laboratory 1 credit

C. BIO 272 Biometrics 4 credits

D. CSC 126 Introduction to Computer Science 4 credits

**Major Requirements: 81-82 credits**

A minimum grade of C is required for a biology course to be used to satisfy a prerequisite for a biology course required for the major requirements for the BS in Biology/Bioinformatics.

**A. Required Courses**

- BIO 205 General Physiology 4 credits
- BIO 312 Genetics 4 credits
- BIO 322 Evolution 4 credits
- BIO 352 Cell Biology 4 credits
- or
- BIO 360 Ecology 4 credits

**B. All of the following courses:**

- BIO 327 Molecular Biology 4 credits
- BIO/
  - CHM 370 Biochemistry I 4 credits
  - BIO/
  - CHM 376 Biochemistry II 4 credits
  - BIO 326 Introduction to Bioinformatics 3 credits
- MTH/
  - BIO 415 Mathematical Biology 4 credits

**C. One advanced six-hour laboratory course from the following:**

- 3 credits

- BIO 450 Experimental Methods in Animal Physiology
- BIO 452 Experimental Methods in Behavioral Biology
- BIO 454 Advanced Methods in Cell Biology
- BIO 456 Experimental Methods in Ecology
- BIO 458 Experimental Methods in Cell Biochemistry
- BIO 460 Experimental Methods in Advanced Genetics

**D. One elective from the following:**

- 3-4 credits

- Courses not selected in groups A or C and these additional courses:
  - BIO 213 Comparative Vertebrate Anatomy
  - BIO 215 Invertebrate Zoology and Paleontology
  - BIO 228 Botany
  - BIO 240 Biology of Disease
  - BIO 314 General Microbiology
  - BIO 318 Histology
  - BIO 324 Developmental Biology
  - BIO 325 Diagnostic Molecular Biology
  - BIO 332 Advanced Physiology
  - BIO 338 Behavioral Biology
  - BIO 365 Principles of Neurobiology
  - BIO 372 Cell Biochemistry
  - BIO 428 Plant Physiology
  - BIO 442 Immunology

**E. Required related science courses:**

- CSC 220 Computers and Programming 4 credits
- CSC 228 Discrete Mathematical Structures 4 credits
- CSC 326 Information Structures 4 credits
- CSC 424 Database Management 4 credits
- PHY 116 Physics I 4 credits
- PHY 156 Physics II 4 credits
- or (with appropriate mathematics background)
- PHY 120 General Physics I
- PHY 121 General Physics I Laboratory
- PHY 160 General Physics II
- PHY 161 General Physics II Laboratory 8 credits
- CHM 141 General Chemistry I 3 credits
- CHM 121 General Chemistry I Lab 1 credit
- CHM 142 General Chemistry II 3 credits
- CHM 127 General Chemistry II Lab 1 credit
- CHM 250 Organic Chemistry I 4 credits
- CHM 256 Organic Chemistry II 4 credits

**Electives: 0-5 credits**

**Total Credits Required: 128**

For all three Biology BS degree program options, with permission of the program coordinator, BIO 150 and BIO 160 Anatomy and Physiology I and II may be substituted for BIO 170 and BIO 171 General Biology I and Laboratory; but BIO 150 and BIO 160 may not be used to satisfy the Scientific Analysis requirement in general education.

A student who has educational background or work experience that may be equivalent to the stated pre- or corequisite for a biology course should contact the Chairperson of the Biology Department. If it is determined that a student has the appropriate background, a course requisite waiver will be issued.

**Honors**

The Honors program in Biology is available to eligible seniors with a 3.5 grade point average or better. The program requires a minimum of one year to complete. The student may receive up to eight credits for independent study (BIO 594) while completing the Honors program. However, students do not automatically gain entrance into the Honors program by registering for independent study.

To be accepted into the Honors program, the student must first obtain approval from a full-time member of the department to carry out an Honors research project. This faculty member will then serve as the student’s adviser. Thereafter, the student will prepare and present a detailed written preliminary proposal of the Honors research project for approval to a three-member departmental committee, consisting of the faculty adviser and two other faculty members. The committee will evaluate the proposal. After an oral presentation by the student and upon the recommendation of the committee, the student will be accepted into the program. The student will meet with his or her committee midway through the first semester for evaluation of the project. In addition, the student will submit a written progress report to the committee at the end of the first semester. On the basis of this report, the committee will decide whether the student should proceed further. If the student does not continue in the Honors program, he or she may still acquire the credits for independent study.

When the research is completed, the student is required to write up the research in the form of a thesis that will be evaluated at early and final stages by the committee. The thesis format must adhere to that used by
leading biological journals, or as outlined in the AIBS style manual. The ultimate decision on thesis format lies with the committee.

Because it will take at least one year to complete the Honors program in Biology, it is suggested that the student begin work during the summer immediately following the junior year.

**Minor**

Prerequisite courses:
- BIO 170
- and 171  General Biology I and Laboratory  4 credits
- BIO 180
- and 181  General Biology II and Laboratory  4 credits

**Requirements:**
Four biology courses at the 200 level or above, at least two of which must have laboratory components.  14-16 credits

**Courses**

**BIO 102  Human Body**
3 class hours, 1 recitation hour, 2 laboratory hours; 4 credits
Survey course of gross anatomy and physiology with emphasis on the relation of structure to function and disease processes. Reading techniques and vocabulary problems of the biological sciences are emphasized.
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Test
This course may not be used to satisfy major requirements for the BS in Biology.

**BIO 105  Molecular Foundations of Cell Function**
1 lecture hour, 1 recitation hour; 1 credit; the course meets four hours per week for one-half semester
This course offers an introductory survey of molecular biology, cellular metabolism, and cellular mechanisms. It is designed to run concurrently with BIO 150 Human Anatomy and Physiology I, and to provide the necessary background for the study of human anatomy and physiology.
Prerequisite: BIO 102 with a minimum grade of C or a satisfactory score on the Biology Placement Test.
Corequisite: BIO 150

Note: Students planning to enter the programs in Nursing, Physical Therapy, Physician Assistant, or the Nuclear Medicine option in Medical Technology are assigned this course by the Department of Biology on the basis of scores attained on the Biology Placement Test.

**BIO 106  Principles of Biology I**
3 hours; 3 credits
Introductory biology for non-science majors. Structure and function of the body and the effects of the environment on it. Fundamental biological principles and concepts and their applications to relevant concerns such as drug addiction, food additives, physical fitness, and the population explosion. Not credited toward Biology major. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test
Corequisite: BIO 107

**BIO 107  Principles of Biology I Laboratory**
2 laboratory hours; 1 credit
Laboratory experiences illustrating principles and topics discussed in BIO 106. (science)
Corequisite: BIO 106

**BIO 108  Principles of Biology II**
3 hours; 3 credits
Introductory biology for non-science majors (continuation of BIO 106). The role of biology in the world around us and the effects of the modern world on living things including ecology, pollution, and the extinction of species. Diseases and their treatment through drugs and genetic engineering. Science and the role of the citizen. Not credited toward Biology major. (science)
Prerequisites: BIO 106, 107
Corequisite: BIO 109

**BIO 109  Principles of Biology II Laboratory**
2 laboratory hours; 1 credit
Laboratory experiences illustrating principles and topics discussed in BIO 108. (science)
Corequisite: BIO 108

**BIO 146  Nutrition**
3 hours; 3 credits
This course presents fundamental principles, concepts, and applications of normal nutrition. Stress will also be placed on the relation of good nutrition to good health. Emphasis will be placed on the common restrictive diets generally used in medical office practice.
Open to non-Medical Assistant students as an elective. May not be used to satisfy major requirements for the BS in Biology.
Prerequisites: BIO 102 or BIO 170/171 or BIO 106/107 or BIO 150

**BIO 150  Human Anatomy and Physiology I**
3 class hours, 3 laboratory hours; 4 credits
The first half of a comprehensive two-semester course in human biology. Integrated lecture and laboratory sessions deal with the structure and function of cells, tissues, and the following systems: integumentary, musculoskeletal, blood-cardiovascular, immune, and respiratory. May not be used to satisfy general education degree requirements, except for Nursing AAS students.
Prerequisite: BIO 102 with a minimum grade of C or a satisfactory score on the Biology Placement Test.
Pre- or corequisite: BIO 105 or a satisfactory score on the Biology Placement Test Test
Pre- or corequisite: BIO 105 or a satisfactory score on the Biology Placement Test Test
Note: Students who have previously registered two or more times for BIO 150 will be permitted to register again only on a space-available basis, as determined at the close of registration. Students must receive a grade of C or better in BIO 150 and BIO 105 (when prescribed as a corequisite of BIO 150) to proceed to BIO 160. This is a required course for students planning to enter the programs in Nursing, Physical Therapy, Physician Assistant, or the Nuclear Medicine option in Medical Technology programs.

**BIO 160  Human Anatomy and Physiology II**
3 class hours, 3 laboratory hours; 4 credits
This course is a continuation of BIO 150. Lecture and laboratory sessions deal with the structure and function of the urinary, digestive, nervous, endocrine, and reproductive systems. May not be used to satisfy general education degree requirements, except for Nursing AAS students.
Prerequisite: BIO 105 or a satisfactory score on the Biology Placement Test, and BIO 150

Note: Students must receive a grade of C or better in BIO 150 and in BIO 105 (when prescribed by the Department as a corequisite of BIO 150) to proceed to BIO 160. This is a required course for students planning to enter the programs in Nursing, Physical Therapy, Physician Assistant, or the Nuclear Medicine option in Medical Technology programs.
BIO 170  General Biology I
3 hours; 3 credits
Fundamental biological principles of cell metabolism, energy transformations, and plant and animal functions including support, digestion, respiration, circulation, excretion, and integration, and selected current topics.
For science, medical technology, appropriate preprofessional majors, and other interested students in consultation with an adviser. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test
Corequisite: BIO 171

BIO 171  General Biology I Laboratory
3 laboratory hours; 1 credit
Direct student involvement in the experimental demonstration of basic biological principles in plants and animals and the dissection of the fetal pig, with experiments oriented toward the understanding of the human body.
For science, medical technology, appropriate preprofessional majors, and other interested students in consultation with an adviser. (science)
Corequisite: BIO 170

BIO 180  General Biology II
3 hours; 3 credits
A continuation of BIO 170, including plant and animal diversity, microbes and disease, reproduction, development, patterns of inheritance, the origins of life, evolution, ecology, and selected topics. For science, medical technology, appropriate preprofessional majors, and other interested students in consultation with an adviser. (science)
Prerequisites: BIO 170 and BIO 171
Corequisite: BIO 181

BIO 181  General Biology II Laboratory
3 laboratory hours; 1 credit
A continuation of BIO 171. A laboratory examination of the material covered in BIO 180. For science, medical technology, appropriate preprofessional majors, and other interested students in consultation with an adviser. (science)
Prerequisites: BIO 170 and BIO 171
Corequisite: BIO 180

BIO 205  General Physiology
3 class hours, 3 laboratory hours; 4 credits
A study of systemic physiology with emphasis on cell physiology, homeostasis, and control mechanisms in vertebrates, particularly mammals. Laboratory exercises include physiographic studies of various systems. Required for Biology and Medical Laboratory Technology majors.
Prerequisites: BIO 160 or BIO 180 and 181; CHM 141 and CHM 121

BIO 213  Vertebrate Zoology
2 class hours, 4 laboratory hours; 4 credits
A comparative study of the chordates with emphasis on both extant and extinct taxa, ecology, behavior and morphological and physiological specializations. Projects conducted outdoors at local field sites and a museum trip.
Prerequisites: BIO 180 and 181

BIO 214  Biological Approach to Human Sexuality
3 hours; 3 credits
Developmental anatomy of female and male reproductive systems, basic endocrinology and reproductive cycles; physiology of sexual functions; pregnancy and birth; fertility, stimulation, and control; sexual disorders, venereal disease, and other diseases including cancer; biological origins and variations of behavior. May not be used to satisfy the major requirements for the BS in Biology.
Pre- or corequisite: BIO 180 and 181 or BIO 160

BIO 215  Invertebrate Zoology and Paleontology
2 class hours, 4 laboratory hours; 4 credits
Taxonomy, ecology, evolution, paleontology, and phylogeny of the invertebrates, emphasizing the medical, economic, and evolutionary importance of the various groups. Introduction to the use of zoological literature and preparation of a scientific paper.
Prerequisites: BIO 180 and 181

BIO 222  Field Biology
2 class hours, 4 laboratory or field hours; 4 credits
This course provides instruction in standard procedures of collecting, preserving, and analyzing specimens and data observed during off-campus field trips. Analysis will include introduction to descriptive statistics; comparisons and indices of species diversity, dispersion, and community similarity. One field study will be made of animal behavior. One weekend field trip is scheduled. Reports using scientific format, labeled specimen collections, and a field notebook are required.
Prerequisites: BIO 180 and 181

BIO 228  Botany
3 class hours, 3 laboratory hours; 4 credits
An introduction to the major structural and functional characteristics of the groups of plants that comprise the plant kingdom: bacteria, algae, fungi, mosses, ferns, gymnosperms, and angiosperms. Interrelationships of evolution, diversity, and ecology are stressed throughout the examination of all major disciplines of plant biology.
Prerequisites: BIO 180 and 181

BIO 232  Social Problems in Biology
3 hours; 3 credits
A course exploring the application of biology to crucial issues in the world today: drugs, pollution, overpopulation, birth control, abortion, the right to die, test-tube babies, genetic engineering, the rebuilding of man, and the conquest of diseases. May not be used to satisfy the major requirements for the BS in Biology.
Prerequisites: BIO 102, or BIO 170 and 171, or BIO 106 and 107

BIO 240  The Biology of Disease
3 hours; 3 credits
Biological aspects of the major diseases of humans, including heart disease, cancer, autoimmune diseases such as arthritis and multiple sclerosis; hereditary diseases such as sickle cell anemia and hemophilia; and bacterial and viral diseases such as tuberculosis, colds, and influenza. Principles of immunology, chemotherapy, and genetic engineering are among the major concepts that will be studied. Effects of disease on human history will also be discussed.
Prerequisites: BIO 108 and 109, or BIO 180 and 181, or BIO 160
BIO 242  History of Biology
3 hours; 3 credits
A survey of the historical development of some of the major biological concepts including an examination of the life and times of various biologists and the factors that influenced their work. Original scientific research papers will be read. May not be used to satisfy the major requirements for the BS in Biology. Prerequisite: BIO 180 and 181.

BIO 272  Biometrics
4 hours; 4 credits
A course for science majors emphasizing applications of statistics to problems in experimental biology, field biology, and environmental science. It covers descriptive statistics, probability and probability distributions, confidence intervals, hypothesis testing, and design of experiments. The following techniques are included: goodness of fit tests, t-tests, analysis of variance, correlation and regression, time series analysis, and nonparametric methods. Prerequisites: BIO 160 or BIO 180 and 181; MTH 125 or MTH 130.

BIO 312  Genetics
3 class hours, 3 laboratory hours; 4 credits
A study of the mechanics and molecular basis of inheritance. The lectures will cover patterns of inheritance, structure and function of nucleic acids, recombinant DNA, bacterial genetics, and population genetics. Laboratory exercises will include studying patterns of inheritance with Drosophila melanogaster and techniques related to recombinant DNA work. Required of Biology majors. Prerequisites: BIO 205 and CHM 142 and CHM 127.

BIO 314  General Microbiology
3 class hours, 3 laboratory hours; 4 credits
Topics will include immunology, biotechnology, and the metabolism, genetics, morphology, and growth of microorganisms. Required of Medical Technology majors. Prerequisites: BIO 160 or BIO 180, BIO 181, and CHM 141.

BIO 316  Clinical Microbiology
2 class hours, 4 laboratory hours; 4 credits
Medical and diagnostic microbiology: a study of host microbe interactions, the principles and applications of the immune response, the epidemiology of infectious disease, and the pathogenesis of the major microbial diseases. In the laboratory the procedures used in laboratory diagnosis are applied. Required of Medical Technology majors. A non-liberal arts and sciences course, not credited toward the Biology major. Prerequisite: BIO 314.

BIO 318  Histology
2 class hours, 4 laboratory hours; 4 credits
A study of the microscopic structure of mammalian cells, tissues, and organs with emphasis on functional correlations. Laboratory sessions include technical procedures for fixing, sectioning, staining, and mounting tissue specimens, and examination of prepared microscopic slides of human/mammalian tissues and organs. Prerequisite: BIO 160 or BIO 205.

BIO 322  Evolution
4 hours; 4 credits
The principles of the neo-Darwin theory of evolution; the origin and evolution of life; mechanisms of evolution and the roles of genetic variation, natural selection, isolation, and chance; species concepts and speciation; phylogeny; the tempo and mode of evolution; molecular evolution; the impact of genomics on evolutionary relationships; and an introduction to the use of pertinent scientific literature. Prerequisite: BIO 312.

BIO 324  Developmental Biology
5 class hours, 3 laboratory hours; 4 credits
Early development of representative organisms, including fertilization, cleavage, origin of germ layers, and organ systems; biochemical events during differentiation. Prerequisites: BIO 180 and 181; CHM 142
Pre- or corequisite: BIO 205

BIO 325  Diagnostic Molecular Biology
(also MDT 325)
3 class hours, 3 laboratory hours; 4 credits
This course will address the theoretical and practical framework for the understanding and application of molecular biology techniques in the clinical laboratory. The course material will cover the principles and applications of recombinant DNA technology including DNA-DNA hybridization, DNA amplification, and nonradioactive in situ hybridization (HISH) for the detection and identification of microorganisms associated with infectious diseases. Prerequisites: BIO 314, CHM 142.

BIO 326  Introduction to Bioinformatics and Genomics
3 class hours, 3 laboratory 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, microarray analyses, etc. Laboratory includes demonstrations and practical exercises illustrating the analyses and concepts presented and discussed in lecture. Prerequisites: BIO 327 or permission of the instructor. Recommended: BIO 312, BIO 370, BIO 352 or the equivalent.

BIO 327  Molecular Biology
4 hours; 4 credits
Principles and regulation of gene expression: nucleic acid and chromosome structure/function, transcription, RNA processing, and translation. Emphasis on eukaryotes and experimental analysis (recombinant DNA and other methods) of genomes, gene structure/function, and expression. Prerequisites: BIO 205, CHM 142 and CHM 127 or permission of the instructor. Recommended: BIO 312, BIO 370, BIO 352, or the equivalent.

BIO 332  Advanced Physiology
4 hours; 4 credits
An in-depth study of representative physiological mechanisms at the molecular and cellular levels of organization. Course topics include the function of biological macromolecules, bioenergetics and metabolism, cell surface dynamics, functional microanatomy of neurons, neural information transfer and integration, organization of reflexes, hormones and other bioactive chemical messengers, renal regulation of the internal environment. Prerequisite: BIO 160 or BIO 205.
BIO 338  Behavioral Biology
3 class hours, 3 laboratory hours; 4 credits
This course will cover the areas of animal behavior, neurophysiology, sensory physiology, and neuroendocrinology to provide an integrated point of view of the biological basis of behavior.
Prerequisites: BIO 205 and CHM 142

BIO 342  Advanced Human Anatomy
3 class hours, 3 laboratory hours; 4 credits
In-depth study of the human body with emphasis on the neuromuscular system. Examines structural interrelationships as a basis for normal functions. Directed laboratory experiences with cadaver dissection and skeletal materials and models.
Prerequisites: BIO 160 and acceptance into the Physical Therapy or Physician Assistant Programs or permission of the appropriate program coordinator.

BIO 346  General Virology
4 hours; 4 credits
Study of major groups of viruses and includes structural and biochemical characteristics, cell-virus interactions, and viral diseases.
Prerequisites: BIO 205 and CHM 142. Recommended: CHM 250 and BIO 312

BIO 350  Microbiology and Cellular Pathology
3 hours; 3 credits
A one-semester course that surveys the major groups of microorganisms with emphasis on those involved in human health problems. The principles of immunity and hypersensitivity, microbial control, and the principal microbial diseases are discussed. Not credited toward the Biology major.
Prerequisite: BIO 160
Corequisite: BIO 351

BIO 351  Microbiology and Cellular Pathology Laboratory
3 laboratory hours; 1 credit
Laboratory exercises correlated with topics covered in BIO 350.
Prerequisite: BIO 160
Corequisite: BIO 350

BIO 352  Cell Biology
3 class hours, 3 laboratory hours; 4 credits
The eukaryotic cell is treated as a highly compartmentalized functional unit. Emphasis on cell cycle, DNA and chromosomal organization and functions, replication, transcription and translation, also organization and functional interrelationship of surface and internal membrane systems, exo/endocytosis and cytoskeleton. The lab component deals with selected topics illustrating key cell biology concepts. Required for Biology majors.
Prerequisites: BIO 205 and CHM 142
Corequisite: CHM 250

BIO 360  Ecology
3 class hours, 3 laboratory hours; 4 credits
How interactions between organisms, and between organisms and the physical environment bring about adaptations in response to natural selection, and change in species diversity through evolutionary time. Population genetics, growth and demography; competition, predation; and community and ecosystem structure and function are other major areas covered. Principles of ecology will be emphasized in laboratory work and in field studies of various natural habitats. Required for Biology majors.
Prerequisites: BIO 312. Recommended: BIO 215 or BIO 228

BIO 365  Principles of Neurobiology
3 class hours, 3 laboratory hours; 4 credits
A study of basic mechanisms regulating activity of nerve cells including mechanisms of memory and brain disorders. Laboratory exercises include electrophysiological recordings of neuronal activity in vitro and biochemical characterization of components of the nervous tissue.
Prerequisites: BIO 180 and BIO 181, or BIO 160
Corequisite: CHM 250

BIO 368  Neuroscience
3 class hours, 3 laboratory hours; 4 credits
Examines the structure and function of the central nervous system and sensory receptors. Includes laboratory sessions on the dissection of the human brain, examination of sections of the spinal cord and brain stem, and experiments with functions of the nervous system.
Prerequisites: BIO 332, BIO 342, PHT 200

BIO 370  Biochemistry I
(Also CHM 370)
4 hours; 4 credits
The major constituents of cells: physical and chemical properties of carbohydrates, lipids, proteins, and nucleic acids. Properties of enzymes including specificity and kinetics.
Prerequisite: CHM 256
Pre- or corequisite: PHY 110 and 111, or PHY 116, or PHY 120 and 121

BIO 372  Cell Biochemistry
3 class hours, 3 laboratory hours; 4 credits
Chemical approaches to cell function: bioenergetics, cell replication, control of biosynthetic processes, and metabolism. Use of analytic methods to study the properties of cells and subcellular components.
Prerequisites: BIO 205, CHM 256

BIO 376  Biochemistry II
(Also CHM 376)
4 hours; 4 credits
Intermediary metabolism, metabolism of carbohydrates, lipids, amino acids, and nucleotides. Introduction to bioenergetics and biochemical genetics.
Prerequisite: BIO/CHM 370
Pre- or corequisite: PHY 150 and 151, or PHY 156, or PHY 160 and 161

BIO 378  Radiation Biology
4 hours; 4 credits
The biological effects of chronic and acute exposure to ionizing and non-ionizing radiation. The mechanisms underlying the events occurring during and after the interaction between macromolecules, isolated cells, organs, and entire organisms with irradiation. The effects of radiation at all levels of biological organization, and the biological basis for radiation safety practices are discussed.
Prerequisite: BIO 205
Pre- or corequisite: PHY 150 and 151, or PHY 156, or PHY 160 and 161

BIO 382  Pharmacotherapeutics
3 hours; 3 credits
Pharmacodynamics of medicinal substances with respect to advanced receptor mechanisms and the action-effect sequence of drug activity. Emphasis is on the correlation between drug structure, pharmacologic activity, and the effect of drugs. Not credited toward Biology major.
Prerequisites: BIO 350 and 351 or BIO 332; CHM 110 and 111 or CHM 141 and CHM 121
BIO 415  Mathematical Biology  
(Also MTH 415)  
4 hours; 4 credits  
This course will address the growing interaction between mathematics and the biological sciences and will provide a practical context for the mathematical description and analysis of biological processes. The emphasis will be on the construction and analysis of models consistent with empirical data. Biological problems in ecology and conservation, epidemiology, cell biology, and neuroscience will be used to illustrate the equations, including especially nonlinear equations. The computer program MATLAB will be used extensively.  
Prerequisites: MTH 230 and MTH 231 or equivalent; MTH 229, and one BIO 300-level course

BIO 420  Comparative Endocrinology  
3 class hours, 3 laboratory hours; 4 credits  
Role of major endocrine glands (including neuroendocrines) in cell function and metabolic pathways. Emphasis upon phylogeny and comparative physiology of the endocrine system. Pertinent methodology will be treated.  
Prerequisites: BIO 205, CHM 256, and one additional physiology course

BIO 424  Molecular Biology and Biotechnology Laboratory  
6 laboratory hours; 3 credits  
Methods in the cloning, expression, isolation, and analysis of nucleic acids (RNA and DNA) and recombinant proteins; introduction to computer methods and analysis in biotechnology; DNA sequencing and sequence analysis; experimental approaches for the analysis of regulation of gene expression including transfection, report analysis, etc.  
Prerequisites: BIO 205, CHM 142 and CHM 127  
Pre- or corequisites: BIO 327. Recommended: BIO 312, BIO 370, or BIO 352

BIO 425  Computational Molecular Biology  
3 hours; 3 credits  
Overview of theoretical and computational methods in bioinformatics with an emphasis on the application of algorithms and use of statistical methods in nucleic acid and protein sequence analysis. Emphasis on the mathematical basis of sequence alignment including database searches using Smith-Waterman dynamic programming, pair-wise sequence alignment using dynamic programming and scoring matrices, and multiple sequence alignment using hidden Markov model and genetic algorithms.  
Prerequisites: BIO 326, BIO 272 or MTH 214 and MTH 230 or MTH 231 or MTH 235

BIO 428  Plant Physiology  
3 class hours, 3 laboratory hours; 4 credits  
Examination of the basic physiological processes common to all vascular plants. Topics covered include cell structure and function, water transport, transpiration, photosynthesis, solute translocation, nutrient uptake, mineral nutrition, phytohormones, plant tropisms, growth, development, and reproduction. Laboratory exercises will include plant cells, water relations, tissue culture, photosynthesis, phytohormones, reproduction, competition, and symbiosis.  
Prerequisite: BIO 205 or BIO 228  
Pre- or corequisite: CHM 250

BIO 432  Clinical Pathology  
3 hours; 3 credits  
Study of the disease processes and their clinical manifestations beginning with the cellular and tissue levels leading to the organ level. Surveys medical conditions and their management as they relate to physical therapy practice. Areas include cardiology, orthopedics, autoimmunity, epidemiology.  
Prerequisites: BIO 342, BIO 332  
Corequisite: BIO 318

BIO 434  Comparative Physiology  
4 hours; 4 credits  
The study of the maintenance of internal homeostasis in different animal groups. Emphasis will be placed upon the phylogeny of the processes of regulation and integration.  
Prerequisites: BIO 205 and BIO 213 or BIO 215  
Corequisite: CHM 250

BIO 442  Immunology  
2 lecture hours, 4 laboratory hours; 4 credits  
An introduction to immunology; with attention to the formation and nature of antibodies, the nature of antigens, and problems of antigen-antibody interactions. Such subjects as antibody-mediated hypersensitivity and histocompatibility are also considered.  
Prerequisite: BIO 314 or 350

BIO 450  Experimental Methods in Animal Physiology  
6 laboratory hours; 3 credits  
Procedures and instrumentation used in testing physiological phenomena. Some of the areas explored are muscle contraction, nerve responses, renal function, active transport, and basal metabolism.  
Prerequisites: BIO 205, CHM 250  
Pre- or corequisite: CHM 256

BIO 452  Experimental Methods in Behavioral Biology  
6 laboratory hours; 3 credits  
Emphasis will be placed on the laboratory analysis of factors that influence the behavior of animals in the laboratory and field. Field trips will be required.  
Prerequisites: BIO 338 and BIO 272 or MTH 214

BIO 454  Advanced Methods in Cell Biology  
6 laboratory hours; 3 credits  
Current procedures for the microscopic study of tissues and cells. Advanced histological procedures involving paraffin embedding, sectioning, and staining with selected reactions will be used to study normal and experimentally modified tissues. Autoradiography and enzyme histochemistry will also be examined.  
Prerequisites: BIO 352 and CHM 142

BIO 456  Experimental Methods in Ecology  
6 laboratory hours; 3 credits  
Introduction to natural communities. Emphasis on quantitative methods for community and ecosystem analysis. Field trips to be arranged.  
Prerequisites: BIO 360 and either BIO 272 or MTH 214

BIO 458  Experimental Methods in Cell Biochemistry  
6 laboratory hours; 3 credits  
The course consists of the application of modern analytical methods to the study of the properties of cells and subcellular components. Emphasis will be placed on the mastering of laboratory techniques. Not credited toward biochemistry major.  
Prerequisite: BIO 370 or 372
BIO 460  Experimental Methods in Advanced Genetics
6 laboratory hours; 3 credits
Current procedures in basic recombinant DNA techniques will be utilized
including DNA isolation, restriction digestion, ligation, and analysis of
recombinant products.
Prerequisite: BIO 312

See Graduate Catalog for graduate courses.

BUSINESS

(Bachelor of Science, Associate in Applied Science, Minor)
Department of Business
Chair: Professor Laura Nowak, Business Building (3N), Room 219
The associate's degree program offers options in accounting, finance,
information systems, international business, management, and marketing.
Graduates may enter directly into the job market or continue study toward
the bachelor's degree and should consult an adviser and plan their
programs accordingly.

Students can obtain both exemption from and course credit for BUS 150 by
successfully completing four Microsoft Office User Specialist (MOUS) exams:
Version 2002 or later, in Word, Excel, PowerPoint, and Access. For information on
MOUS test standards and administration, see Microsoft Office Specialist Certification

Business (AAS)
General Education Requirements
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The
Contemporary World; Textual, Aesthetic, and Linguistic
Analysis: 13-15 credits
1. Scientific Analysis
   At least one science course with laboratory (4 credits)
   Mathematics: MTH 121, MTH 123, or higher (3-4 credits)
2. ECO 101 Introduction to Economics (3 credits)
3. One course from Social Scientific Analysis, The Contemporary World,
or Textual, Aesthetic, and Linguistic Analysis (3-4 credits)
See section on general education requirements for approved course lists and
complete details.

Core requirements: 23-25 credits
ACC 114  Introduction to Accounting I 4 credits
ACC 121  Introduction to Accounting II 4 credits
BUS 150  Essential Software Tools for Business
or
BUS 250  Computers in Information Processing 3-4 credits
or
CSC 102  Computers for Today
BUS 160  Business Law I 3-4 credits
or
MGT/ECO 230  Introduction to Managerial and Economic Statistics
FNC/

Specialization requirements: 7-8 credits selected from the
following recommended courses:

Accounting:
Any two accounting courses above the level of ACC 121 Introduction to
Accounting II.

Finance:
Any two finance courses at the 200 level or above.

Information Systems:
Two courses chosen from among the following: BUS 205 Data
Communications and Networks for Business, BUS 352 Introduction to
Systems Analysis, CSC 126 Introduction to Computer Science.

International Business:
BUS 200 and one additional course selected in consultation with the
student’s adviser (ECO 250 International Economics, POL 260
International Politics: In Search of a New World Order).

Management:
Any two management courses at the 200 level or above.

Marketing:
Any two marketing courses at the 200 level or above.

Electives: 0-5 credits
Total Credits Required: 60

Liberal Arts and Sciences Requirement
All courses designated ACC and BUS, and most courses designated FNC,
MKT, and MGT are non-liberal arts and sciences. Courses double-listed with
economics (ECO) or political science (POL) are liberal arts and sciences.

Business (BS)
This program offers students a strong general business education together
with the opportunity for a concentration in finance, international business,
management, or marketing. The BS degree programs in Business and
Accounting are appropriate for graduates of associate’s degree programs as
well as for new and transfer students. A minimum GPA of 2.5 is required for
admission to and continuation in majors leading to the BS in business and
for graduation. A 2.5 GPA is not a requirement for students to enroll in the
AAS program, for students pursuing a minor in the Business Department, or
for students enrolling in individual courses.

General Education Requirements
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The
Contemporary World; Textual, Aesthetic, and Linguistic
Analysis; Pluralism and Diversity requirements: 21-27
credits
Whenever possible, these courses should be completed within the first 60 credits.

1. **Scientific Analysis:** (11 credits)
   a. Science and Technology: (8 credits)
      - Chosen from MTH 121, MTH 123, MTH 130, MTH 231*, MTH 235
      (*MTH 231 may be taken by those students who wish to combine MTH 130 Pre-Calculus Mathematics with MTH 231 Analytic Geometry and Calculus I.)
   b. Mathematics: (3 credits)
      - Chosen from MTH 121, MTH 123, MTH 130, MTH 231*, MTH 235

2. **Social Scientific Analysis:** (3-4 credits)
   - Including ECO 101 Introduction to Economics

3. **The Contemporary World:** (4 credits)

4. **Textual, Aesthetic, and Linguistic Analysis:** (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level

5. **Pluralism and Diversity Requirement:** (0-4 credits)
   - See section on general education requirements for approved course lists and complete details.

   Note: International Business students must take two semesters of a foreign language. The language requirement can be met by exhibiting proficiency or by passing a proficiency exam equivalent to two semesters’ work at the basic level or higher.

### Pre-Major Requirements: 36-38 credits

**Business Courses**
- MGT 110 Organizational Theory and Management 3 credits
- MKT 111 Marketing 3 credits
- FNC/ECO 240 Managerial Finance I 3 credits

**Economics Courses**
- ECO 210 Price Theory 4 credits
- ECO 212 Income and Employment Theory 4 credits

**Quantitative and Computer Courses**
- ACC 114 Introduction to Accounting I 4 credits
- ACC 121 Introduction to Accounting II 4 credits
- BUS 150 Essential Software Tools for Business or
  - CSC 102 Computers for Today or
  - CSC 126 Introduction to Computer Science
- MGT/ECO 230 Introduction to Economic and Managerial Statistics 4 credits

One mathematics course chosen from:
- MTH 130 Pre-Calculus Mathematics
- MTH 221 Applied Finite Mathematics and Business Calculus
- MTH 223 Technical Calculus
- MTH 230 Calculus I with Pre-Calculus or
  - MTH 231 Analytic Geometry and Calculus I
- MTH 232 Analytic Geometry and Calculus II
- MTH 236 Accelerated Calculus II 3-5 credits

### Major Requirements: 26-30 credits

Each student chooses one area of concentration beyond the pre-major requirements. Concentrations are available in finance, international business, management, and marketing.

#### Finance Concentration: 29-30 credits

- FNC/ECO 214 Money and Banking 4 credits
- FNC/ECO 345 Managerial Finance II 4 credits
- FNC 350 Advanced Corporate Finance 4 credits
- FNC/ECO 360 Investment Analysis 4 credits
- FNC 370/ECO 370 International Finance 4 credits
- ACC 241 Federal Income Taxation I 3 credits
- ACC 251 Federal Income Taxation II or
  - FNC 213 Money and Capital Markets 3-4 credits

Plus three additional credits in business and related courses with the written approval of the student’s adviser.

#### International Business Concentration: 28 credits

- BUS 200 International Business 4 credits
- FNC 370 International Finance 4 credits
- Foreign Language 8 credits

Note: Students who are exempt from the foreign language course requirement must take additional credits from the courses listed below to complete the 28 credits required in the concentration.

At least one course chosen from each of the following categories:

1. **Business**
   - MKT 415 International Marketing 4 credits
   - MGT 410 Business Policy 4 credits
   - MGT 416 Decision Making 4 credits
   - BUS 598 Business Internship 4 credits

2. **Economics/Political Science**
   - ECO 250 International Economics 4 credits
   - ECO 252 GEG 252 Economic Geography 4 credits
   - ECO 256 Analysis of Underdeveloped Areas 4 credits
   - ECO/POL 251 International Political Economy 4 credits
   - POL 260 International Politics 4 credits
   - POL 261 International Organizations 4 credits

3. **History**
   - HST 206 Modern China 4 credits
   - HST 208 Modern Latin America 4 credits
   - HST 210 Modern India 4 credits
   - HST 272 Modern Germany 4 credits

#### Management Concentration: 26-28 credits

- MGT 210 Management Process 4 credits
- MGT 320 Management of Organizational Behavior 4 credits
- MGT 410 Business Policy 4 credits
- MGT 416 Decision Making in Business 4 credits
Plus two (2) courses chosen from the following list or any other 200-level or higher MGT course: 7-8 credits

- MGT 223 Public Administration 4 credits
- MGT 314 Small Business Management 4 credits
- MGT 322 Human Resource Management 4 credits
- MGT 425 International Management 4 credits
- BUS 200 Introduction to International Business 4 credits
- BUS 211 Principles of Corporate Communications 3 credits
- BUS 238 Ethical Issues in Business and Society 4 credits
- MGT 215 Principles of Selling 4 credits

Plus any one (1) Business-related course* with the written approval of the student's adviser. 3-4 credits

*BUS 100 cannot be used to satisfy this requirement.

Marketing Concentration: 27-28 credits

- MKT 211 Advertising 4 credits
- MKT 310 Consumer Behavior 4 credits
- MKT 410 Marketing Research 4 credits
- MKT 420 Marketing Management 4 credits
- MGT 416 Decision Making in Business 4 credits

An additional seven to eight credits selected from the following two lists including at least one course from list A:

A. Marketing courses:
   - MKT 213 Retail Store Organization and Operation
   - MKT 215 Principles of Selling
   - MKT 216 Sales Management
   - MKT 312 Advertising Copy and Production
   - MKT 415 International Marketing
   - MKT 490 Marketing Seminar

   Any additional MKT courses at the 200 level or higher

B. Additional courses:
   - BUS 160 Business Law I
   - BUS 200 Introduction to International Business
   - BUS 250 Computers in Information Processing
   - BUS 598 Business Internships
   - COM 250 Basic Design and Media Graphics
   - ECO 323/MGT 324 Introduction to Econometrics
   - ENL 112 Public Speaking
   - ENL 212 Discussion and Debate
   - PSY 214 Psychology of Advertising

Electives: 13 - 25 credits

Total Credits Required: 120

Liberal Arts and Sciences Requirement

Since most business courses are non-liberal arts and sciences, students in this program should pay special attention to this requirement.

Honors

To graduate with Honors in Business a student must have a 3.5 grade point average in business courses and must have a 3.25 grade point average overall. An Honors thesis or project supervised by a member of the business faculty must be completed.

Minors

The Business minors are available to students in any of the College's bachelor's degree majors.

Minor in Business
At least 15 credits from any ACC, BUS, FNC, MGT, or MKT courses or ECO 101

Minor in Finance
At least 18 credits of courses including:
   - ACC 114 Introduction to Accounting I 4 credits
   - MGT 110 Organizational Theory and Management 3 credits
   - FNC/ECO 240 Managerial Finance I 3 credits
   - FNC/ECO 345 Managerial Finance II 4 credits
   - One additional finance course 4 credits

Minor in Management
At least 18 credits of courses including:
   - ACC 114 Introduction to Accounting I 4 credits
   - MGT 110 Organizational Theory and Management 3 credits
   - MGT 210 Management Process 4 credits
   - MGT 320 Management of Organizational Behavior 4 credits
   - One additional course in management at the 200 or 300 level 3-4 credits

Minor in Marketing
At least 18 credits of courses including:
   - ACC 114 Introduction to Accounting I 4 credits
   - MKT 111 Marketing 3 credits
   - MKT 211 Advertising 4 credits
   - MKT 310 Consumer Behavior 4 credits
   - One additional course in marketing at the 200 or 300 level 3-4 credits

Accounting courses are listed alphabetically under ACC.

Business Courses

BUS 100 Introduction to Business
3 hours; 3 credits
The role of business is examined in relation to the environment, government, and society with the emphasis on decision making. An investigation is made of the major aspects of business practice including accounting, finance, management, marketing, data processing, and international business.

BUS 135 Introduction to Information Systems
(Also CSC 135)
2 lecture hours, 2 laboratory hours; 3 credits
A hands-on laboratory course in the effective use of technology tools for problem solving. Students will understand how copyright laws apply to software and the need to acknowledge material from outside sources, including online material and the work of others.

Co-requisite: CSC 126
BUS 140 Business Communications
3 hours; 3 credits
Composition of effective business correspondence: credit and collection letters, request and response letters, job applications, résumés, and reports. Detailed attention is given to the principles of grammar, spelling, punctuation, and form as they apply to contemporary business writing.

BUS 150 Essential Software Tools for Business
4 hours; 3 credits
This course is a hands-on introduction to the use of microcomputers in business. The emphasis will be on the operating system and practical use of the most popular application software including spreadsheets, word processing, and database management. Data exchange among different applications and usage of external databases will also be introduced. Not open to students who have successfully completed CSC 102.
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test
Note: Students can obtain both exemption from and course credit for BUS 150 by successfully completing four Microsoft Office Specialist (MOS) exams, Versions 2002 or later, in Word, Excel, PowerPoint, and Access. For information on MOS test standards and administration, see Microsoft Office Specialist Certification Requirements at www.Microsoft.com.

BUS 160 Business Law I
3 hours; 3 credits
The study of the law of contracts, agency, personal property, bailments, real property, mortgages, fire and casualty insurance, and accountant’s legal liability. The lecture and case study methods will be employed.
Prerequisites: Successful completion of C/ACT Writing Skills Test, C/ACT Reading Sample Test, and the CUNY Math Assessment Test or the equivalent

BUS 200 Introduction to International Business
4 hours; 4 credits
International business is examined in relation to technological, competitive, economic, legal, social, and cultural factors. Introduction to the use of the Internet to develop the latest information for course assignments. Major areas of analysis include the evolution of international business, the ongoing development of opportunities in international business, the growth in global e-commerce, and the responses of multinational firms to these opportunities. Introduction to international aspects of the traditional business functions of marketing, finance, management, and accounting.
Pre- or corequisites: ECO 101 and MGT 110 or MKT 111

BUS 205 Data Communications and Networks for Business
4 hours; 4 credits
Fundamentals of data communications, including hardware, basic components of communications, configurations, networks and applications, protocols, and software. Detailed presentation of networks management and networks design fundamentals, including local networks.
Prerequisite: BUS 150 or CSC 102 or CSC 108/116/118 or CSC 126

BUS 210 Government Policy and Multinational Enterprises
4 hours; 4 credits
This course examines the major issues affecting relations between Multinational Enterprises (MNEs) and home and host governments. Students will be exposed to the processes by which conflicting interests are resolved. The impact of international controls on MNEs by the United Nations (UN), Organization for Economic Cooperation and Development (OECD), and the European Economic Community (EEC) will be examined in detail. (Offered only at the American University of Rome.)
Prerequisites: MGT 110 or BUS 100 and POL 100 or POL 240

BUS 211 Principles of Corporate Communication
4 hours; 3 credits
A critical survey of artifacts of corporate and public communication, including films, video programs, and other audio-visual presentations, annual reports, catalogues, brochures, house organs, and other print communications. Corporate publications: their meaning, purpose, audience, and significance. Writing and editing for such publications with special emphasis on audience and purpose and development of a variety of editorial skills: proofreading, reorganizing, rewriting, collaborating, coauthoring. Students who successfully complete COM/ENL 214 may not register for COM 211.
Prerequisites: COM 150 and ENG 151

BUS 230 Quantitative Analysis of Business and Economic Problems
3 hours; 3 credits
The application of mathematical techniques to business and economic problems. An introduction to operations research, linear programming, PERT, and related materials.
Prerequisites: MGT 110 and MGT 230

BUS 238 Ethical Issues in Business and Society
4 hours; 4 credits
Critical examination of economic and social responsibility of business in the U.S. and around the world; exploration of the appropriate scope of ethical involvement from the points of view of management and society; the limitations of responsibility and the establishment of ethical criteria for the evaluation of business performance; the role of public policy in shaping corporate responsibility; consideration of ethical issues arising from the changing nature and implementation of computer and information technology.
Prerequisites: ENG 111; PHL 101 or PHL 130 or MGT 110 or sophomore standing

BUS 250 Computers in Information Processing
2 class hours, 2 laboratory hours; 3 credits
A business-oriented approach to the use of computers in the management of information systems. Study of hardware and software concepts as they relate to solving problems and making decisions in business organizations. Use of advanced software options and applications. The laboratory component will involve projects utilizing widely used office productivity software available on microcomputers including spreadsheets, databases, presentations, and other software.
Prerequisites: ACC 114 and BUS 150 or CSC 102 or passing score on a departmental placement test demonstrating basic proficiency in Windows, word processing, spreadsheets, databases, data presentations, and computer concepts

BUS 260 Business Law II
3 hours; 3 credits
The study of the Law of Sales, commercial paper (negotiable instruments), documents of title, and partnership. The lecture and case study methods will be employed.
Prerequisite: BUS 160
BUS 310  **International Trade**  
4 hours; 4 credits  
This course presents an integrated treatment of theory, policy, and enterprise in international trade and investment. The course is directed toward the acquisition of knowledge and understanding of these subjects. Among the topics to be investigated are: foreign exchange rates, balance of payments, tariff and non-tariff trade barriers. (Offered only at the American University of Rome.)

BUS 334  **Decision Support Systems**  
4 hours; 4 credits  
This course introduces modern approaches to management information systems methodologies and typical realizations. The use of computer systems and the data structures needed to implement small MIS environments and extensive network-based information systems will be covered. Current concepts from artificial intelligence and database management will be used in designing and building effective information systems, ranging in complexity from simple retrieval systems to sophisticated decision support systems.  
Prerequisites: CSC 126, ECO/MGT 230, BUS 352

BUS 352  **Introduction to Systems Analysis**  
4 hours; 4 credits  
An analysis of business needs to be satisfied by systems solutions. The systems development cycle. Determining systems requirements. Design of input, output, database, and processes. Controls of data integrity and security. Managing a systems development project. Preliminary systems design.  
Prerequisites: ACC 114 and one of the following computer courses: BUS 150 or CSC 126 or CSC 102, or permission of the instructor.

BUS 360  **Business Law III**  
3 hours; 3 credits  
The study of the law of corporations, estates, trusts and wills, regulation of employment, and securities regulations (Federal Securities Acts) will be covered in depth. Trade regulation, consumer protection, constitutional law, administrative law, criminal law, intentional torts, negligence, and strict liability will be discussed. The lecture and case study methods will be employed.  
Prerequisite: BUS 260

BUS 405  **Applied Concepts in Information Systems**  
(Also CSC 405)  
3 lecture hours, 3 laboratory hours; 4 credits  
Examination of applied concepts in information systems. Theory and methodology for the design, development, and implementation of large-scale reliable business software projects, and tools and techniques for managing business software projects will be discussed. Presentations and GUI interfaces will be emphasized.  
Prerequisites: CSC 326 and BUS 352

BUS 410  **Media Administration**  
(Also COM 410)  
4 hours; 4 credits  
A course dealing with the skills and concepts necessary for the competent management of a media production department. Topics include production planning and control, cost analysis procedures, contract and copyright law in relation to the media, and organization theory.  
Prerequisite: COM 150, and COM 261 or COM 270 or CIN 111

**Finance Courses**

FNC 111  **Personal Finance**  
3 hours; 3 credits  
Discussion of the problems involved in handling personal finance: taxes, life insurance, investments and securities, borrowing, savings, annuities, wills, trusts, estate taxes, and budgeting.  
Prerequisites: Successful completion of the CUNY Mathematics Assessment Test, the C/ACT Writing Skills test, and the C/ACT Reading Sample Test.

FNC 213  **Money and Capital Markets**  
(Also ECO 213)  
4 hours; 4 credits  
The course examines financial markets from the standpoint of investors and users. Markets studied are those for money market instruments, T-bill futures, Ginnie Mae futures, T-bond futures, stocks, stock options, bonds, mortgages, and Eurocurrencies. Federal Reserve operations, U.S. Treasury operations, and international financing are considered with regard to their effects on financial markets.  
Prerequisites: Successful completion of C/ACT Writing Skills Test and C/ACT Reading Sample Test or equivalent and ECO 101

FNC 214  **Money and Banking**  
(Also ECO 214)  
4 hours; 4 credits  
An analytical, institutional, and historical examination of the monetary systems of the United States. Particular attention will be paid to the operation of commercial banks, and to the powers, purposes, and performance of the Federal Reserve System. The influence of the quantity of money on the level of economic activity will be considered.  
Prerequisites: Successful completion of C/ACT Writing Skills Test and C/ACT Reading Sample Test or equivalent and ECO 101

FNC 240  **Managerial Finance I**  
(Also ECO 240)  
3 hours; 3 credits  
Examination of securities markets, analysis of methods of long-term financing, financial ratio analysis, budgeting, current asset management, present value concepts, capital budgeting, cost of capital, and dividend policy.  
Prerequisite: MTH 030 or MTH 121 or MTH 123 or equivalent and ACC 114 and ECO 101

FNC 315  **Monetary Theory and Policy**  
(Also ECO 315)  
4 hours; 4 credits  
Theoretical and applied problems of monetary policy. Emphasis is placed on contemporary developments. Current controversies concerning the use of monetary policy, relationship to fiscal policy, and impact on economic activity.  
Prerequisites: ECO 212 and either ECO/FNC 213 or ECO/FNC 214

FNC 345  **Managerial Finance II**  
(Also ECO 345)  
4 hours; 4 credits  
Working capital management, current asset management, sources of short-term financing, financial structure and use of leverage, valuation and rates of return, dividend policy and internal financing, mergers and acquisitions, and liquidation; includes computer lab for solving financial management problems.  
Prerequisite: FNC/ECO 240 and MGT/ECO 230
FNC 350  Advanced Corporate Finance  
4 hours; 4 credits  
A case problem approach to business policy including a theoretical and practical study of assets and liabilities, capital management, financial markets, and the legal concepts of corporate finance. Problems in industry structure, mergers, and acquisitions.  
Prerequisite: FNC/ECO 345

FNC 360  Investment Analysis  
(Also ECO 360)  
4 hours; 4 credits  
Survey of principles governing the investment of individual and institutional capital funds: the theory and mechanics of investments; general analysis and valuation procedures including quantitative and qualitative tests for judging security values; valuation of fixed income securities and common stocks. Introduction to the analysis of industrial, public utility, and government securities. Management of an individual investor's portfolio.  
Prerequisite: FNC/ECO 345

FNC 370  International Finance  
(Also ECO 370)  
4 hours; 4 credits  
The financial interrelationships between countries. Analysis of balance of payments, fixed and flexible exchange rates, the role of international reserves. Historical trends in payments and exchange; implications of the rise of the multinational corporation; current international policy problems facing the United States, other developed nations, and underdeveloped nations, and current institutional changes designed to meet them.  
Prerequisite: FNC/ECO 345

Management Courses

MGT 110  Organizational Theory and Management  
3 hours; 3 credits  
Theories of organization and management are developed, examined, and applied to business and nonprofit institutions. Evaluation of organizational structure and practice in light of these theories. Studies of leadership, small group behavior, creativity, communication, and the process of social change in the large business organization.  
Prerequisites: ENG 111, and MTH 025 or MTH 030 or permission of the Mathematics Department or an appropriate score on the CUNY Math Assessment Test.

MGT 210  Management Process  
4 hours; 4 credits  
Advanced study of organizational structure and practice in light of management theory. Management functions: planning, organizing, and controlling, along with the secondary functions of staffing, personnel management, and external representation will be studied.  
Prerequisite: MGT 110, ECO 101, ACC 114

MGT 223  Public Administration  
(Also POL 223)  
4 hours; 4 credits  
A course examining concepts in the execution of public policy. Relationships of administrative process to the executive, legislative bodies, the public, special interest groups, the clientele, and the courts. Considers personnel administration and administrative law and regulation. (social science)  
Prerequisite: ENG 111, COR 100

MGT 230  Introduction to Managerial and Economic Statistics  
(Also ECO 230)  
4 hours; 4 credits  
Development and application of modern statistical methods, including such elements of descriptive statistics and statistical inference as correlation and regression analysis, probability theory, sampling procedures, normal and binomial distributions, estimation, and testing of hypotheses.  
Prerequisites: Successful completion of CUNY/ACT Writing Skills Test and CUNY/ACT Reading Sample Test and ECO 101, and MTH 121 or 123, and BUS 150 or BUS 250 or CSC 102 or CSC 126.

MGT 261  Labor Relations  
(Also ECO 261)  
4 hours; 4 credits  
History, theories, structure, and objectives of trade unionism. Grievance procedures, collective bargaining, union power, strikes and other weapons, mediation and arbitration. Government regulation of the labor sector. Students will participate in the reenactment of actual arbitration cases.

MGT 314  Small Business Management  
4 hours; 4 credits  
An overview of the entrepreneur: definition, traits, and development; the role of the entrepreneur in our society and importance to the economy; the launching of a new venture; managing an ongoing venture; planning, financing, staffing, and control.  
Prerequisite: MGT 110, MKT 111

MGT 320  Management of Organizational Behavior  
4 hours; 4 credits  
A systematic, analytical approach to understanding, predicting, and controlling human behavior in organizations. Consideration is given to the individual and the organization, groups and the organization, organizational development and leadership.  
Prerequisites: MGT 110, ECO 101

MGT 322  Human Resource Administration  
4 hours; 4 credits  
The course provides an introduction to the functions of the personnel executive. A historical and theoretical background is provided. Stress is placed upon the technical, analytical, and legal skills necessary in performing the job itself. Specific topics include recruiting and selecting, employee development, reward and penalty systems, job descriptions, records, and industrial relations.  
Prerequisites: MGT 110

MGT 323  Public Policy Analysis  
(Also POL 323)  
4 hours; 4 credits  
A study of how government deals with problems in such areas as health, energy, environment, education, crime, and economic stability. In addition to focusing on substantive policies in these fields, the course will examine how problems come to government's attention and analyze various techniques for determining whether a governmental program is successful.  
Prerequisite: POL 100
MGT 324  Introduction to Econometrics
(Also ECO 323)
4 hours; 4 credits
This course will examine the relationship between economic theory and statistical measurement. It will deal mainly with the general linear regression and correlation model. A selected number of other statistical tools will also be treated. Emphasis will be on the understanding of the concepts rather than on their mathematical derivation.
Prerequisites: ECO 101 and ECO/MGT 230 or permission of the instructor

MGT 339  Administrative Law
(Also POL 339)
4 hours; 4 credits
Emphasizes the judicial, legislative, and executive control of decisions made by bureaucrats. Topics such as the possibility and scope of judicial review of administrative decision making; ripeness for review and exhaustion of administrative remedies; and the legislative veto. The Administrative Procedure Act's requirements for rule making and adjudication will also be analyzed.
Prerequisite: POL/MGT 223 or POL 336 or POL 338

MGT 410  Business Policy
4 hours; 4 credits
The course develops a conceptual framework for business planning through case analysis including the work of theorists, practitioners, and researchers in business policy and strategy planning.
Prerequisites: Completion of the business core requirements, and junior or senior standing, or permission of the instructor

MGT 416  Decision Making in Business
4 hours; 4 credits
Analysis of the problems that face business managers. The course involves participation in a simulated, computerized business game dealing with sales forecasting, marketing, production planning, personnel, pricing, and finance.
Prerequisites: Completion of the business core requirements

MGT 423  The Collective Bargaining Process
4 hours; 4 credits
Prerequisite: MGT 261

MGT 425  International Management
4 hours; 4 credits
After a review of the international business environment this course examines the strategic aspects of the multinational enterprise (MNE). This includes organization, policy making, and long-range planning. To achieve this end the functional aspects of international management are examined including human resource management and analysis of cross-cultural management and contrasts in the different managerial approaches and styles that are used throughout the world. Production, marketing, and financial aspects as they apply to the international scene are examined in relation to policy making. To achieve these goals the course is a combination of class lectures and discussions examining theory to formulate policy in analyzing current case studies.
Prerequisites: Senior status, ECO 250, BUS 200
Pre- or corequisite: ECO/FNC 370

Marketing Courses

MKT 111  Marketing
3 hours; 3 credits
Survey of the nature of the United States distributive system, covering the principles, policies, and practices used by manufacturers, wholesalers, and retailers. Emphasis is placed on the planning, development, and efficient use of marketing tools and institutions in the creation and expansion of markets. Current trends and developments in modern marketing practice are analyzed.
Prerequisites: ENG 111, and MTH 025 or MTH 030 or permission of the Mathematics Department or the equivalent score on the CUNY Math Assessment Test.

MKT 211  Advertising
4 hours; 4 credits
The course examines the principles and applications of advertising in modern business, details the procedures and techniques necessary for advertising campaigns and execution via preparation of a marketing/advertising plan, and stresses marketing/advertising strategy. Evaluation of social and ethical responsibilities of advertising.
Prerequisite: MKT 111

MKT 213  Retail Store Organization and Operation
3 hours; 3 credits
Survey of the functions, principles, procedures, organization, and activities involved in retail store operations. Current trends and developments in retailing practices are analyzed.
Prerequisite: MKT 111

MKT 215  Principles of Selling
3 hours; 3 credits
A study of the problems of sales management: sales policies; selection and training of salespersons; methods of compensation and sales stimulation; sales administration and budgeting; sales forecasting. Analysis and evaluation of current practices in sales management.
Prerequisite: MKT 111

MKT 310  Consumer Behavior
4 hours; 4 credits
The study of consumer behavior from a theoretical and practical standpoint. The course seeks to understand the role of the behavioral sciences (e.g. anthropology, sociology, psychology) in buying behavior and to integrate the theoretical world of the behavioral sciences with the practical world of marketing. Social, interpersonal, and mediating influences are examined and evaluated as a basis for marketing decisions.
Prerequisites: MKT 111, PSY 100 or SOC 100 or permission of the instructor

MKT 312  Advertising Copy and Production
4 hours; 4 credits
Creative and procedural techniques involved in planning, preparing, and producing advertisements for print and broadcast media. Problems and practice exercises are used to develop a working technical skill. Hands-on production experience in all media.
Prerequisite: MKT 211
MKT 360  Internet Marketing
4 hours; 4 credits
This course is an introduction to the use of the Internet and electronic commerce as a marketing tool. A major team project will require students to develop a marketing plan along with a web site for a new or existing product or service. Data collection as well as legal and ethical issues, including security, surrounding commerce in a web-mediated environment will be discussed.
Prerequisites: MKT 111 and, BUS 150 or BUS 250 or CSC102 or permission of the instructor
MKT 410  Marketing Research
4 hours; 4 credits
Encompasses survey of research processes, problem formulation, the types
of problems for which market research is used, primary and secondary data
collection methods, questionnaire design, and sampling plans. Analysis
and interpretation of data and research report formats.
Prerequisites: MKT 111, MGT/ECO 230, and MKT 211 or MKT 310

MKT 415  International Marketing
4 hours; 4 credits
An analytical approach to solving international business problems
considering the multiple environments of international business. This
course requires the student to investigate the relationship of marketing
strategy to cultural, economic, legal, political, and technological
conditions in various national markets.
Prerequisites: ECO 250 or BUS 200 and MKT 111

MKT 420  Marketing Management
4 hours; 4 credits
The course focuses on the major decisions facing marketing management
in its attempt to harmonize the objectives and resources of the company
with the opportunities found in the marketplace. The course is analytical
in nature and draws heavily on the basic disciplines of economics,
behavioral science, and mathematics.
Prerequisites: Completion of business core requirements, MKT 310, senior
standing, or permission of instructor

MKT 490  Marketing Seminar
3 hours; 3 credits
The use of a selected broad-gauge marketing topic as a focal point for the
semester’s work to bring about an integration of concepts and knowledge from
a number of related disciplines. New ways of thinking about problems faced
by marketing management are sought. Individual study by each student of a
specific topic and preparation of a report giving the results of research.
Prerequisite: Completion of business core requirements, senior standing,
and permission of the instructor

CHEMISTRY
(Bachelor of Science, Minor; see Graduate Catalog for information on
graduate programs)
Department of Chemistry
Chair: Associate Professor John Olsen, Biological/Chemical Sciences
Building (6S), Room 235
A degree in chemistry or biochemistry is essential to anyone interested in
working in the chemical or pharmaceutical industries and in related fields
such as teaching and chemical sales. The degree affords the opportunity to
participate in pure chemical research, product development, marketing and
sales. A student with a BS in Chemistry may branch out and become involved
in government jobs in geochemistry, toxicology, and environmental
chemistry. The Chemistry major also might elect to work in the more
medically oriented fields such as pharmacology, biochemistry,
bioengineering, or medicinal chemistry or to enter the teaching profession.
For students who wish to pursue graduate study in the sciences or enter
professional schools (medicine, dentistry, optometry, pharmacy), a BS degree
in Chemistry or Biochemistry is viewed quite favorably by admissions
committees.

Chemistry (BS)
General Education Requirements for the BS
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first
36 credits.

Scientific Analysis; Social Scientific Analysis; The
Contemporary World; Textual, Aesthetic, and Linguistic
Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (3-4 credits)
3. The Contemporary World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
See section on general education requirements for approved course lists and
complete details.

Pre-Major Requirements: 26 credits
Students planning to major in Chemistry must complete the following
requirements. A detailed guide to course choices for Biochemistry and
Chemistry majors is available from the Department of Chemistry.

CHM 141  General Chemistry I 3 credits
CHM 121  General Chemistry I Laboratory 1 credit
CHM 142  General Chemistry II 3 credits
CHM 127  General Chemistry II Laboratory 1 credit
PHY 120  General Physics I 3 credits
PHY 121  General Physics I Laboratory 1 credit
PHY 160  General Physics II 3 credits
PHY 161  General Physics II Laboratory 1 credit
MTH 229  Calculus Computer Laboratory 1 credit
MTH 230  Calculus I and Pre-Calculus
or
MTH 231  Analytic Geometry and Calculus I and
MTH 232  Analytic Geometry and Calculus II
MTH 233  Analytic Geometry and Calculus III
or
MTH 235  Accelerated Calculus I
MTH 236  Accelerated Calculus II 10-13 credits

Major Requirements: 36 credits
CHM 240  Quantitative Chemistry 4 credits
CHM 250  Organic Chemistry I 4 credits
CHM 256  Organic Chemistry II 4 credits
CHM 330  Physical Chemistry: Equilibria 4 credits
CHM 336  Physical Chemistry: Processes 4 credits
CHM 337  Experimental Methods in Physical Chemistry 4 credits
Three additional chemistry electives at the 300 level or higher 12 credits
Electives: 19-36 credits
All Chemistry majors are encouraged to take an Independent Study course (CHM 591-4) as an elective.

Total Credits Required: 120
Transfer students are expected to fulfill their advanced major requirements (300-level and higher) at the College of Staten Island.

Honors
A student may be eligible for admission to the Honors program in Chemistry if he or she enters the senior year with a 3.5 grade point average. With the concurrence of a faculty supervisor, the student must submit (by September 1) a one-page summary of a proposed research project. The chairperson of the Department and the faculty supervisor will appoint a three-member committee to evaluate and/or modify the proposal (by September 15), then grant or deny admission to the honors program.

While pursuing Honors research the student may receive eight credits for Independent Study (CHM 594), four each in the fall and spring semesters. Additionally, it is highly recommended that the student begin work on the project during the summer or spring semester that immediately precedes the senior year. Progress of the research will be monitored as follows: (1) the student will meet with his or her committee by November 1 of the first semester, (2) the student will submit a five-page progress report by January 15; (3) the committee will recommend for or against continuation in the program by February 1; (4) the student will submit a thesis, following the style of major journals, by May 1; (5) the student will present an oral defense of the thesis to the committee by the end of the final exam period.

The deadline dates noted above are based on a June graduation date, but corresponding guidelines may be designed for January graduation. In either case, it is expected that completion of the Honors program will require at least one year of student research.

Minor
Prerequisite Courses:
- CHM 141, 121, 142, 127
Requirements:
- CHM 240 Analytical Chemistry
- CHM 340 Instrumental Analysis
- CHM 250 Organic Chemistry I
- CHM 256 Organic Chemistry II
- One 300-level chemistry course

Courses

CHM 100 Introduction to Chemistry
3 lecture hours, 1 recitation hour; 3 credits
Course material includes matter and energy, atoms and molecules, the periodic table, nomenclature, equations, mole concept, stoichiometry, solutions.
Prerequisite: MTH 025 or MTH 030
Corequisite: CHM 101

Note: This course is intended for those students who have had no previous chemistry and for those returning to the subject after some years. The course is designed to prepare students for entry into CHM 141.

CHM 101 Introduction to Chemistry Laboratory
2 hours; 1 credit
A laboratory course emphasizing basic chemical laboratory techniques. The experiments provide illustrations of concepts discussed in CHM 100. Use of computer software for laboratory data analysis and computer-assisted instruction.
Corequisite: CHM 100

CHM 106 Chemistry for Today I
3 hours; 3 credits
Basic chemical concepts including atomic theory, the nature of molecules, chemical formulae and equations, bonding, gas laws, nuclear chemistry, oxidation-reduction, and acids and bases. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test
Corequisite: CHM 107

CHM 107 Chemistry for Today I Laboratory
2 laboratory hours; 1 credit
Laboratory experiences illustrating principles and topics discussed in CHM 106. (science)
Pre- or corequisite: CHM 106

CHM 108 Chemistry for Today II
3 hours; 3 credits
A continuation of Chemistry 106. Topics will be chosen from among the following: fossil fuels and pollution, humankind’s effect on the environment, food additives, household chemicals, the chemistry of drugs and the human mind, farm chemistry, and plastics. (science)
Prerequisite: CHM 106
Corequisite: CHM 109

CHM 109 Chemistry for Today II Laboratory
2 laboratory hours; 1 credit
Laboratory experiences illustrating principles and topics discussed in CHM 108. (science)
Pre- or corequisite: CHM 108

CHM 110 Principles of Chemistry I
3 hours; 3 credits
Modern concepts of the atom and chemical bonding, chemical calculations, states of matter, chemistry of water, purification of water, types of solutions, acids and bases, nuclear chemistry, and radioactivity. The concepts necessary for an understanding of our technological society are developed. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Examination Test
Corequisite: CHM 111

CHM 111 Principles of Chemistry I Laboratory
2 laboratory hours; 1 credit
Experiments illustrating principles studied in CHM 110. (science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test Corequisite: CHM 110

CHM 116 Principles of Chemistry II
3 hours; 3 credits
Chemistry and biochemistry of carbon compounds. A study of the nomenclature, structure, properties, and reactions of organic and biochemical compounds. A number of special topics are discussed, some of which are the petroleum industry, giant molecules (synthetic and biopolymers), environmental chemistry, drugs, and oral contraceptives. (science)
Prerequisite: CHM 110 and 111 or permission of the instructor
Corequisite: CHM 117
CHM 117  Principles of Chemistry II Laboratory
2 laboratory hours; 1 credit
Laboratory experiments concerned with the synthesis, isolation, and purification and analysis of a variety of organic and biochemical compounds of the types considered in CHM 116. (science)
Prerequisites: CHM 110 and 111 or permission of the instructor
Corequisite: CHM 116

CHM 121  General Chemistry I Laboratory
3 laboratory hours; 1 credit
Experiments reinforce important chemical concepts discussed in lectures, teach modern lab techniques, and emphasize present day interpretations of lab measurements. (science)
Pre- or corequisite: CHM 141

CHM 127  General Chemistry II Laboratory
3 laboratory hours; 1 credit
A continuation of CHM 121. Inorganic qualitative analysis. (science)
Prerequisite: CHM 121
Pre- or corequisite: CHM 142

CHM 141  General Chemistry I
3 lecture hours, 1 recitation hour; 3 credits
A study of the fundamental principles and laws concerning the structure and behavior of matter. The first semester covers atomic and molecular structure, chemical bonding, reactions, stoichiometry and the gaseous, liquid, and solid states of matter. (science)
Prerequisite: CHM 121
Corequisite: CHM 121
Note: Students are advised that satisfactory completion of one year of high school chemistry or a college-level introductory chemistry course is essential preparation for this course.

CHM 142  General Chemistry II
3 lecture hours, 1 recitation hour; 3 credits
A continuation of CHM 141. Solution properties, reaction rates, equilibrium processes, thermochemistry and thermodynamics, electrochemistry, nuclear and organic chemistry. (science)
Prerequisite: CHM 141
Corequisite: CHM 127

CHM 240  Analytical Chemistry
4 class hours, 4 laboratory hours; 4 credits
A study of the quantitative aspects of chemical changes, chemical equilibria, the stoichiometry and energetics of chemical reactions. Theory and laboratory in volumetric, optiometric, electrostatic, and kinetic methods of chemical analysis. An introduction to instrumental methods of analysis.
Prerequisites: CHM 142 and 127

CHM 250  Organic Chemistry I
3 class hours, 4 laboratory hours; 4 credits
The structure and properties of organic compounds are examined. Emphasis is given to reactions and synthesis of aliphatic and aromatic molecules. Stereochemistry and organic reaction mechanisms are introduced and thoroughly discussed.
Prerequisites: CHM 142 and CHM 127

CHM 256  Organic Chemistry II
3 class hours, 4 laboratory hours; 4 credits
A continuation of CHM 250 with an emphasis on functional group chemistry and bioorganic chemistry. By the end of the two-semester sequence IR and NMR analysis are discussed in detail in conjunction with classical methods of structural determination.
Prerequisite: CHM 250

CHM 330  Physical Chemistry: Equilibria
4 hours; 4 credits
Chemical thermodynamics and its application to phase and chemical equilibria.
Prerequisite: MTH 233 or MTH 236, PHY 160, CHM 240

CHM 336  Physical Chemistry: Processes
4 hours; 4 credits
Kinetic theory and transport processes, introductory quantum and statistical chemistry, atomic and molecular spectroscopy, and chemical kinetics.
Prerequisite: MTH 233 or MTH 236, PHY 160, CHM 240

CHM 337  Experimental Methods in Physical Chemistry
8 hours; 4 credits
Introduction to techniques of physical measurement applied to chemical systems. Vacuum and gas handling techniques, optico-chemical methods, transport and electrochemical processes.
Corequisite: CHM 330 or CHM 336

CHM 340  Instrumental Methods of Chemical Analysis
2 class hours, 4 laboratory hours; 4 credits
Fundamental considerations underlying the theory and design of instrumental methods and procedures of analysis. General treatment of the operating characteristics of instruments. A consideration of ultraviolet-visible, infrared, nuclear magnetic and electron spin resonance spectroscopy, column and gas chromatography, flame photometry, atomic absorption, polarography, fluorimetry, radiochemical and thermal analysis, electrophoresis, and other analytical methods. Basic instrumentation electronics, including operational amplifiers, triodes, transistors, and transducers.
Prerequisites: CHM 142 and CHM 127, CHM 240 or permission of the instructor

CHM 350  Advanced Organic Chemistry
4 hours; 4 credits
An introduction to the theory of bonding and structure; acids and bases; an introduction to physical organic chemical concepts and the application of these, together with stereochemical concepts, to the study of reaction mechanisms.
Prerequisite: CHM 256
Corequisite: CHM 330 or CHM 336 or permission of the instructor

CHM 370  Biochemistry I
(Also BIO 370)
4 hours; 4 credits
Biochemistry and the living state. Regulation of energy-yielding and energy-requiring reactions in cells. Molecular components of cells, enzyme mechanisms, bioenergetics, and an introduction to biosynthetic principles.
Prerequisite: CHM 256
Corequisite: PHY 110 or 120 or permission of the instructor

CHM 376  Biochemistry II
(Also BIO 376)
4 hours; 4 credits
Respiration, photosynthesis, membrane structure and transport, biosynthesis of macromolecules, biochemical genetics, and the regulation of metabolic activity in mammals.
Prerequisite: CHM 370
Corequisite: PHY 150 or 160 or permission of the instructor
CHM 377  Experimental Biochemistry
8 laboratory hours; 4 credits
Through a study of a commonly occurring genetic defect, this course introduces students to biochemical concepts and techniques used in current research. Techniques used include protein purification, enzymology, Western blotting, RNA isolation, DNA isolation, PCR-amplification of mutated regions of genes, cloning of PCR products into vectors, culturing of mammalian brain cells, immunocytochemistry, and retrieving and processing of genetic information using various databases and software packages.
Prerequisite: CHM 240 or BIO 312 or BIO 352
Corequisite: CHM 370/BIO 370

CHM 434  Inorganic Chemistry
3 class hours, 3 laboratory hours; 4 credits
The course covers general bonding theories of inorganic compounds, symmetry elements and point groups, acid-base properties, coordination chemistry and reaction mechanisms, organometallic chemistry, and an introduction to bioinorganic chemistry.
Pre- or corequisite: CHM 256 or 330 or 336 or permission of instructor

CHM 442  Spectroscopy: Theory and Applications
4 hours; 4 credits
Theory and applications of molecular spectroscopy in gases and condensed phases, including rotation, vibration, electronic, and magnetic resonance techniques. Applications to structural problems in biochemistry and polymer chemistry.
Pre- or corequisite: CHM 330 or 336

CHM 452  Polymer Chemistry
4 hours; 4 credits
Prerequisites: CHM 256, 330, and 336; permission of the instructor

CHM 592  Independent Study for Research
2 credits

CHM 594  Independent Study for Honors Research
4 credits
See Graduate Catalog for graduate courses.

CINEMA STUDIES
(Bachelor of Arts, Minor; Master of Arts - see Graduate Catalog)
Department of Media Culture
Chair: Assistant Professor Edward Miller, Center for the Arts (1P), Room 226

Cinema Studies (BA)
General Education Requirements for the BA
ENG 111, ENG 151, COR 100, PED 190:  12 credits
Whenever possible, these four courses should be completed within the first 36 credits.
Courses

CIN 100  Introduction to Film
4 hours; 3 credits
An introduction to the art of film and to the methods and terms of film analysis. Topics to be covered include the nature of cinematic time and space; the contribution of directorial style; the effects of cutting, editing, lighting, framing, camera movement, and sound; and the relationship between written script and visual imagery. (arts & com.)

CIN 111  Basic Video Production
4 hours; 3 credits
An introductory workshop in the basic techniques of video production. Visual awareness as applied to composition and continuity is developed in a series of practical class projects. This course is a prerequisite for 200- and 300-level work in film/video production and is intended for Cinema and Communications majors and minors. Others may register by permission of the instructor. (arts & com.)

CIN 204  Politics and Film
(Also POL 219)
4 hours; 4 credits
An analysis of the political and social perspectives and directing styles of a variety of European and American directors. The course will examine how race, social class, gender, ethnicity, revolution, the city, and national character and culture are represented in these films. (social science) (arts & com.)
Prerequisite: ENG 111, COR 100

CIN 210  Film Theory
4 hours; 4 credits
Study of film theory and its relation to international cinema of the silent and sound periods. Readings include the major theoretical works of various critics, philosophers, and filmmakers. Required for the Cinema Studies major.
Prerequisites: CIN 100 and ENG 111

CIN 211  Film/Video Cinematography
4 hours; 3 credits
A basic workshop in film/video cinematography. Practical exercises with video and 16mm equipment will focus on techniques of composition, lighting, and camera movement.
Prerequisite: CIN 111

CIN 220  History and Theory of Film II
4 hours; 4 credits
Survey history of world cinemas. The course will consider research practices, historiography, film style, and industrial models of production; viewing and discussion of films by various American and international filmmakers. Required for the Cinema Studies major.
Prerequisites: CIN 100, ENG 111, and CIN 210 or permission of the instructor.

CIN 230  American Film and American Myth
(Also AMS 230)
4 hours; 4 credits
The American film and its relationship to American myth, society, and culture. Topics to be included are: the American West; the gangster; rural and urban life; the nature of war; race and class; comic views of America. (arts & com.)
Prerequisite: ENG 111

CIN 240  Third World Cinema
4 hours; 4 credits
A survey of cinema from and about the Third World that emphasizes the effort to construct a national identity within a post-colonial multinational context. Considered and analyzed will be films from Africa, Latin America, the Middle East, and Asia. Films directed by Glauber Rocha, Satyajit Ray, Tomas Alea, Tracy Moffatt, among others, will be examined. (p&d)
Prerequisite: CIN 100

CIN 274  Introduction to Screen Writing
(Also ENL 274)
4 hours; 4 credits
Writing for television and film. Class discussions of students’ work and the problems of creating in this field. Selected readings.
Prerequisite: ENG 151

CIN 290  Internship in Media Production
(Also COM 290)
1-4 credits
An internship work and learning experience with a public or private agency whose activity is film, video, television, or radio production.
Prerequisite: A 100-level course in cinema studies, or the equivalent and permission of the faculty sponsor

CIN 301  Literature into Film
4 hours; 4 credits
An examination of the aesthetic and practical problems in translating fiction into film. Students will read novels and plays and view the films made from them, with class discussions to focus on the potentialities and limitations of each art form.
Prerequisites: CIN 100 and ENG 111

CIN 303  Screen Comedy
4 hours; 4 credits
An examination of the screen comedians. The course will consider the comic techniques of the performers and the particular cinematic devices that are used to convey the performance. Showings of films by Chaplin, Lloyd, Keaton, Lubitsch, Laurel and Hardy, the Marx Brothers, W.C. Fields, and others.
Prerequisites: CIN 100 and ENG 111

CIN 304  Nonfiction Film
4 hours; 4 credits
A critical and historical survey of the development of nonfiction film, including the work of such filmmakers as Robert Flaherty, John Grierson, Pare Lorentz, Williard Van Dyke, Leni Riefenstahl, Richard Leacock, Albert and David Maysles, and Frederick Wiseman.
Prerequisites: CIN 100 and ENG 111

CIN 311  Film/Video Workshop
4 hours; 3 credits
Students will use advanced filmmaking and video equipment in the production of sync-sound documentary or fiction videos. Projects shot on film will be edited on video. Emphasis is placed on the ability of students to work in production crews. This course may be repeated for credit.
Prerequisite: CIN 111, and either CIN 211 or COM 261

CIN 312  Non-Linear and Multimedia Production
4 hours; 3 credits
Individual projects in video and multimedia with an emphasis on digital post-production. This course may be repeated for credit.
Prerequisite: CIN 111, and either CIN 211 or COM 261
CIN 314 Introduction to 16mm Filmmaking
4 hours; 3 credits.
This course will introduce students to the basics of 16mm reversal film production. Using Bolex cameras and 16mm bench editing, students will explore non-sync editing and the essentials of motion picture photography while executing individual and group projects in a hands-on workshop.
Prerequisite: CIN 211 or permission of the instructor

CIN 401 Major American Directors I
4 hours; 4 credits
The place of individual directorial style in the American movie industry: Howard Hawks, Preston Sturges, Josef von Sternberg, John Ford, Alfred Hitchcock, and Orson Welles.
Prerequisites: CIN 100 and ENG 111

CIN 402 Major American Directors II
4 hours; 4 credits
The place of individual directorial style in the American movie industry: Martin Scorsese, Robert Altman, Spike Lee, and Francis Ford Coppola.
Prerequisites: CIN 100 and ENG 111

CIN 404 Major French Directors I
4 hours; 4 credits
A study of the personal vision and style of several French directors chosen from the leading figures of the 1930s, 1940s, and 1950s: Clair, Cocteau, Renoir, Vigo, Ophuls, Carne, Bresson, and Franju.
Prerequisites: CIN 100 and ENG 111

CIN 405 Major French Directors II
4 hours; 4 credits
A study of the work of the major New Wave directors (Truffaut, Godard, Resnais, Varda, Chabrol, Rohmer) and the French and American sources that influenced their aesthetic.
Prerequisites: CIN 100 and ENG 111

CIN 406 Postwar Italian Cinema
(Also LNG 406)
4 hours; 4 credits
A study of the political and cultural roots of Neorealism and of the personal style and vision of such postwar directors as Visconti, DeSica, Rossellini, Fellini, Antonioni, and Bertolucci.
Prerequisites: CIN 100 and ENG 111

CIN 407 International Films I
4 hours; 4 credits
An exploration of the work of important filmmakers from Western and Central Europe and Scandinavia. Those studied may include Olmi, Tanner, Herzog, Fassbinder, and Bergman.
Prerequisites: CIN 210 and ENG 111

CIN 408 International Films II
4 hours; 4 credits
An exploration of the work of important filmmakers from Eastern Europe, Asia, and the nations of the developing world. Those studied may include Wajda, Szabo, Forman, Kurosawa, Mizoguchi, and Ray.
Prerequisites: CIN 210 and ENG 111

CIN 436 Screen Writing
(Also ENL 436)
4 hours; 4 credits
Study of the craft of constructing the screenplay, treatment, synopsis, and shooting script. The student will work on the problems of creating the original filmscript as well as adapting a piece of existing material for the screen.
Prerequisite: CIN/ENL 274 or permission of the instructor

For graduate courses in Cinema Studies see the Graduate Catalog.
2. Social Scientific Analysis: (7-8 credits)
3. The Contemporary World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)
See section on general education requirements for approved course lists and complete details.

**Major Requirements: 51-57 credits**

Common Core: required for all specializations: 33-34 credits

1. History and Theory of Communications (16 credits)
   COM 150 Introduction to Communications 4 credits
   COM 203 Theories of Communications 4 credits
   Two of the following: 8 credits
   COM/
   SOC 374 Mass Media in Modern Society
   COM 220 History of Broadcasting
   COM/
   ENL 230 History of Print Media
2. Practical and Applied (10-11 credits)
   COM/
   ENL 277 Introduction to Journalism 4 credits
   One of the following: 3-4 credits
   CSC 102 Computing for Today
   BUS 150 Essential Software Tools in Business
   One of the following: 3 credits
   CIN 111 Film/Video Production I
   COM 250 Basic Design and Media Graphics
   COM 261 Television Studio Production
   COM 270 Radio Production
3. Internship (3 credits)
   COM/
   CIN 290 Internship in Media Production 3 credits
4. Communications Seminar (4 credits)
   COM 450 Senior Seminar in Communications 4 credits

**Areas of Specialization (18-23 credits)**

Communications majors must elect one of the following specializations: media studies, corporate communications, publication design, or journalism.

**Electives: 4-29 credits**

**Total Credits Required: 120**

It is strongly recommended that students majoring in Communications also elect a minor. The choice of minor should be developed in accordance with the student's career objectives in consultation with the student's faculty adviser.

**Specialization: Media Studies**

The specialization in media studies prepares students for entry-level positions in media production and media research. Students study the basic production skills of film, video, audio, and television as well as the institutional contexts in which mediated communication often occurs. Students are introduced to basic theories of communications and specialized theories of mass communications.

**Requirements: 23 credits**

- CIN 111 Film/Video Production I 3 credits
- CIN 211 Film/Video Production II 3 credits
- COM 240 Media Workshop: Acting, Directing, and Producing for the Media 3 credits

One of the following: 4 credits

- COM 200 Media and Culture
- COM 201 History and Theory of Television
- COM/
- ENL 312 Theories of Mass Media

One of the following: 4 credits

- COM/
- ANT 225 Multicultural Literacy
- COM 370 Introduction to Web Design, Graphics, and Theory
- COM 371 Minorities and the Media

Two of the following: 6 credits

- COM/
- ENL 241 Communications Design Workshop
- COM 251 Advanced Design
- COM 261 TV Studio Production
- COM 271 Radio/TV Newscasting

**Specialization: Corporate Communications**

The specialization in corporate communications prepares students to enter business and not-for-profit settings. The curriculum provides a theoretical framework and practical skills in writing and design, with particular emphasis on their interrelationship, as well as knowledge of related production and business practices.

**Requirements: 21 credits**

- COM 211 Principles of Corporate Communications 3 credits
- COM/
- ENL 241 Communications Design Workshop: Writing and Design 3 credits
- COM 410 Media Administration 4 credits
- ACC 114 Introduction to Accounting I 4 credits

One of the following: 3 credits

- BUS 100 Introduction to Business
- MKT 111 Marketing
- MGT 110 Organizational Theory and Management
- FNC 240 Managerial Finance I

One of the following: 4 credits

- MKT 211 Advertising
- COM/
- ENL 412 Broadcast Journalism
- ENL 457 Writing in the Business World
- COM/
- ENL 438 Newspaper Reporting
- ENL 439 Copyediting and Proofreading
- COM/
- ENL 465 Writing for the Media
- COM/
- ENL 475 Writing for Advertising and Public Relations
Specialization: Publication Design
The specialization in publication design prepares students for entry-level positions in publishing, small advertising and design organizations, and in public relations and publicity departments. The curriculum emphasizes writing and design skills and those skills specific to publicity, public relations, and publishing processes. The practical component provides students with the opportunity to develop skills and competence in at least one area of practical application: graphic design, non-broadcast video, radio, and tape production.

Requirements: 21 credits

COM/ENL 214 Principles of Editorial Style: Integration of Writing and Graphics 3 credits
COM/ENL 241 Communications Design Workshop: Writing and Design 3 credits
One of the following: 3 credits
CIN 211 Film/Video Production II
COM 251 Advanced Design
COM 261 TV Studio Production
COM 271 Radio and TV Newscasting
Three of the following: 12 credits
COM 410 Media Administration
COM/ENL 412 Broadcast Journalism
ENL 439 Copyediting and Proofreading
ENL 440 Magazine Writing
COM/ENL 465 Writing for the Media
COM/ENL 475 Writing for Advertising and Public Relations Journalism

Specialization: Journalism
The specialization in journalism prepares students for entry-level positions in print and broadcast journalism. The curriculum provides students with a broad background in English language, linguistics, and literature, and with the development of writing and reportorial skills suited to contemporary journalism.

Requirements: 18-20 credits

COM/ENL 412 Broadcast Journalism 4 credits
COM/ENL 438 Newspaper Reporting 4 credits
ENL 480 Studies in Advanced Journalism 4 credits
Two of the following: 6-8 credits
COM/ENL 214 Principles of Editorial Style: Integration of Writing and Graphics
COM/ENL 241 Communications Design Workshop: Writing and Design

Internships
The program requires an internship of at least three credits.

Minors
Minor in Media Studies: 17 credits
COM 150 Introduction to Communications 4 credits
CIN 111 Film/Video Production I 3 credits
One of the following: 4 credits
COM 200 Media and Culture
COM/ENL 241 Communications Design Workshop
ENL 433 Nonfiction Writing
ENL 439 Copyediting and Proofreading
ENL 440 Magazine Writing
ENL 441 Writing about the Media
COM/ENL 465 Writing for the Media
COM/ENL 475 Writing for Advertising and Public Relations Journalism
ENL 445 Journalism and Society

Minor in Corporate Communications: 17 credits
COM 211 Principles of Corporate Communications 3 credits
COM/ENL 241 Communications Design Workshop 3 credits
ENL 437 Writing in the Business World 4 credits
One of the following: 4 credits
COM 410 Media Administration
COM/ENL 360 Writing for the Media
COM/ENL 412 Broadcast Journalism
COM/ENL 438 Newspaper Reporting
ENL 439 Copyediting and Proofreading
COM/ENL 475 Writing for Advertising and Public Relations Journalism
One of the following: 3 credits
COM 250 Basic Design and Media Graphics
COM 261 TV Studio Production
COM 270 Radio Production
Minor in Publication Design: 17 credits

- COM/ENL 214 Principles of Editorial Style 3 credits
- COM/ENL 241 Communications Design Workshop 3 credits
- COM/ENL 277 Introduction to Journalism 4 credits
- One of the following: 3 credits
  - COM 250 Basic Design and Media Graphics
  - COM 260 Small Format TV Production
  - COM 270 Radio Production
- One of the following: 4 credits
  - COM/ENL 412 Broadcast Journalism
  - COM/ENL 438 Newspaper Reporting
  - COM/ENL 439 Copyediting and Proofreading
  - ENL 440 Magazine Writing
  - COM/ENL 465 Writing for the Media
  - COM/ENL 475 Writing for Advertising and Public Relations

Minor in Journalism: 10-12 credits

Two of the following: 7-8 credits

- COM/ENL 277 Introduction to Journalism
- COM/ENL 412 Broadcast Journalism
- COM/ENL 438 Newspaper Reporting
- COM/ENL 480 Studies in Advanced Journalism
- One of the following: 3-4 credits
  - COM 214 Principles of Editorial Style Integration of Writing and Graphics
  - ENL 433 Nonfiction Writing
  - ENL 439 Copyediting and Proofreading
  - ENL 440 Magazine Writing
  - ENL 441 Writing about the Media
  - COM/ENL 465 Writing for the Media
  - COM/ENL 475 Writing for Advertising and Public Relations
  - ENL 445 Journalism and Society

Courses

**COM 100 Introduction to Media**
3 hours; 3 credits
An introduction to television, radio, and related media. (arts & com.)

**COM 150 Introduction to Communications**
4 hours; 4 credits
The course provides a general introduction to the field of communications. It is intended for potential majors, and is designed to introduce basic concepts in the study of communications modes, media, and messages; interpersonal, organizational, and mass communication contexts; and the process of communications research.

**COM 200 Media and Culture**
4 hours; 4 credits
Media and Culture examines the nature and structure of communication media, their interrelationships, and their social, economic, and cultural contexts. The course considers the role of the mass media in influencing its audiences, and the effects of these strategies and messages on individuals, groups, and institutions. (arts & com.)
Prerequisite: ENG 111, and COM 100 or COM 150

**COM 201 History and Theory of Television**
4 hours; 4 credits
History and Theory of Television examines the development of commercial television broadcasting, its genesis in radio, its creation of distinctive genres, and its change and diversification in the age of cable and satellite broadcasting. The course considers different theoretical approaches to the analysis of television, investigating theories of the effects of television, the impact of television on other media, and television's “mythic” content. (arts & com.)
Prerequisite: ENG 111

**COM 203 Theories of Communications**
4 hours; 4 credits
Theories of Communications examines the development of communications as an academic discipline, tracing its roots in rhetoric, social psychology, political science, sociology, anthropology, and other disciplines. General theories of human communication will be discussed, as well as specialized theories of mass communication. Different models of communication (e.g., Shannon and Weaver's “Information Theory”) will be presented and critiqued.
Prerequisite: ENG 111 and COM 150

**COM 211 Principles of Corporate Communications**
(Also BUS 211)
4 hours; 3 credits
A critical survey of artifacts of corporate and public communications, including films, video programs and other audio-visual presentations, annual reports, catalogues, brochures, house organs, and other print communications. Analyses of corporate publications will focus on their meaning, purpose, audience, and significance. Writing and editing for such publications is taught, with special emphasis on audience and purpose and the development of a variety of editorial skills: proofreading, reorganizing, rewriting, collaborating, coauthoring.
Students who successfully complete COM/ENL 214 may not register for COM 211.
Prerequisites: COM 150 and ENG 151
COM 214  **Principles of Editorial Style: Integration of Writing and Graphics**  
(Also ENL 214)  
4 hours; 3 credits  
Editorial style as total concept, including both visual design and written concept. An introduction to professional writing, editorial concepts, and the publication process. Focus on brochure, newsletter, magazine, advertisement, and book structure; their meaning and significance. Writing and editing for such publications and for the marketplace, with special emphasis on audience and purpose and the development of a variety of editorial skills, such as proofreading, reorganizing, rewriting, collaborating, and coauthoring. Students who successfully complete COM 211 may not register for COM/ENL 214.  
Prerequisite: ENG 151 or permission of instructor.

COM 220  **History of Broadcasting**  
4 hours; 4 credits  
This course examines the structure and development of the American broadcasting system. The course considers political, economic, social, aesthetic, and technological factors contributing to the growth of radio and television as publicly owned but privately operated, profit-generating telecommunications media.  
Prerequisite: ENG 111 and COM 150

COM 225  **Multicultural Literacy**  
(Also ANT 225)  
4 hours; 4 credits  
This course will explore the nature of culture as it is defined by various disciplines and affected by class, race, gender, and ethnicity. Readings will include texts in anthropology, sociology, literary theory, media studies, and women's studies. (social science) (arts & com.) (p&d)  
Prerequisites: ENG 151, COR 100; and either ANT 100, COM 100, HST 100, POL 100, SOC 100, or WMS 100

COM 230  **A History of Print Media**  
(Also ENL 230)  
4 hours; 4 credits  
An introductory survey of the evolution of newspapers, periodicals, and the publishing industry, focusing on technological developments, major innovations, legal and ethical issues, and societal impact.  
Prerequisite: ENG 151 and COM 150

COM 240  **Media Workshop: Acting, Directing, and Producing for the Media**  
4 hours; 3 credits  
An examination of the actor/director relationship as it applies in the various media: stage, film, and television. Students will have an opportunity to work both as actors and directors. New work from writing classes will be encouraged for student projects.  
Pre- or corequisite: CIN 111

COM 241  **Communications Design Workshop: Writing and Design**  
(Also ENL 241)  
4 hours; 3 credits  
Theoretical and practical approaches to the interrelationship of writing, print, and video graphics. Analysis of the role of subject, voice, and audience in determining appropriate visual and verbal forms. Practical problems of graphic and video reproduction and execution with applications through desktop publishing and small format TV. Each student works through a number of design problems and completes various problems and projects of his/her own choice.  
Prerequisite: COM/ENL 214

COM 249  **Workshop in Typesetting**  
2 hours; 1 credit  
An intensive five-week course designed to introduce the student to the various capabilities and applications of desktop publishing.

COM 250  **Basic Design and Media Graphics**  
4 hours; 3 credits  
A hands-on course in the skills of layout and design. The course will focus on the organization of visual space, both moving and stationary, visual strategies, and the appropriateness of visual design to various audiences. Recommended for students with limited background in design.

COM 251  **Advanced Design**  
4 hours; 3 credits  
Case studies for projects from print and electronic media, focused on informational graphics, are assigned to students. Individual development of communications, problem solving, and presentation skills are stressed. Presentation to critiques by juries of professionals and peers represents a significant dimension of each class.  
Prerequisite: COM 250

COM 261  **Television Studio Production**  
4 hours; 3 credits  
The emphasis is on studio production and the application of controlled studio techniques to the production of video programs. Increasingly complex projects will be planned, scripted, and carried through to a final edit.  
Prerequisite: ENG 111 and CIN 111

COM 270  **Radio Production**  
4 hours; 3 credits  
This course is designed to give the student an understanding of radio production, theory, and practice. This includes audio principles and aesthetics; the purpose and operation of primary (microphones, tape machines, consoles, turntables) and secondary (compressors, equalizers, delays) studio equipment; and the techniques of the production process.

COM 271  **Radio/TV Newscasting**  
4 hours; 3 credits  
This course provides students with an understanding of newscasting through an evaluation of the impact of broadcast news, and investigation of journalistic tenets and applications that include organizing, writing, and producing news programs.  
Prerequisite: COM 270 or COM 261

COM 277  **Introduction to Journalism**  
(Also ENL 277)  
4 hours; 4 credits  
A general introduction to the principles of journalism. Work on reporting, editing, and layout, and an examination of distribution/feedback systems.  
Prerequisite: ENG 151
COM 290  Internship in Media Production  
(Also CIN 290)
1 to 4 credits
An internship work and learning experience with a public or private agency whose activity is film, video, television, or radio production.
Prerequisites: A 100-level course in communications, cinema studies, or the equivalent and permission of the faculty sponsor (special form required).

COM 312  Theories of Mass Media  
(Also ENL 312)
4 hours; 4 credits
A survey of contemporary communications theory defining the language, structure, systems, effects, and rhetoric of the mass media. Practical examples in journalism, advertising, publishing, radio, television, and film will be analyzed.
Prerequisite: ENG 151

COM 370  Introduction to Web Design, Graphics, and Theory  
4 hours; 4 credits
This course explores Web design, new-media, digital culture, and cyberspace. These terms and practices, integrally linked, speak of current and emerging technologies. This course is concerned with the operation of technical equipment, equipment requirements of emerging technologies, and the theoretical implications of Web-based design. Students will create projects employing Web design software. Along with production, COM 370 focuses on the understanding of the psychological, cultural, social, economic, and political relationships that have brought about the development of “cyber-society.”
Prerequisites: COM 203 and COM 250

COM 371  Minorities and the Media  
(also SOC 371)
4 hours; 4 credits
This course will examine the role of the mass media as cultural institutions in shaping the images and self-images of different minority groups. Definitions and images to be analyzed are drawn from religious, medical, and social scientific sources, as well as elite and popular culture. (p&d)
Prerequisites: COM 150 or a 100-level and 200-level SOC or ANT course

COM 374  Mass Media in Modern Society  
(Also SOC 374)
4 hours; 4 credits
Sociological analysis of the mass media: their comparative histories and organizations, and their political and social effects. Attention will be given to their persuasive role in propaganda and public opinion, as well as to their function in providing information and entertainment for the common culture.
Prerequisite: COM 150 and a 200-level SOC or ANT course

COM 410  Media Administration  
(Also BUS 410)
4 hours; 4 credits
A course dealing with the skills and concepts necessary for the competent management of a media production department. Topics include production planning and control, cost analysis procedures, contract and copyright law in relation to the media, and organization theory.
Prerequisite: COM 150, and COM 261 or COM 270 or CIN 111

COM 412  Broadcast Journalism  
(Also ENL 412)
4 hours; 4 credits
An introduction to the theory, history, and practice of modern newscasting. Special emphasis will be placed on preparing material for broadcast on radio and television. Readings will explore the economic realities of broadcasting, legal sanctions, and social impact. Students will monitor newscasts, analyze them, and write copy suitable for broadcast.
Prerequisite: ENG 151; COM 100 is recommended

COM 438  Newspaper Reporting  
(Also ENL 438)
4 hours; 4 credits
Techniques of copyediting and proofreading for both the reporter-writer and the editor.
Prerequisite: ENG 151

COM 445  Journalism and Society  
(Also ENL 445)
4 hours; 4 credits
Learning to “read” and write the news. Analysis of the ways in which news stories define our understanding of society. The course will consider both the effect of print and broadcast journalism on politics, values, and social standards and the pressures on the press that define its values. Topics vary from term to term.
Prerequisite: ENG 151

COM 450  Senior Seminar in Communications Research  
4 hours; 4 credits
This course provides an overview of communications research, and introduces students to basic research procedures, paradigms, and methods. First, we examine the historical development of the field of communications theory and research. Then we introduce some of the basic research goals, methodologies, and strategies used in communications research. Students then use these tools to formulate a research problem of their own. Not open to students who have previously taken COM 400.
Prerequisites: COM 203, and COM 220 or COM 230 or COM 374

COM 465  Writing for the Media  
(Also ENL 465)
4 hours; 4 credits
Scripting for various media, including slide-tape presentations, audio, video, film, television, and print. The course emphasizes the translation of information, ideas, and experience into various presentational formats and applies that knowledge to specific projects such as marketing presentations, sales, promotional scripts, and motivational scripts within industry.
Prerequisites: 200-level COM course and ENG 151 or permission of instructor

COM 475  Writing for Advertising and Public Relations  
(Also ENL 475)
4 hours; 4 credits
An introduction to the techniques of writing promotional copy, including advertising (print and broadcast), press releases, direct mail, and publicity materials. Students analyze advertising and public relations campaigns from a marketing point of view and evaluate and discuss their effectiveness. Assignments include product, audience, and media analysis; copywriting ads; press releases; and direct mail letters.
Prerequisites: COM 211 or COM/ENL 214 and ENG 151 or permission of instructor
COM 480  Studies in Advanced Journalism  
(Also ENL 480)  
4 hours; 4 credits  
Analysis of the techniques required for good feature writing, magazine writing, personal journalism, investigative reporting, interviewing, etc. Emphasis varies from term to term.  
Prerequisite: COM 412 or COM 438  

COM 490  Senior Project  
2 hours; 1 credit  
A laboratory/seminar in which students select a publication project to complete during the semester, including a written analysis of the writing, design, and management problems and skills related to the completion of the project. Problems, possible solutions, and final results will be shared seminar-style.  
Prerequisites: Senior standing and permission of the instructor

COMPUTER SCIENCE  
AND COMPUTER TECHNOLOGY  

(Bachelor of Science, Associate in Applied Science, Minor; Master of Science - see Graduate Catalog)  
Department of Computer Science  
Chair: Associate Professor Deborah Sturm, Computer Science/Engineering Sciences and Physics Building (1N), Room 215

Computer User Responsibilities  
Students are expected to be familiar with the computer user responsibilities detailed in Appendix ii.

Computer Technology (AAS)  
The College offers a Computer Technology program that focuses on general applications programming. Students seeking a Bachelor's degree in Computer Science should consult the requirements for the BS in Computer Science or the BS in Computer Science/Mathematics.

General Education Requirements  
ENG 111, ENG 151, COR 100, PED 190: 12 credits  
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The Contemporary World; Textual, Aesthetic, and Linguistic Analysis: 15 credits  
1. Scientific Analysis  
   A one-year, eight-credit sequence of laboratory science (8 credits)  
2. At least one course from two of the following groups:  
   Social Scientific Analysis; The Contemporary World; Textual, Aesthetic, and Linguistic Analysis (7 credits)  
See section on general education requirements for approved course lists and complete details.

Pre-Core Requirement: 4 credits  
CSC 126  Introduction to Computer Science  
4 credits  
A grade of C or above in CSC 126 is required for continuation in the program. Students will be allowed to repeat the course, if necessary.

Core Requirements: 29 credits  
CSC 210  Applications Programming  
4 credits  
CSC 220  Computers and Programming  
4 credits  
CSC/  
MTH 228  Discrete Mathematical Structures  
4 credits  
CSC 326  Information Structures  
4 credits  
CSC 330  Object-Oriented Software Design  
4 credits  
CSC 332  Operating Systems I  
4 credits  
MTH 229  Calculus Computer Laboratory  
1 credit  
MTH 231  Analytic Geometry and Calculus I  
4 credits

Total Credits Required: 60

Liberal Arts and Sciences Requirement  
Courses designated CSC are non-liberal arts and sciences.

Computer Science (BS)  
The Computer Science program offers a full four-year curriculum in computer science that prepares students for careers as computer professionals and/or for graduate study. Our goal is to deliver a broad-based, high-quality program in computer science that prepares students for lifelong learning as they pursue professional careers in computing and graduate programs.

Our curriculum offers a balance of theoretical and applied software and hardware courses. Within software design, we emphasize an object-oriented approach with user interface development and testing. In addition to classic switching theory and architecture, students build and test hardware components. We are committed to offering courses that stay current with changing technologies. Our senior seminar stresses presentation and written skills, and discusses ethical concerns in computer science.

Students interested in transferring into the program from the two-year Computer Technology program should consult the department chairperson.

The program in Computer Science is accredited by the Computing Accreditation Commission (CAC) of the Accreditation Board for Engineering and Technology (ABET).

General Education Requirements for the BS: 41 credits  
(These include at least 30 credits not in science, mathematics, or computer science.)  
ENG 111, ENG 151, COR 100, PED 190: 12 credits  
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The Contemporary World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 29 credits  
Whenever possible, these courses should be completed within the first 60 credits.

Scientific Analysis; Social Scientific Analysis; The Contemporary World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 29 credits  
Whenver possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)  
a. Science and Technology: (8 credits)  
A one-year science sequence chosen from the list of courses below:  
AST 120 Space Science I  
AST 160 Space Science II  
BIO 170/171 General Biology I/Laboratory  
BIO 180/181 General Biology II/Laboratory  
CHM 141/121 General Chemistry I/Laboratory  
CHM 142/127 General Chemistry II/Laboratory
PHY 120/121 General Physics I/Laboratory
PHY 160/161 General Physics II/Laboratory
b. Mathematics: (3 credits)*
  *Fulfilled in the pre-major requirements.
2. Social Scientific Analysis: (3-4 credits)
3. The Contemporary World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Plus an additional 2-8 credits that are not science, mathematics, or
   computer science courses.

   See section on general education requirements for approved course
   lists and complete details.

   Pre-Computer Science Sequence: 4 credits
   CSC 126 Introduction to Computer Science 4 credits
   A grade of C or above in CSC 126 is required for admission to the Computer
   Science Baccalaureate program. Students will be allowed to repeat the
   course, if necessary.

   Pre-Major Requirements: 22-25 credits
   MTH 229 Calculus Computer Laboratory
   MTH 230 Calculus I with Pre-Calculus
   MTH 232 Analytic Geometry and Calculus II
   MTH 233 Analytic Geometry and Calculus III
   or
   MTH 229 Calculus Computer Laboratory
   MTH 231 Analytic Geometry and Calculus I
   MTH 232 Analytic Geometry and Calculus II
   MTH 233 Analytic Geometry and Calculus III
   or
   MTH 229 Calculus Computer Laboratory
   MTH 235 Accelerated Calculus I
   MTH 236 Accelerated Calculus II 10-13 credits
   CSC 220 Computers and Programming 4 credits
   MTH/  
   CSC 228 Discrete Mathematical Structures for Computer Science 4 credits
   Four additional credits of science courses chosen from the Scientific
   Analysis category list of courses that provide the foundation for further
   study in the sciences or that are chosen from courses with these Scientific
   Analysis courses as prerequisites.

   Major Requirements: 52 credits
   Students majoring in Computer Science must complete:
   CSC 326 Information Structures 4 credits
   CSC 330 Object-Oriented Software Design 4 credits
   CSC 332 Operating Systems I 4 credits
   CSC/  
   ENS 346 Switching and Automata Theory 4 credits
   CSC 347 Computer Circuits Laboratory 2 credits
   CSC 382 Analysis of Algorithms 4 credits
   CSC 430 Software Engineering 4 credits
   CSC 446 Computer Architecture 4 credits
   CSC 490 Seminar in Computer Science 2 credits
   MTH 311 Probability Theory and an Introduction to Mathematical Statistics 4 credits
   MTH 338 Linear Algebra 4 credits
   Three courses chosen from the following, at least two of which must be a
   Computer Science course:
   CSC 420 Concepts of Programming Languages 4 credits
   CSC 421 Internet Data Communications and Security 4 credits
   CSC 424 Database Management Systems 4 credits
   CSC 432 Operating Systems II 4 credits
   CSC 434 Compiler Construction 4 credits
   CSC 435 Advanced Data Communications 4 credits
   CSC/  
   ENS 462 Microprocessors 4 credits
   CSC 470 Introductory Computer Graphics 4 credits
   CSC 480 Artificial Intelligence 4 credits
   CSC 482 Discrete Simulation 4 credits
   CSC 484 Theory of Computation 4 credits
   CSC/  
   MTH 335 Numerical Analysis 4 credits
   MTH 337 Applied Combinatorics and Graph Theory 4 credits
   MTH 339 Applied Algebra 4 credits
   MTH 350 Mathematical Logic 4 credits
   MTH 370 Operations Research 4 credits
   MTH 410 Statistics 4 credits
   A grade of C or above in all CS courses that are prerequisites for CS courses
   in the Major Requirements. Students will be allowed to repeat courses, if
   necessary.

   Electives: 0-4 credits

   Total Credits Required: 124

   Minor
   Prerequisites or corequisites: MTH 123 and
   CSC 126 Introduction to Computer Science 4 credits
   CSC 220 Computers and Programming 4 credits
   CSC/  
   MTH 228 Discrete Mathematical Structures 4 credits

   Requirements:
   Students with a science major are strongly urged to take MTH 335 or ENS
   336; students with a business major are strongly urged to take MTH 231 or
   MTH 221.

   Computer Science minor requirements can be met by completion of
   any one of the following sequences:
   1. Computer Science minor sequence for students with an interest in
      computer engineering:
      CSC 326 Information Structures 4 credits
      CSC 332 Operating Systems I 4 credits
      CSC 435 Advanced Data Communications 4 credits
      CSC 446 Computer Architecture 4 credits
   2. Computer Science minor sequence for students with an interest in
      applications programming:
      CSC 326 Information Structures 4 credits
      CSC 330 Object-Oriented Software Design 4 credits
      CSC 424 Database Management Systems 4 credits
and one course chosen from the following list: 4 credits
- CSC 332 Operating Systems I
- CSC 420 Concepts of Programming Languages
- CSC 430 Software Engineering
- CSC 435 Advanced Data Communications
- CSC 470 Introductory Computer Graphics
- CSC 480 Artificial Intelligence

Courses
The courses in computer science are listed below. Students should consult a computer science adviser before registering for courses. CSC 100 Computers and Society, and CSC 102 Computing for Today are general introductory courses in computers. They are not credited toward the major. CSC 126 Introduction to Computer Science is the introductory course in the Associate's degree Computer Technology program and in the Bachelor's degree program. It is designed for students who have completed MTH 025 or 030 or the equivalent. CSC 270 Introduction to Scientific Computing is a general introductory course in computer science for engineering students and others with similar needs.

CSC 102 Computers for Today
6 hours; 4 credits
Basic computer concepts including hardware, operating systems, application software (word processing, spreadsheets, and database manager), networks, and the Internet. Internet protocols, Internet, intranets and the Web, Web development, multimedia, research, privacy, cyber security, e-commerce, and ethical issues. Not open to students who have successfully completed a 200-level computer course or BUS 150.

CSC 112 Introduction to Word Processing
1 class hour, 2 laboratory hours - 7 weeks; 1 credit
The latest version of a popular word processing program will be taught. Topics will include creating and editing a file, using the speller and the thesaurus, formatting, printing, merging, footnotes, and macros. Not open to students who have successfully completed CSC 102.

CSC 114 Elements of Computer Programming for the Technologies
1 class hour, 3 laboratory hours; 2 credits
Elements of computer programming for the technologies; arithmetic and logical operations and functions, comparison operators, loops, subroutines, input and output. Programs will be written in a higher-level computer language. Specialized packages for technological applications will be used. Pre- or corequisite: MTH 123

CSC 116 Introduction to Database
1 class hour, 2 laboratory hours - 7 weeks; 1 credit
The latest version of a widely used database program will be taught. Topics will include creating and editing a file, sorting and indexing, printing reports and labels. Not open to students who have successfully completed CSC 102. Prerequisite: Passing the CUNY Mathematics Assessment Test

CSC 118 Introduction to Spreadsheets
1 class hour, 2 laboratory hours - 7 weeks; 1 credit
The latest version of a widely used spreadsheet program will be taught. Topics will include creating and problem solving using spreadsheets, entering data and formulas, correcting errors, the range, copy and formatting instructions, printing, tables, and graphs. Not open to students who have successfully completed CSC 102. Prerequisite: Passing the CUNY Mathematics Assessment Test

CSC 122 Computer and Windows
1 class hour, 2 laboratory hours; 2 credits
This course will introduce the novice to the essentials of Windows usage. Topics will include controlling the Windows graphical environment, customizing the desktop, screen savers, running programs, copying data between programs, and managing files with the File Manager. The supplied programs of Windows, the accessories, will be explored: Write, Terminal, Paintbrush, Notepad, Cardfile, Recorder, Calendar, and Calculator. Groups and the installation of programs will be taught. Not open to students who have completed CSC 326 or above. Prerequisite: Passing the CUNY Mathematics Assessment Test

CSC 126 Introduction to Computer Science
3 class hours, 3 laboratory hours; 4 credits
Computing and information processing. Basic computer structure. Programming methodology: analysis, design, documentation, implementation, and evaluation. Algorithmic approach to problem solving. Computer solutions of several numerical and non-numerical problems. For students who plan to pursue a degree program in computer science. Pre- or corequisite: MTH 123 or MTH 130 or MTH 230 or MTH 231 or MTH 235

CSC 135 Introduction to Information Systems
(Also BUS 135)
2 class hours, 2 laboratory hours; 3 credits
A hands-on laboratory course in the effective use of technology tools for problem solving. Students will understand how copyright laws apply to software and the need to acknowledge material from outside sources, including online material and the work of others. Corequisite: CSC 126

CSC 205 Basic Desktop Publishing
1 class hour, 2 laboratory hours; 2 credits
A hands-on course designed to provide a practical introduction to the basics of text formatting and design. Text and graphics will be combined to produce printer-ready pages for publication. Topics will stress the transformation of otherwise plain-looking documents into professional-looking, more readable copy. Typefaces, type styles, type sizes and page layouts will be explored. Prerequisite: CSC 102 or CSC 112.

CSC 210 Applications Programming
3 class hours, 3 laboratory hours; 4 credits
Application of programming techniques to problems in business and data processing. State-of-the-art software packages to analyze and manipulate data for standard business applications will be taught. Prerequisite: A grade of C or above in either CSC 126 or CSC 270

CSC 211 Intermediate Programming
3 hours, 3 laboratory hours; 4 credits
A second course in programming. Programming techniques emphasizing reliability, maintainability, and reusability. Module design and multi-file programs. Abstract data types. Data representation and conversion. Addresses, pointers, and dynamic storage allocation. Recursion and function parameters. User interface design. Prerequisite: CSC 126 with a grade C or better (not open to students who had a C or better in CSC 310).
CSC 220  Computers and Programming
3 class hours, 3 laboratory hours; 4 credits
Binary and hexadecimal number systems, computer structure, machine language, instruction formats and execution, addressing techniques, and digital representation of data. Computer systems organization, symbolic coding and assembly systems, programming techniques, program segmentation and linkage. Students will complete computer projects in machine language and assembly language.
Prerequisite: A grade of C or above in either CSC 126 or 270

CSC 228  Discrete Mathematical Structures for Computer Science
(Also MTH 228)
3 class hours, 3 laboratory hours; 4 credits
Prerequisite: A grade of C or above in either CSC 126 or CSC 270; MTH 123 or MTH 130 or MTH 230 or MTH 231 or MTH 235

CSC 270  Introduction to Scientific Computing
6 hours; 4 credits
Programming elements: operators, flow control, repetition, selection, logical conditions, arrays, data import, vectors, matrices, functions. Introduction to numerical techniques using scientific software: graphing, integration, roots of equations, linear equations, eigenvectors, eigenvalues, interpolation, signal processing. Not open to students who have successfully completed CSC 120 or CSC 126.
Prerequisite: MTH 231

CSC 310  Input/Output Operations and File Management
3 class hours, 3 laboratory hours; 4 credits
Files and file structures. Physical versus logical files. Secondary storage devices and system software. Input/output and access techniques. File organizations, indexing and processing. The capabilities of file handling in at least one higher-level programming language will be explored.
Prerequisite: CSC 126

CSC 326  Information Structures
3 class hours, 3 laboratory hours; 4 credits
Organization and processing of various types of information. Storage allocation techniques. Linear list structures including stacks and queues, deques, rings, and linked arrays. Tree structures and multi-linked structures. Advanced sorting and searching techniques. Scatter storage techniques. Recursive programming.
Prerequisites: CSC 310 or CSC/MTH 228 or ENS 336; a knowledge of C programming language

CSC 330  Object-Oriented Software Design
3 class hours, 3 laboratory hours; 4 credits
Large-scale software design issues; object-oriented design paradigms; encapsulation; polymorphism; inheritance; reusability; specifics of an object-oriented language and associated development tools. Students will be required to implement a substantial and well-engineered project using an object-oriented language.
Prerequisite: CSC 326

CSC 332  Operating Systems I
3 class hours, 3 laboratory hours; 4 credits
Prerequisites: CSC 220 or ENS 362, and CSC 326

CSC 334  Computer System Fundamentals
4 hours; 4 credits
The course covers concepts of hardware and software systems and programming concepts common to the corporate data processing environment. Topics include fundamentals of hardware and software, rudiments of operating systems, and communication between microcomputers and mainframes. Various software application and utility packages utilizing both mainframes and microcomputers will be studied.
Prerequisite: CSC 310

CSC 346  Switching and Automata Theory
4 hours; 4 credits
Prerequisites: CSC 220 and CSC 326 or CSC 270 and ENS 320 or CSC 220 and CSC/MTH 228 and ETL 240

CSC 347  Computer Circuits Laboratory
4 hours; 2 credits
The design and implementation of circuitry found in modern computers. Physical realizations of minimized switching functions. Design and implementation of finite state machines including synchronous sequential circuits and asynchronous sequential circuits.
Prerequisite: CSC 346

CSC 382  Analysis of Algorithms
4 hours; 4 credits
Algorithm development, including running time analysis and correctness arguments. Topics include: asymptotic notation and complexity analysis; use of mathematical techniques to determine the computational complexity of algorithms such as sorting and searching. The course provides an introduction and analysis of elementary graph algorithms and programming techniques such as greedy, backtracking, and dynamic programming. Projects will be assigned to correlate the computational complexity and real-time execution time of the algorithms.
Prerequisites: CSC 326 and MTH 311

CSC 405  Applied Concepts in Information Systems
(Also BUS 405)
3 class hours, 3 laboratory hours; 4 credits
The course covers applied concepts in information systems. Theory and methodology for the design, development, and implementation of large-scale reliable business software projects; and tools and techniques for managing business software projects will be discussed. Presentations and GUI interfaces will be emphasized.
Prerequisites: CSC 326 and BUS 352
**CSC 420  Concepts of Programming Languages**
4 hours; 4 credits
Definition of programming languages, data types and declaration, storage allocation, statement types, operations, control structures, binding time, procedure, subroutine, function declaration, parameters, string manipulation. Several programming languages will be discussed and problems using these languages will be assigned.
Prerequisites: CSC 220 and CSC 326

**CSC 421  Internet Data Communications and Security**
3 class hours, 3 laboratory hours; 4 credits
Designed to present a thorough understanding of the Internet structure, its functionality, and the technology. This course covers networks and how they work; Internet protocols; Internet control protocols; Internet and www; Internet clients and servers and their main features; Internet applications and related protocols; Internet and www security; encryption, public-key cryptography, authentication, and IP security.
Prerequisite: CSC 326

**CSC 424  Database Management Systems**
4 hours; 4 credits
Introduction to database systems, concepts and architecture; Conceptual data modeling with the Entity-Relationship Model; the Relational database model: concepts, languages, functional dependencies, database normalization and design; programming in SQL; Concepts of integrity, security, transactions, concurrency, recovery, distributed and object-oriented databases are introduced. Study of several real-world database management systems. Students are required to implement a database application project in the area of their major interest.
Prerequisite: CSC 326

**CSC 430  Software Engineering**
3 class hours, 2 laboratory hours; 4 credits
Developing large-scale reliable software systems. Theory and methodology for the design and implementation of software systems from requirements analysis through design and implementation, testing, integration, and maintenance. Tools and techniques for all phases of a software system's life cycle will be discussed. Documentation, testing, and management of large-scale systems. A significant project will be required.
Prerequisite: CSC 330

**CSC 432  Operating Systems II**
4 hours; 4 credits
Concurrency processing. Linear and tree-structured address space. Resource allocation for multiprocessing. Queuing and network control policies. Protection mechanisms. Case studies of various state-of-the-art systems and implementation of a small operating system.
Prerequisite: CSC 332

**CSC 434  Compiler Construction**
4 hours; 4 credits
Review of assembly techniques of symbol table techniques and macros, and of compilation, loading, and execution. One-pass compilation techniques. Translation of arithmetic expressions from prefix form to machine language. Detailed organization of a simple complete compiler.
Prerequisites: CSC 350 and CSC 326

**CSC 435  Advanced Data Communications**
4 hours; 4 credits
Concepts of circuit, packet, and message switched networks; local, campus, metropolitan, and wide area networks; concepts of data transmission; the emerging telecommunications industry, private networks, and integrated services digital networks.
Prerequisite: CSC 346

**CSC 446  Computer Architecture**
(Also ENS 446)
4 hours; 4 credits
Instruction formats and addressing schemes. Arithmetic and logic unit design. Control unit design: hardwired and microprogrammed. Main memory technology. Virtual, high-speed, associative, and read-only memories. Programmable logic arrays. Computer organizations including stack, parallel, and pipeline. System structures: time sharing, multiprocessing, and networking. Digital communications. Input/Output systems; direct memory access.
Prerequisite: CSC 346 or ENS 220

**CSC 450  Honors Workshop**
4 hours; 4 credits
Students, with the approval of the department, work in teams on large-scale projects.
Prerequisites: Computer Science major with senior standing and departmental approval

**CSC 462  Microprocessors**
(Also ENS 362)
2 class hours, 4 laboratory hours; 4 credits
Introduction to 8086 architecture using the SDK-86 single-board computer. Interfacing of programmable chips including the 8255 PPIO, 8259 Interrupt controller, 8254 counter/timer, 8279 keyboard/display controller, and ADC 0804 analog to digital converter. Testing and debugging of assembler language programs to exercise the interface. Troubleshoot with oscilloscope and Debug.
Prerequisites: ENS 220 and ENS 221, or CSC 346 and CSC 347

**CSC 470  Introductory Computer Graphics**
4 hours; 4 credits
Introduction to the basic concepts and techniques of interactive computer graphics including the hardware and software components of computer graphics systems and mathematical handling of graphical objects. Algorithms for two-dimensional and three-dimensional graphics: windowing, clipping, and transformations. Viewing with parallel and perspective projections. Possible additional topics include: curves and surface modeling; realistic rendering (shading with illumination and material, shadowing, reflection and surface texturing).
Prerequisite: CSC 326

**CSC 480  Artificial Intelligence**
4 hours; 4 credits
Prerequisite: CSC 326
**CSC 482  Discrete Simulation**  
4 hours; 4 credits  
Prerequisite: MTH 311 and CSC 326

**CSC 484  Theory of Computation**  
4 hours; 4 credits  
Prerequisites: A grade of C or above in (CSC 126 or 270) and MTH 339 and (MTH 233 or 236)

**CSC 490  Seminar in Computer Science**  
2 hours; 2 credits  
Invited speakers will lead discussions on the ethical and societal impact of the computer. Students will write and present papers on current research topics in the computing field.  
Prerequisites: Computer Science major with senior standing

**Computer Science-Mathematics (BS)**  
The Departments of Computer Science and Mathematics offer a joint BS degree program in Computer Science and Mathematics that provides a balance between these two disciplines with an emphasis on their applied aspects and their relationship to each other.

**General Education Requirements for the BS**  
**ENG 111, ENG 151, COR 100, PED 190: 12 credits**  
Whenever possible, these four courses should be completed within the first 36 credits.

**Scientific Analysis; Social Scientific Analysis; The Contemporary World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits**  
General education requirements are the same as for other BS degrees.

**Pre-Computer Science Sequence: 4 credits**  
CSC 126  Introduction to Computer Science  
A grade of C or above in CSC 126 will be required for admission to the Computer Science-Mathematics Baccalaureate program. Students will be allowed to repeat the course, if necessary.

**Pre-Major Requirements: 18-21 credits**  
Students planning to major in Computer Science-Mathematics should complete the following requirements prior to their junior year:  
- Calculus sequence chosen from the following:  
  - MTH 231 Analytic Geometry and Calculus I  
  - MTH 232 Analytic Geometry and Calculus II  
  - MTH 233 Analytic Geometry and Calculus III  
  - MTH 229 Calculus Computer Laboratory  
  or  
  - MTH 235 Accelerated Calculus I  
  - MTH 236 Accelerated Calculus II  
  - MTH 229 Calculus Computer Laboratory  
  - CSC 220 Computers and Programming  
  - MTH/  
  - CSC 228 Discrete Mathematical Structures  
  - 4 credits  
  - MTH 232 Analytic Geometry and Calculus II  
  - MTH 233 Analytic Geometry and Calculus III  
  - MTH 229 Calculus Computer Laboratory  
  - CSC 220 Computers and Programming  
  - 4 credits  

**MTH 232 Analytic Geometry and Calculus II**  
**MTH 233 Analytic Geometry and Calculus III**  
**MTH 229 Calculus Computer Laboratory**  
**MTH 235 Accelerated Calculus I**  
**MTH 236 Accelerated Calculus II**  
**MTH 229 Calculus Computer Laboratory**  
**CSC 220 Computers and Programming**  
**MTH/**  
**CSC 228 Discrete Mathematical Structures**  
**4 credits**

**Major Requirements: 48 credits**  
**Computer Science: 24 credits**  
- CSC 326 Information Structures  
- CSC 330 Systems Programming: Concepts of Software Design  
- CSC/  
- ENS 346 Switching and Automata Theory  
- CSC 382 Analysis of Algorithms  
- CSC 420 Concepts of Programming Languages  
- Any one from the following group of advanced computer courses:  
  - CSC 424 Database Management Systems  
  - CSC 480 Artificial Intelligence  
  - CSC 482 Discrete Simulation  
- 4 credits  

**Mathematics: 24 credits**  
- MTH 311 Probability Theory and an Introduction to Mathematical Statistics  
- MTH 335 Numerical Analysis  
- MTH 338 Linear Algebra  
- MTH 339 Applied Algebra  
- Any two of the following:  
  - MTH 330 Applied Mathematical Analysis I  
  - MTH 337 Applied Combinatorics and Graph Theory  
  - MTH 341 Advanced Calculus I  
  - MTH 350 Mathematical Logic  
  - MTH 370 Operations Research  
  - MTH 410 Mathematical Statistics I  
- 8 credits

**Electives: 8-20 credits**  
**Total Credits Required: 120**

**Liberal Arts and Sciences Requirement**  
All courses designated CSC are non-liberal arts and sciences. (Courses are listed under Computer Science and Mathematics.)
Eleven credits to be selected from the following courses:

**DANCE**

(Dance)

Department of Performing and Creative Arts
Coordinator: Associate Professor Charles Thomas, Center for the Arts (1P), Room 224

The minor in Dance is available to students in all baccalaureate programs. In conjunction with a major in Psychology, this minor prepares students for graduate work in dance therapy.

**Requirements: 18 credits**

Required courses:

- **DAN 101** Contemporary Dance Technique I 2 credits
- **DAN 111** Choreography I 3 credits
- **DAN 184** Afro-Haitian Rhythms I 2 credits

Eleven credits to be selected from the following courses:

- **DAN 112** Choreography II 3 credits
- **DAN 150** Dance History: Twentieth Century 3 credits
- **DAN 171** Improvisation I 2 credits

**Courses**

- **DAN 101** Contemporary Dance Technique I
- **DAN 102** Contemporary Dance Technique II 3 hours; 2 credits

The progressive stages in the development of a technical vocabulary and movement patterns into the art form and expression of modern dance. Each stage develops naturally from the preceding one, contributing to the total advancement of the dance. For beginning students. Prerequisite for DAN 102: DAN 101 or permission of the instructor.

- **DAN 111** Choreography I 3 hours; 3 credits

I: Elements of Composition; II: Dance Composition. The art of the dance as a creative expression that offers students the opportunity to explore the traditional and experimental approach to choreography through interaction of time, space, and energy. It commands a critical judgment of one’s own creative experience and expression. For beginning students. Prerequisite for DAN 112: DAN 111 or permission of the instructor.

- **DAN 122** Black Dance Workshop (Also AFA 122) 4 hours; 3 credits

Based on traditions of the peoples of Africa and the Caribbean, this course develops the technical language of Black dance, emphasizing the cultural interaction of native tradition and western influence; the retelling of legends and tales through dance rhythms and symbolism.

- **DAN 150** Dance History: Twentieth-Century (Also AMS 150) 4 hours; 3 credits

Concentrating on the "pioneers of modern dance"—Duncan, Denishawn, Graham, Humphrey, Weidman, and others—as well as on the experimental and avant-garde, using lectures, demonstrations, video, and film to illustrate examples of outstanding choreography. The course includes the dances of other countries, coordinated with professional concerts and student reports. Includes "Happenings in Today's World of Dance." No dance background required. (Arts & com.)

- **DAN 160** Modern Dance Technique I 2 hours; 1 credit

Technical movement skills used in dance to further the appreciation of dance as an art form and experiment with dance movement for the beginning student. Professional dance films will be shown. Open to all students.
DAN 171  Improvisation I
DAN 172  Improvisation II
3 hours; 2 credits
Experimenting with movement exploration to help develop sensitivity and creative response through free movement patterns. Simple props sometimes used in improvising.
Prerequisite for DAN 172: DAN 171 or permission of the instructor

DAN 180  International Folk Dance
2 hours; 1 credit
Group dancing for both style and pleasure geared to the national characteristics and traditional folk dances from the British Isles, Russia, Germany, Greece, Israel, and the Scandinavian countries.

DAN 184  Afro-Haitian Rhythms I
DAN 185  Afro-Haitian Rhythms II
3 hours; 2 credits
The history, theory, and practice of dance as performed in Haiti and other parts of the Caribbean. This course will introduce the student to the historical and anthropological sources of Afro-Haitian dance, as well as to its choreometrics.
Prerequisite for DAN 185: DAN 184

DAN 201  Contemporary Dance Techniques III
DAN 202  Contemporary Dance Techniques IV
3 hours; 2 credits
The progressive stages in the development of a technical vocabulary and movement patterns translated into the art form and expression of modern dance, each stage developing naturally from the preceding one, contributing to the total advancement of the dance. For intermediate students.
Prerequisite for DAN 201: DAN 102 or permission of the instructor; for DAN 202: DAN 201 or permission of the instructor

DAN 211  Choreography III
DAN 212  Choreography IV
3 hours; 3 credits
Elements of composition. The art of the dance as a creative expression that offers students the opportunity to explore the traditional and experimental approach to choreography through interaction of time, space, and energy. It commands a critical judgment of one's own creative experience and expression. For intermediate students only.
Prerequisite: DAN 112 or permission of the instructor

DAN 231  Fundamentals of Ballet I
DAN 232  Fundamentals of Ballet II
3 hours; 2 credits
Using the five fundamental positions of feet and legs, and the associated positions of the arms, a vocabulary of classical ballet is developed and combined into longer dance phrases. Emphasis is placed on fluidity of movement for mastery of expression.

DAN 261  Modern Jazz Dance I
DAN 262  Modern Jazz Dance II
3 hours; 2 credits
The course includes basic technique and style of dance used with rhythmic improvisation in contemporary American jazz dance.

DAN 331, 332, 333, 334
Private Study in Dance I, II, III, IV
2 credits each
Students interested in the development of style and technical skills necessary for performance may earn credit through study under an approved teacher in repertory class. Evaluation of the work will include performances in dance workshops and concerts. Registration is by permission of a full-time member of the dance faculty.
Prerequisite: Permission of instructor

DISABILITY STUDIES
(Minor)
Interdisciplinary Program
Coordinator: Professor David Goode, Department of Sociology, Anthropology, and Social Work; Psychology/Sociology; Anthropology; and Social Work Building (4S), Room 236
The minor in Disability Studies is an interdisciplinary course of study in which students select from a variety of courses concerned with matters of interest to persons with disabilities. The student is required to take a core set of courses in the social and psychological sciences supplemented by a choice from a list of disability-related courses. The minor may be taken in combination with any baccalaureate degree.

Requirements:

- SWK 107  Introduction to Developmental Disabilities 3 credits
- PSY 211  Methods of Applied Behavioral Analysis 4 credits
- SOC 350  Psychosocial Aspects of Disabilities 4 credits
- One additional course chosen from the following:
  - ASL 113  American Sign Language I 5 credits
  - EDP 220  Special Education Needs of the Developmentally Disabled 4 credits
  - EDP 310  Survey of Exceptional Children I 4 credits
  - EDP 311  Survey of Exceptional Children II 4 credits
  - NRS 230  Health in Persons with Developmental Disabilities 4 credits
  - SWK 440  Internship in Developmental Disabilities 4 credits

DRAMATIC ARTS
(Bachelor of Science, Minor)
Department of Performing and Creative Arts and Department of English, Speech, and World Literature
Coordinator: Assistant Professor Maurya Wickstrom, Department of Performing and Creative Arts, Center for the Arts (1P), Room 203F
The program in dramatic arts provides the opportunity to earn a Bachelor of Science degree in Dramatic Arts, with a focus on theatrical production and techniques including a study of dramatic literature. Students whose primary interest is in dramatic literature are referred to the program that leads to the Bachelor of Arts degree in English with a concentration in dramatic literature. (See section on English.)
Dramatic Arts (BS)

General Education Requirements

ENG 111, ENG 151, COR 100, PED 190: 12 credits

Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The Contemporary World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28-47 credits

Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)

2. Social Scientific Analysis: (7-8 credits)

3. The Contemporary World: (4 credits)

4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
      Arts and Communications: 200-level

5. Pluralism and Diversity Requirement: (0-4 credits)

6. Foreign language: (0-12 credits)

See section on general education requirements for approved course lists and complete details.

Major Requirements: 52 credits

DRA 110 Acting I 3 credits
DRA 131 Introduction to Technical Theater 3 credits
DRA 210 Acting II 3 credits
DRA 235 Introduction to Stage Management 3 credits
DRA 260 History of Theater I 4 credits
DRA 261 History of Theater II 4 credits
DRA 320 Directing I 3 credits
DRA 372 Theater Practicum 4 credits
DRA 597 Internship 3 credits

Four courses in dramatic literature at the 300 level or above 16 credits

Electives in DRA or cross-listed courses 6 credits

Note: DRA 100 no longer qualifies as a course applicable toward the major requirements. It is, however, recommended as an introduction to the major.

Electives: 9-28 credits

Total Credits Required: 120

Honors

To graduate with Honors in Dramatic Arts a student must have a 3.5 grade point average in dramatic arts courses and must complete a creative project in acting, directing, design, or in the writing of plays or criticism.

Minor Requirements: 14 credits

At least six credits in courses in dramatic arts chosen from DRA 210, 213, 214, 220, 230, 231, 232, 233, 310, 320, 370, 371, 410, 420.

At least eight credits in dramatic literature courses chosen from DRA 260, 261, 460, or DRA courses that are cross-listed with English (ENL), French (FRN), or Spanish (SPN) courses.

Courses

DRA 100 Introduction to Theater 4 hours; 3 credits

Introduction to theater as an art form that brings together performance, text, directing and design as well as aspects of the culture in which it is created. Students can expect to engage in theater exercises to learn about performance, to read plays, to do small design projects, and to see at least one professional theater production. There may be modest expense for tickets. (arts & com)

DRA 101 Exploring the New York Theater Scene 4 hours; 3 credits

Students will see at least five productions, on and off Broadway, and will examine them in order to gain an understanding of what comprises the theater experience so that critical standards may be developed. Students are expected to purchase tickets. See the Schedule of Classes for estimated cost of theater tickets.

DRA 110 Acting I 4 hours; 3 credits

A basic approach to acting for stage, film, and television.

DRA 131 Introduction to Technical Theater 4 hours; 3 credits

Survey of different kinds of theaters, their physical plants, and production techniques. Construction and handling of scenery, properties, and lighting equipment.

DRA 141 Theater Production 3 hours, 3 credits

Introduction to theory of stage design and technical theater through an exploration of types of theaters, different styles of scenery, costume and lighting design, textual analysis from a design point of view, sound effects and sound design, set construction drafting, white models, color wheel, sewing, and fabric swatches.

Corequisite: DRA 142

DRA 142 Theater Production Lab 2 hours, 1 credits

The practical application of design and technical skills to a specific production. Students will work on faculty or student productions, under the supervision of the instructor of Theater Production, and/or other production designers. May be repeated for credit.

Pre or Corequisite: Drama 141 and approval of either the instructor or the Performing and Creative Arts Department

DRA 202 African American Drama 4 hours; 4 credits

A study of the emergence of the Black theater in the United States and an examination of the theater as a manifestation of the Black genius.
DRA 205  African American Musical Theater
(Also AFA 205)
4 hours; 4 credits
A study of the musical theater of African Americans from its early beginnings in African culture to genius manifested in the 19th century, its influence on early vaudeville, its unique contribution to American musical theater, and the present day popularity of its style. Whenever possible, current productions will be attended and studied in detail.

DRA 210  Acting II
4 hours; 3 credits
Exercises and improvisations, with an emphasis on scene study. Prerequisite: DRA 110

DRA 213  Movement for the Theater
4 hours; 3 credits
Techniques to assist the actor in exploring the elements of movement and mime. This course may be repeated for credit. Prerequisite: ENG 111

DRA 214  Voice and Diction for the Theater
4 hours; 3 credits
The development and training of the actor's voice as a flexible instrument. Work on individual problems in diction in order to develop an effective self-expression on the stage. This course may be repeated for credit. Prerequisite: DRA 100 or 110 or permission of the instructor

DRA 215  Modes of Drama
(Also ENH 212)
4 hours; 4 credits
An introduction to the variety of forms and themes of dramatic literature. Major problems treated by dramatists will be examined, as well as genres: tragedy, comedy, farce, melodrama, tragicomedy, and the thesis play. (literature) (arts & com.) Prerequisite: ENG 111, ENG 151

DRA 216  Theater Studies
4 hours, 4 credits
An initial overview of the leading texts, performance styles, and visual aesthetics of theater. The class will include performance work, key dramatic texts and their cultural contexts and production histories, an introduction to dramaturgy, and a focus on learning to write about plays and performance. Students must receive a B or better in this class to proceed with a Drama major. Prerequisite: ENG 151

DRA 220  Play Production
4 hours; 3 credits
The role of the producer in the management of non-profit and commercial theaters. A consideration of theater space, budget, organization of the production staff, front of the house and backstage management.

DRA 230  Set Design for the Theater
4 hours; 3 credits
Principles, materials, and practices of set design, with an emphasis on its contribution to various theatrical styles and periods. Prerequisites: ENG 111 and DRA 100 or DRA 131 or permission of the instructor

DRA 232  Costume Design for the Theater
4 hours; 3 credits
Principles, materials, and practices of the design of costumes and theatrical properties, with an emphasis on their contributions to various theatrical styles and periods. Prerequisite: ENG 111

DRA 233  Introduction to Design for the Theater
4 hours; 3 credits
Theory and practice of designing stage settings, lighting, and costumes. Visits to the theater and to professional scene shops. Prerequisite: ENG 111

DRA 235  Introduction to Stage Management
4 hours; 3 credits
Principles and practices of contemporary stage management. Interprets the function of the stage manager in the entire production process. Identifies the relationship of the stage manager to the director, designers, technical director, actors, stage hands, and costume and properties managers. Specifies responsibilities and practices. Prerequisite: ENG 111

DRA 240  Theater for Young People
4 hours; 3 credits
Theory and methods of producing theater for young people. An examination of appropriate dramatic literature, as well as the problems of play production for and with children and adolescents. Creative drama as an educational process will be viewed in relationship to theater for young people as an aesthetic product. Students will develop dramatic material in class for presentation.

DRA 260  History of Theater I
4 hours; 4 credits
A critical history of the theater and theatrical style from prehistory through Shakespeare and his contemporaries. Aspects to be covered include the ritual origins of drama, the drama of ancient Greece and Rome, the Middle Ages, and the English and European theater of the 16th and 17th centuries. The primary emphasis will be the total theatrical context in which plays were written and produced (the social and cultural environment, the playhouse, the prevailing theatrical styles of the time). The secondary emphasis will be the reading of major dramatic texts that help to illustrate that development. (literature) (arts & com.) Prerequisite: ENG 111

DRA 261  History of Theater II
4 hours; 4 credits
A critical history of the theater and theatrical style from the re-opening of the English theater in 1660 through American drama of the 1960s. Aspects to be covered include the English Restoration and 18th century theater, European theater of the 18th and 19th centuries, the theater of Asia, and modern European and American theater. The primary emphasis will be on the total theatrical context in which plays were written and produced (the social and cultural environment, the playhouse, the prevailing theatrical styles of the time). The secondary emphasis will be the reading of major dramatic texts that help to illustrate that environment. (literature) (arts & com.) Prerequisite: ENG 111
DRA 270  Performance I
DRA 271  Performance II
4 hours; 3 credits
Performance of a play. Students will be involved in various aspects of theatrical presentation.
Prerequisite: Permission of the instructor

DRA 272  Performance Histories
4 hours, 4 credits
Survey of historical performance forms from Egyptian, Sanskrit, and Greek, through the European Medieval theater, Asian theater through 1600, the European Renaissance, and the Spanish Golden Age. Performance will be considered in this class as an integral and vital part of social, political, and cultural dynamics. This survey will put the Western theater tradition in perspective as only one of many traditions that exist, or have existed, across the world at different times.
Prerequisites: ENG 151 and DRA 216 (with a grade of B or better for Drama majors)

DRA 300  Topics on Productions
4 hours, 3 credits
A study of the interdisciplinary issues that intersect with the play currently being directed by a member of the theater faculty. Students may also study alternative or updated versions of the play, and experiment with related performance genres. Plays will be chosen specifically for the richness of their historical and cultural scope. The instructor for this course and the director of the play, if they are not the same person, will work together on materials for this course, and students who are not acting in the production will have the opportunity to attend rehearsals and engage in dialogue with the actors and director.
Prerequisites: ENG 151 and DRA 216 (with a B or better for Drama majors)

DRA 310  Acting III
4 hours; 3 credits
Work on scenes, encouraging the actor to explore a variety of characters and to perform them before an audience.
Prerequisite: DRA 210

DRA 314  Media Workshop for Actors/Directors
(Also COM 314)
An examination of the actor/director relationship as it applies in the various media: stage, film, and television. Students will have an opportunity to work both as actors and directors. New work from writing classes will be encouraged for student projects.
Prerequisite: COM 210

DRA 320  Directing I
4 hours; 3 credits
Basic principles of directing. The function of the director in the production relating to actors, designers, the producer, stage manager, and house manager. Students direct scenes and produce a final workshop performance.
Prerequisites: DRA 110, and DRA 131 or DRA 233, ENG 111

DRA 345  Spanish Theater
(Also SPN 345)
4 hours; 4 credits
Discussion of ideas, background, and staging traditions of representative Spanish-language plays from the Golden Age to the present. The course is taught in English. Readings and assignments in Spanish required for majors; readings and assignments may be done in English for non-majors.
Prerequisite: SPN 313 or equivalent for those doing readings and assignments in Spanish; ENG 151 or a 200-level English course for those doing readings and assignments in English

DRA 354  English Drama to 1800
(Also ENL 354)
4 hours; 4 credits
Selected works with emphasis on Elizabethan and Jacobean drama (exclusive of Shakespeare), and Restoration and 18th century drama.
Prerequisite: An ENH 200-level course

DRA 355  Modern European Drama
(Also ENL 355)
4 hours; 4 credits
A study of the major dramatists of the modern European theater, with an emphasis placed upon the development of dramatic styles and themes, as well as the theatrical context in which the plays were produced.
Prerequisite: An ENH 200-level course

DRA 356  American Drama
(Also ENL 356)
4 hours; 4 credits
Readings of plays by O’Neill, Williams, Miller, and others who have dramatized the conflicts and predicaments of 20th century Americans.
Prerequisite: An ENH 200-level course

DRA 357  World Drama to 1800
(Also ENL 357)
4 hours; 4 credits
Selected plays from the Greeks to 1800.
Prerequisite: An ENH 200-level course

DRA 358  World Drama since 1800
(Also ENL 358)
4 hours; 4 credits
Selected plays from 1800 to the present.
Prerequisite: An ENH 200-level course

DRA 359  Contemporary Drama
(Also ENL 359)
4 hours; 4 credits
Major figures, works, and movements in dramatic literature since World War II, with special emphasis on the last two decades.
Prerequisite: An ENH 200-level course

DRA 361  The Early Shakespeare
(Also ENL 361)
4 hours; 4 credits
A selection of Shakespeare’s work written before 1600: early and middle comedies, the major histories, the earlier tragedies, and the poems.
Prerequisite: An ENH 200-level course

DRA 362  The Later Shakespeare
(Also ENL 362)
4 hours; 4 credits
A selection of Shakespeare’s work written after 1600: the major tragedies, the problem plays, the late comedies and romances.
Prerequisite: An ENH 200-level course
DRA 370  Theater Workshop I
4 hours; 3 credits
Projects in acting and directing are developed by members of the workshop. An effort will be made to have a current playwright’s workshop contribute material for the course.
Prerequisite: DRA 110 or permission of the instructor

DRA 371  Theater Workshop II
4 hours; 3 credits
Projects in acting, directing, and playwriting, representing various theatrical styles, will be developed by members of the workshop.
Prerequisite: DRA 370 or permission of the instructor

DRA 372  Theater Practicum
4 hours; 4 credits
Participation in acting or production roles in a production sponsored by the program in Dramatic Arts. Students are to be evaluated by the faculty production coordinator. Students will keep a journal to be submitted at the conclusion of the production. This course may be repeated for credit.

DRA 410  Acting IV
4 hours; 3 credits
Work on more complex scenes leading to their performance before an audience.
Prerequisite: DRA 310

DRA 426  Classical French Drama
(Also FRN 426)
4 hours; 4 credits
Plays of Corneille, Racine, Molière, with special emphasis on the continuing role of Molière in the world's theater. (literature)
Prerequisite: FRN 313 or equivalent for those doing readings and assignments in French; ENG 151 for those doing readings and assignments in English

DRA 460  Dramatic and Theatrical Criticism
4 hours; 4 credits
A survey of theories of drama and theater and of the development of dramatic and theatrical criticism from their origins in such writers as Aristotle and Horace to the present.
Prerequisites: At least two 300-level courses in dramatic literature or English or permission of the instructor

DRA 465  Spanish Theater in the 20th Century
(Also SPN 465)
4 hours; 4 credits
Principal tendencies in Spanish theater in the 20th century. Including an analysis of the major works of dramatists such as Benavente, Valle-Inclán, García Lorca, Mihura, Bueno Vallejo, Alonso Sastre, Carlos Muniz, Lauro Olmo, Arrabal, Antonio Gala, and others. (literature)
Prerequisite: SPN 313 or equivalent

Dramatic Arts students should also consider:
ENL 272 Playwriting I, ENL 373 Playwriting II, and ENL 435 Playwright's Workshop.

ECONOMICS
(Bachelor of Arts, Bachelor of Science, Business Specialization, Finance Specialization, Minor)
Department of Political Science, Economics, and Philosophy
Chair: Associate Professor Vasilios Petratos, History/Political Science, Economics, and Philosophy Building (2N), Room 224
The Economics program serves several different student needs. It provides a major in economics for students interested in the study of the subject at the bachelor's degree level or in preparation for graduate study of economics. A business specialization and a finance specialization are available for interested students.

Economics (BA)
General Education Requirements for the BA
ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The Contemporary World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 28-47 credits
Whenever possible, these courses should be completed within the first 60 credits.

1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (7-8 credits)
3. The Contemporary World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (6-8 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
6. Foreign Language: (0-12 credits)
See section on general education requirements for approved course lists and complete details.

Pre-Major Requirement: 3 credits
ECO 101 Introduction to Economics 3 credits

Major Requirements: 28-32 credits
(28-32 credits include Computer Proficiency Requirement)
28 credits in economics courses at the 200, 300, or 400 level or above including:
ECO 210 Price Theory 4 credits
ECO 212 Income and Employment Theory 4 credits
ECO/ MGT 230 Introduction to Economic and Managerial Statistics 4 credits
ECO 323 Introduction to Econometrics or
ECO 326 Introduction to Mathematical Economics 4 credits
And at least two additional 300- or 400-level economics courses 8 credits
The remaining four economics credits may be at the 200, 300, or 400 level.
Computer Proficiency Requirement: 0-4 credits
In addition, Economics majors must demonstrate computer proficiency in one of the following ways:
1. Successful completion of any course in computer science.
3. Demonstration of proficiency with computers in a manner satisfactory to the economics faculty.
   (CSC 108, 112, 114, 116, 118, special focus, abbreviated courses, do not meet this requirement.)

Electives: 22-52 credits
Total Credits Required: 120

Economics (BS)

General Education Requirements for the BS

ENG 111, ENG 151, COR 100, PED 190: 12 credits
Whenever possible, these four courses should be completed within the first 36 credits.

Scientific Analysis; Social Scientific Analysis; The Contemporary World; Textual, Aesthetic, and Linguistic Analysis; Pluralism and Diversity requirements: 21-27 credits
Whenever possible, these courses should be completed within the first 60 credits.
1. Scientific Analysis: (11 credits)
   a. Science and Technology: (8 credits)
   b. Mathematics: (3 credits)
2. Social Scientific Analysis: (3-4 credits)
3. The Contemporary World: (4 credits)
4. Textual, Aesthetic, and Linguistic Analysis: (3-4 credits)
   a. Literature: 200-level
   b. Arts and Communications: 100-level
   c. Arts and Communications: 200-level
5. Pluralism and Diversity Requirement: (0-4 credits)
See section on general education requirements for approved course lists and complete details.

Pre-Major Requirements, 3 credits, and Major Requirements, 28-32 credits, including Computer Proficiency Requirement, are the same as those listed for the BA.

Specializations
Within the major in Economics, the College offers two specializations, business and finance, combining the major in Economics with the study of selected courses in business. The program is administered jointly by the Department of Political Science, Economics, and Philosophy and the Department of Business. The specialization adds courses useful to students who plan to pursue careers in business or finance and/or continue their education.

Business Specialization: 17 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ACC 114</td>
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<tr>
<td>ACC 121</td>
<td>4</td>
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<td>MGT 110</td>
<td>3</td>
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<tr>
<td>MKT 111</td>
<td>3</td>
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<tr>
<td>ECO/</td>
<td></td>
</tr>
<tr>
<td>FNC 240</td>
<td>3</td>
</tr>
</tbody>
</table>

Finance Specialization: 19 credits
The Finance Specialization has the following requirements within the 28-32 credits required for the major:
Four credits at the 200 level:
- ECO/ FNC 214 Money and Banking
Eight credits in 300-level economics courses chosen from the following:
- ECO/ FNC 315 Monetary Theory and Policy
- ECO 336 Industrial Organization
- ECO/ FNC 360 Investment Analysis
- ECO/ FNC 370 International Finance
- ECO 387 Managerial Economics

Specialization courses: 19 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECO/</td>
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<tr>
<td>FNC 240</td>
<td>3</td>
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<td>FNC 345</td>
<td>4</td>
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<td>ACC 121</td>
<td>4</td>
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<tr>
<td>FNC 350</td>
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</tbody>
</table>

ECO/FNC 213 Money and Capital Markets is a recommended elective.

Electives: 23-42 credits
Total Credits Required: 120

Honors
To graduate with Honors in Economics a student must have a 3.5 grade point average in economics courses and must complete a thesis or project determined by the student and his or her faculty sponsor, and the course POL/ECO/PHL 490 Senior Seminar in Political Science, Economics, and Philosophy.

Minor
Prerequisite Course:
- ECO 101 Introduction to Economics 3 credits

Minor Requirements:
- ECO 210 Price Theory 4 credits
- ECO 212 Income and Employment Theory 4 credits
- ECO 230 Introduction to Economic and Managerial Statistics 4 credits

One 300-or 400-level course in economics 4 credits

Courses

ECO 101 Introduction to Economics
3 hours; 3 credits
This course examines the principles of economics in the context of the operation of the United States economy. Both microeconomic theory (behavior of firms and households) and macroeconomic theory (total output, inflation, employment and unemployment, economic growth) will be introduced as will economic approaches to social problems. (social science)
Prerequisite: MTH 020 or an appropriate score on the CUNY Mathematics Assessment Test


ECO 210 Price Theory
4 hours; 4 credits
Examination of the workings of the price mechanism by which a free enterprise system solves the basic economic problems of production, distribution, and optimum methods of production. The roles of household and firm in determining prices under varying market structures. Development of a theoretical approach as the foundation for more advanced work in economics. Application of analytical tools to contemporary problems.
Prerequisites: ECO 101 and MTH 025 or MTH 030 or an appropriate score on the CUNY Mathematics Assessment Test, or permission of the instructor.

ECO 212 Income and Employment Theory
4 hours; 4 credits
Aggregate economic analysis from the classical and the modern post-Keynesian point of view. The major objective is an understanding of the factors that determine the levels of national income, output, employment, overall prices, and rates of economic growth. The roles of consumption, investment, and alternative governmental policies are demonstrated. Measurement of national income and output is also studied.
Prerequisites: ECO 210 and MTH 025 or MTH 030 or 030 or an appropriate score on the CUNY Mathematics Assessment Test, or permission of the instructor.

ECO 213 Money and Capital Markets
(Also FNC 213)
4 hours; 4 credits
The course examines financial markets from the standpoint of investors and users. Markets studied are those for money market instruments, T-bill futures, Ginnie Mae futures, T-bond futures, stocks, stock options, bonds, mortgages, and Eurocurrencies. Federal Reserve operations, U.S. Treasury operations, and international financing are considered with regard to their effects on financial markets.
Prerequisites: Successful completion of C/ACT Writing Skills Test and C/ACT Reading Sample Test or equivalent and ECO 101

ECO 214 Money and Banking
(Also FNC 214)
4 hours; 4 credits
An analytical, institutional, and historical examination of the monetary system of the United States with particular attention paid to the operation of commercial banks, and to the powers, purposes, and performance of the Federal Reserve System. The influence of the quantity of money on the level of economic activity will be considered.
Prerequisites: Successful completion of C/ACT Writing Skills Test and C/ACT Reading Sample Test or equivalent and ECO 101

ECO 210 Price Theory
4 hours; 4 credits
Examination of the workings of the price mechanism by which a free enterprise system solves the basic economic problems of production, distribution, and optimum methods of production. The roles of household and firm in determining prices under varying market structures. Development of a theoretical approach as the foundation for more advanced work in economics. Application of analytical tools to contemporary problems.
Prerequisites: ECO 101 and MTH 025 or MTH 030 or an appropriate score on the CUNY Mathematics Assessment Test, or permission of the instructor.

ECO 221 Money and Employment Theory
4 hours; 4 credits
Aggregate economic analysis from the classical and the modern post-Keynesian point of view. The major objective is an understanding of the factors that determine the levels of national income, output, employment, overall prices, and rates of economic growth. The roles of consumption, investment, and alternative governmental policies are demonstrated. Measurement of national income and output is also studied.
Prerequisites: ECO 210 and MTH 025 or MTH 030 or 030 or an appropriate score on the CUNY Mathematics Assessment Test, or permission of the instructor.

ECO 213 Money and Capital Markets
(Also FNC 213)
4 hours; 4 credits
The course examines financial markets from the standpoint of investors and users. Markets studied are those for money market instruments, T-bill futures, Ginnie Mae futures, T-bond futures, stocks, stock options, bonds, mortgages, and Eurocurrencies. Federal Reserve operations, U.S. Treasury operations, and international financing are considered with regard to their effects on financial markets.
Prerequisites: Successful completion of C/ACT Writing Skills Test and C/ACT Reading Sample Test or equivalent and ECO 101

ECO 214 Money and Banking
(Also FNC 214)
4 hours; 4 credits
An analytical, institutional, and historical examination of the monetary system of the United States with particular attention paid to the operation of commercial banks, and to the powers, purposes, and performance of the Federal Reserve System. The influence of the quantity of money on the level of economic activity will be considered.
Prerequisites: Successful completion of C/ACT Writing Skills Test and C/ACT Reading Sample Test or equivalent and ECO 101

ECO 220 Introduction to Economic and Managerial Statistics
(Also MGT 230)
4 hours; 4 credits
Development and application of modern statistical methods, including such elements of descriptive statistics and statistical inference as correlation and regression analysis, probability theory, sampling procedures, normal distribution and binomial distribution, estimation, and testing of hypotheses.
Prerequisites: Successful completion of CUNY/ACT Writing Sample Test and CUNY/ACT Reading Sample Test, and ECO 101, and MTH 121 or 123, and BUS 150 or BUS 250 or CSC 102 or CSC 126

ECO 231 Quantitative Analysis of Business and Economic Problems
(Also BUS 250)
3 hours; 3 credits
The application of mathematical techniques to business and economic problems. An introduction to operations research, linear programming, PERT, and related materials.
Prerequisites: MGT 110 and 230

ECO 240 Managerial Finance I
(Also FNC 240)
3 hours; 3 credits
Examination of securities markets, analysis of methods of long-term financing, financial ratio analysis, budgeting, current asset management, present value concepts, capital budgeting, cost of capital, and dividend policy.
Prerequisite: MTH 030 or MTH 121 or MTH 123 or equivalent, and ACC 114, and ECO 101

ECO 250 International Economics
4 hours; 4 credits
A study of the effects and causes of trade between nations. Tariffs and non-tariff barriers to free trade will be analyzed, as will the effect of common markets on international trade. Historical patterns of international trade, and the theory and evidences of imperialism will be considered. The course will include an introduction to the financial aspects of international trade.
Prerequisites: ECO 101, ENG 151, COR 100

ECO 251 International Political Economy
(Also POL 251)
4 hours; 4 credits
This course examines the relationships among nation-states, corporations, and key international trade and financial organizations in today's global environment. It also examines how globalization and world politics affect distribution of economic wealth and, in turn, how economic growth/changes affect world politics and the global order. (cont. wld.)
Prerequisites: At least one political science or economics course, ENG 151, COR 100

ECO 252 Economic Geography
(Also GEG 252)
4 hours; 4 credits
Examination of how geographic factors influencing economic activity, and culture, technology, resources, location, and labor intersect to produce different economic environments, and how globalization and local conditions interact. (cont. wld.)
Prerequisites: ENG 151, COR 100

ECO 253 United States Economic History
(Also HST 253)
4 hours; 4 credits
The growth of the American economy; analysis of the components of growth: capital, labor, and government.
Prerequisites: ECO 101, any college-level history course, and ENG 111
ECO 285  Economics for Engineers
4 hours; 4 credits
An accelerated calculus-based course. Introduction to contemporary macroeconomic and microeconomic theory. Topics include output, unemployment, inflation, functioning of markets, government policy, and productivity. The course concludes with engineering applications. (social science)
Prerequisites: ENG 111, COR 100, MTH 230 or MTH 231 or MTH 235, CSC 126 or CSC 270 or other evidence of equivalent proficiency with computers

ECO 260  Labor Economics
4 hours; 4 credits
A critical examination of theories of wage determination; factors responsible for wage differentials; the effect of unionism upon wages; empirical trends in wage differentials and average wage levels; wage push inflation, unemployment, minimum wage laws, and automation; human capital, educational expenditures, and manpower analysis.
Prerequisites: ECO 101 and ENG 111

ECO 276  The Nonprofit Institution
4 hours; 4 credits
The finances, management, and decision making of such nonprofit institutions as the university, school systems, governmental departments, hospitals, and foundations. The effects of the nonprofit institution upon society. Evaluation of the achievements of nonprofit institutions.
Prerequisite: ECO 101

ECO 291  Political Economy of War and Peace
(Also POL 268)
4 hours; 4 credits
An interdisciplinary introduction to political and economic decision making as it concerns national defense spending, focusing on such issues as the "military-industrial complex;" the draft, a volunteer army, the question of national priorities, the impact of war and peace on such economic problems as inflation, recession, employment, growth, and the federal budget.
Prerequisite: ENG 111

ECO 292  Urban Economics
4 hours; 4 credits
Economic factors in the emergence of urban centers and historical changes in their economic functions. Determinants of the size and location of cities and the occupational characteristics of the urban labor force. Analysis of the proper economic scope of local government and the financing of its expenditures. Allocating and pricing public services. Aspects of urban renewal and study of the urban ghetto.
Prerequisites: ENG 111, ECO 101 or permission of the instructor

ECO 296  History of American Business
4 hours; 4 credits
The history of business in American life; theories of business evolution; the role of business in shaping American social institutions and values; the effect of the American social, political, and economic environment upon business thought and practice.
Prerequisite: ENG 111

ECO 315  Monetary Theory and Policy
(Also FNC 315)
4 hours; 4 credits
Theoretical and applied problems of monetary policy. Emphasis is placed on contemporary developments. Current controversies concerning the use of monetary policy, relationship to fiscal policy, and impact on economic activity.
Prerequisites: ECO 212 and either ECO/FNC 213 or ECO/FNC 214

ECO 318  Economic and Business Forecasting
4 hours; 4 credits
Forecasting the nation's economy and economic trends over the short term and the longer term. Also forecasts of business trends and sales of individual businesses will be considered within the economic framework.
Prerequisites: ECO 210, ECO 212, ECO/MGT 230

ECO 323  Introduction to Econometrics
(Also MGT 324)
4 hours; 4 credits
This course will examine the relationship between economic theory and statistical measurement. It will deal mainly with the general linear regression and correlation model. A selected number of other statistical tools will also be treated. Emphasis will be on the understanding of the concepts rather than on their mathematical derivation.
Prerequisites: ECO 101 and ECO/MGT 230 or permission of the instructor

ECO 326  Introduction to Mathematical Economics
4 hours; 4 credits
The use of mathematical analysis in solving economic problems. Methods of calculus, matrix algebra, deductive logic, and elementary set theory will be developed and employed to understand the equilibrium of the market, firm, and consumer. The uses and misuses of the mathematical method in economics will also be discussed.
Prerequisites: ECO 101, MTH 121 or MTH 123 or the equivalent, or permission of the instructor
ECO 327 Intermediate Mathematical Economics
4 hours; 4 credits
A continuation of ECO 326. Differential and difference equations, elementary dynamic models and stability of equilibrium, rigorous development of modern microeconomic and macroeconomic theory using the mathematical approach.
Prerequisite: ECO 326 or permission of the instructor

ECO 330 Public Finance
4 hours; 4 credits
Analysis of causes and effects of government expenditure and taxation in the United States economy. Some treatment of determination of optimal types and amounts of government expenditure on goods and services, but greater emphasis on various types of taxation examined for equity, efficiency, role in fiscal policy, and effect on productive effort. Some attention to standards of income distribution and to inter-governmental fiscal relationships in the United States.
Prerequisite: ECO 210

ECO 331 Law and Economics
(Also POL 331)
4 hours; 4 credits
Fundamental concepts of economics, especially efficiency, will be utilized to explain and evaluate legal rulings. The tools of economics will be employed to analyze not only tort, contract, and property principles, but also marriage and divorce law, criminal law, and constitutional issues such as abortion, the death penalty, and racial and gender-based discrimination.
Prerequisites: ECO 101; BUS 160 or any two POL courses

ECO 332 Economics and Philosophy
(Also PHIL 333)
4 hours; 4 credits
This course will cover topics that overlap in the fields of economics and philosophy. It will enlighten economics majors about the philosophical underpinnings of economics and introduce philosophy majors to the more "thoughtful" aspects of economics. Topics discussed will include: rational choice and ethics; social welfare; justice, efficiency, and equity; social choice; and game theory.
Prerequisites: ENG 111 and any introductory-level economics or philosophy course

ECO 333 Industrial Organization
4 hours; 4 credits
The rise and development of industrial combinations and their effect on the structure and performance of the United States economy; models of monopoly and oligopoly pricing; analysis of the power of monopoly and oligopoly in relation to efficient allocation of resources, technological growth, inflation, and political influence; causes and effects of mergers; government policies aimed at the preservation of competition in industrial markets, and regulation of trade practices.
Prerequisite: ECO 210

ECO 334 Managerial Finance II
(Also FNC 345)
4 hours; 4 credits
Working capital management, current asset management, sources of short-term financing, financial structure and use of leverage, valuation and rates of return, dividend policy and internal financing, mergers and acquisitions, and liquidation; includes computer lab for solving financial management problems.
Prerequisites: ECO/FNC 240 and MGT/ECO 230

ECO 335 Comparative Economic Systems
4 hours; 4 credits
An analysis of economic systems through formulation of abstract economic models and an analysis of actual economic societies, including comparison of capitalism and socialism.
Prerequisites: ECO 101 and at least two other courses in the social sciences

ECO 336 Investment Analysis
(Also FNC 360)
4 hours; 4 credits
Survey of the principles governing the investment of individual and institutional capital funds: the theory and mechanics of investments, general analysis and valuation procedures including quantitative and qualitative tests for judging security values, valuation to fixed income securities and common stocks. Introduction to the analysis of industrial, public utility, and governmental securities. Management of an individual investor's portfolio.
Prerequisite: ECO/FNC 345

ECO 337 Managerial Finance II
(Also FNC 370)
4 hours; 4 credits
The financial interrelationships between countries. Analysis of balance of payments, fixed and flexible exchange rates, the role of international reserves. Historical trends in payments and exchange; implications of the rise of the multinational corporation; current international policy problems facing the United States, other developed and underdeveloped nations, and current institutional changes designed to meet them.
Prerequisite: FNC/ECO 240

ECO 338 Government and Business
4 hours; 4 credits
The relationship between government and business in the United States will be investigated under three general headings: antitrust policy, regulation, and the promotion of specific business interests. Theoretical issues, historical developments, political and economic interrelationships, legislation and its judicial and quasi-judicial interpretation relevant to each area will be explored.
Prerequisite: ECO 210

ECO 339 Managerial Economics
4 hours; 4 credits
Applications of economic theory and operations analysis in the formulation of business policies and decisions. Marginal and incremental analysis of business opportunities, demand analysis and forecasting, production and price setting, capital budgeting and investment analysis, and regulation of business. Introduction to the techniques and applications of econometrics and linear programming. Not open to students who have successfully completed ECO 387.
Prerequisite: MTH 121 or MTH 125 or equivalent

ECO 340 Engineering Economics
4 hours; 4 credits
Applications of economic theory and operations analysis in the formulation of business policies and decisions. Marginal and incremental analysis of business opportunities, demand analysis and forecasting, production and price setting, capital budgeting and investment analysis, and regulation of business. Introduction to the techniques and applications of econometrics and linear programming. Not open to students who have successfully completed ECO 385.
Prerequisites: MTH 121 or MTH 123 or equivalent and ECO 210
ECO 388  Economics of Natural Resources and the Environment
4 hours; 4 credits
An economic approach to the problems of depleting natural resources and environmental pollution. Intertemporal allocation of resources, recycling, renewable resources, energy, pollution, acid rain, global warming, ozone depletion. The role of markets and the role of government.
Prerequisite: ECO 210

ECO 389  Economics and Technology
4 hours; 4 credits
The economics of research and development in the single firm and the economy as a whole. Implications for society will be explored. Topics will include: determinants of research and development expenditures by the firm, selection and management of research and development projects, technological forecasting, the role of government and nonprofit organizations in research and development, the economics of the patent system, antitrust legislation, and technological innovation.
Prerequisite: ECO 101

ECO 390  History of Economic Thought
4 hours; 4 credits
The development of economic thought from antiquity to modern times. Emphasis on the contrast and similarities between such divergent schools of thought as mercantilism, the physiocratic school, the classical school, the socialist school, the historical school, and the neoclassical school. Prominent thinkers such as Aristotle, Aquinas, Mun, Hume, Quesnay, Adam Smith, Ricardo, Malthus, Mill, Cournot, von Thunen, Marx, Menger, Jevons, Walras, Marshall, Keynes, Samuelson, Schumpeter, and von Hayek will be discussed, as will the periodic resurgence of various themes and the links between economic thought and economic history.
Prerequisites: ECO 210 and ECO 212, or permission of the instructor

ECO 395  Foundations of Modern Capitalism
4 hours; 4 credits
An examination of the historical and intellectual origins of capitalist society, the role of capitalism in the growth and development of modern industrial society, an evaluation of the future of capitalism.
Prerequisites: ECO 101 and at least two other courses in the social sciences

ECO 410  Seminar in Economic Analysis
4 hours; 4 credits
Selected topics in economic theory including production theory, capital theory, welfare economics, growth theory, and investment in human capital. Students prepare detailed presentations and analyses of classic works for discussion and evaluation.
Prerequisites: ECO 210 and 212, or permission of the instructor

ECO 490  Senior Seminar in Political Science, Economics, and Philosophy
(Also POL 490 and PHL 490)
4 hours; 4 credits
Selected topics in which ideas and approaches from economics, political science, and philosophy either mesh or collide will be explored. Required of all students expecting to graduate with Honors in Political Science, Economics, or Philosophy, but not limited to these students.
Prerequisites: Senior standing and completion of at least 16 credits in intermediate and advanced social science courses and permission of the instructor

EDUCATION
Department of Education
Chair Associate Professor Susan Sullivan, Education Building (3S), Room 208.
(See the Graduate Catalog for information on master’s degree programs.)
The College of Staten Island offers a full selection of programs to prepare students for certification as teachers at all levels. Students at the College do not major in Education; they major in academic subjects and complete a sequence of courses in teacher education that provides the academic work necessary for a recommendation for initial certification by the State of New York. Students seeking initial certification from the State Education Department of New York must pass the appropriate teacher certification examinations.
In 2001-2002, 98% of the College of Staten Island students taking the Liberal Arts and Sciences Test (LAST) of the New York State Teacher Certification Examination received a passing score. On the Assessment of Teaching Skills-Written Test (ATS-WT), 98% passed.
Education courses are identified and the descriptions arranged alphabetically according to the following designations:
EDA - Supervision and Administration
EDC - Early Childhood
EDD - General Education
EDE - Elementary Education (Childhood Education)
EDP - Special Education
EDS - Secondary Education (Adolescence Education)
(Graduate courses are described in the Graduate Catalog.)

Fieldwork
A fieldwork component is required of every undergraduate education course. Fieldwork hours are determined based upon the needs of each course.

Academic Major
Students in the Early Childhood Education program and in the Childhood Education program must complete the requirements for the major in Science, Letters, and Society (SLS) leading to the BA degree. Completion of all degree requirements for the Science, Letters, and Society major with the Early Childhood Education sequence may require at least 121 credits.

Criteria for Entry into the Education Sequences
Students must have a GPA of 2.75 or above to enroll in introductory (foundations) education courses (EDC 215, EDC 216, EDE 200, EDE 260, EDS 201, EDS 202). Students whose GPAs are below 2.75 but above 2.6 may appeal for special permission to enroll in a foundations course. All students apply for admission to an educational sequence while enrolled in one of the foundations courses listed above. Students who are denied admission to an educational sequence may appeal the decision. Instructions for all appeal processes, including deadlines, are available in the department office, Room 208 of the Education Building (3S).

Criteria for Continuing in the Educational Sequences
Students must develop and maintain a program portfolio as outlined in the program handbook. Students must earn a C+ or above in each education class. Students must maintain a 2.75 GPA throughout the program. Students whose portfolio, course grades, and/or GPA do not meet program standards may appeal for special permission to continue in the program. Instructions for the appeal process, including deadlines, are available in the department office, Room 208 of the Education Building (3S).
Language Requirement
Beginning September 1993, all applicants for initial teacher education certification in early childhood, childhood, and adolescence education must demonstrate proficiency in a language other than English in one of two ways: by passing a CSI modern language course at the 114 level or by passing the Department of Modern Languages proficiency examination at that same level. For information on the department proficiency examination, please contact the coordinator of the Modern Languages Media Center.

Liberal Arts and Sciences Requirement
Because most required education courses are non-liberal arts and sciences, students in education usually do not have room for non-liberal arts and sciences courses beyond those required for the education sequence. Students who take other non-liberal arts and sciences courses may find that they need to take more than 120 credits to complete their degree. Education courses that fulfill the Liberal Arts and Sciences requirement are marked (L&S).

Teacher certification is governed by the New York State Board of Regents and the New York State Education Departments. These requirements are subject to change. Students are advised to contact the Department of Education for the latest degree requirements.

Early Childhood Education
This program is designed for students wishing to specialize in the education of children from birth to second grade. It provides the academic course content necessary for New York State certification at the early childhood level.

Academic Major: 34-36 credits

Education Sequence: 30 credits

Students wishing to be recommended by the College for initial certification must successfully complete the following sequence of education courses, as well as the Science, Letters, and Society major. Students are encouraged to begin the early childhood sequence in the sophomore year. To complete the sequence in two years, it must be started by the beginning of the junior year. Students must have a minimum cumulative average of 2.75 to be admitted to all early childhood courses.

<table>
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<tr>
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<td>EDC 215</td>
<td>Psychological Foundations of Early Childhood Education</td>
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<tr>
<td>EDC 216</td>
<td>Social Foundations of Early Childhood Education</td>
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</tr>
<tr>
<td>EDC 217</td>
<td>Affective Development of the Child</td>
<td>3</td>
</tr>
<tr>
<td>EDC 218</td>
<td>Language Development in Young Children and the Educative Process</td>
<td>3</td>
</tr>
<tr>
<td>EDC 310</td>
<td>The Teaching of Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>EDC 332</td>
<td>Music in Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>EDC 340</td>
<td>Workshop in Mathematics and Science for Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>EDC 350</td>
<td>Fieldwork in Preschool Classrooms</td>
<td>2</td>
</tr>
<tr>
<td>EDC 360</td>
<td>Workshop in Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>EDC 440</td>
<td>Student Teaching in Kindergarten and Early Primary Classrooms</td>
<td>4</td>
</tr>
</tbody>
</table>

Childhood Education
This program provides the academic course content necessary for New York State certification as a childhood teacher at the first- through sixth-grade level (1-6).

Academic Major: 34-36 credits

Education Sequence: 32 credits

Students wishing to be recommended by the College for certification must successfully complete the following sequence of childhood education courses, as well as the Science, Letters, and Society major. The sequence in childhood education may be begun in the sophomore year. To complete the sequence in two years, it must be begun by the beginning of the junior year. Students must have a minimum cumulative average of 2.75 to be admitted to all childhood education courses.

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<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tr>
<td>EDE 200</td>
<td>Social Foundations of Education</td>
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<tr>
<td>EDE 260</td>
<td>Psychological Foundations of Education</td>
<td>4</td>
</tr>
<tr>
<td>EDE 301</td>
<td>Literacy Development and Language Acquisition in Elementary Education</td>
<td>4</td>
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<tr>
<td>EDE 302</td>
<td>Social Studies, Art, Reading, and Language Arts in Elementary Education</td>
<td>6</td>
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<tr>
<td>EDE 303</td>
<td>Mathematics, Science, and Music in Elementary Education</td>
<td>6</td>
</tr>
<tr>
<td>EDE 400</td>
<td>Student Teaching in Elementary Education</td>
<td>6</td>
</tr>
<tr>
<td>EDE 402</td>
<td>Reflection and Analysis in Student Teaching in Elementary Education</td>
<td>2</td>
</tr>
</tbody>
</table>

Adolescence Education
This program provides the academic course content necessary for certification as a teacher at the adolescence level in the fields of English, foreign languages, mathematics, science, and social studies.

Academic Major

Students must complete the requirements of a major in the field in which they plan to teach. These include English, Spanish, mathematics, biology, chemistry, and social studies disciplines.

Students planning to teach social studies major in History, and they complete at least 50 credits in the social sciences, including at least four credits in geography, at least four credits in U.S. history, and at least four credits in non-U.S. history.

Students planning to teach mathematics must include, within the set of advanced courses required by the mathematics major, one or more upper-level mathematics courses covering (1) Euclidean and non-Euclidean geometry and (2) history of mathematics. This requirement may be met by taking MTH 329 Geometry, and MTH 306 History of Mathematical Thought.

Adolescence Education Sequence: 24 credits

Students wishing to be recommended by the College for certification must successfully complete the following sequence of education courses, as well as their academic major. The sequence may be begun in the sophomore year. To complete the sequence in two years it must be begun by the beginning of the junior year. Students must have a minimum cumulative average of 2.75 to be admitted to all adolescence education courses.

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>EDS 201</td>
<td>Social Foundations of Secondary Education</td>
<td>4</td>
</tr>
<tr>
<td>EDS 202</td>
<td>Psychological Foundations of Secondary Education</td>
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One of the following four-credit courses:
- EDS 301 The Teaching of Secondary School Curriculum in Social Studies
- or
- EDS 302 The Teaching of Secondary School Curriculum in English
- or
- EDS 303 The Teaching of Secondary School Curriculum in Mathematics
- or
- EDS 304 The Teaching of Secondary School Curriculum in Science
- or
- EDS 305 The Teaching of Secondary School Curriculum in Foreign Language
- and
- EDS 307 Discovery Learning and Interdisciplinary Instruction 4 credits
- EDS 400 Student Teaching in Secondary Education 6 credits
- EDS 401 Reflection and Analysis in Student Teaching in Secondary Education 2 credits

Special Education
The College of Staten Island does not offer an undergraduate program in special education. Students seeking certification in special education are advised to pursue the undergraduate sequence in childhood education and the master's program in special education.

Courses
For graduate courses in education see the Graduate Catalog.
Note: Student teaching courses are graded P or F.

EDC - Early Childhood

EDC 215 Psychological Foundations of Early Childhood Education
3 hours; 3 credits
An examination of the developing child, focusing on the period from birth through age eight, with an introduction to children with special needs. Major developmental theories are critically examined and are illuminated through students' field experiences with children in diverse and inclusive settings. Recent research on child abuse and abduction is examined within the context of the teacher's responsibilities. This course includes ten hours of fieldwork prior to student teaching. (L&S)
Prerequisites: ENG 111 and ENG 151, and a GPA of 2.75

EDC 216 Social Foundations of Early Childhood Education
3 hours; 3 credits
A required multidisciplinary course for prospective early childhood teachers. Perspectives from such academic disciplines as philosophy, history, sociology, anthropology, political science, and economics are brought to bear on early childhood education in its relationships with contemporary society and with later education. The major purpose of this course is to bring the student to an initial understanding of how values, attitudes, and structures in society as a whole influence the education of young children. (L&S)
Prerequisites: ENG 111 and ENG 151, and a GPA of 2.75

EDC 217 Affective Development of the Child
3 hours; 3 credits
An examination of the relationship between the infant and the primary caretaker, and its importance in personality development. Influences on the primary relation, broadening of affectional ties; comparison of child rearing across and within cultures. Students learn to use a variety of observational approaches and recording techniques to increase their understanding of children who are developing normally and children with disturbances in development. School and community partnerships are explored for their emotional impact on children. Diverse infant and toddler programs are studied through 20 hours of fieldwork.
Prerequisites: EDC 215, EDC 216, and a GPA of 2.75 or above

EDC 218 Language Development in Young Children and the Educative Process
3 hours; 3 credits
Theory and research in language development and the processes of language acquisition to inform program planning and development in inclusive educational settings. Students learn how to create, manage, and develop preschool curriculum areas such as dramatic play, block building, expressive arts, puzzles and manipulatives, nature study, and outdoor play to facilitate language acquisition and development. The course provides students with a range of alternative teaching strategies to meet the needs of linguistically diverse children.
Prerequisites: EDC 215 and EDC 216, or EDE 200 and EDE 260, and a GPA of 2.75 or above
Corequisite: EDC 350

EDC 310 The Teaching of Reading and Writing
3 hours; 3 credits
An examination of the teaching of reading and writing within a developmental framework and introduction to programs, practices, and materials of reading/writing instruction in diverse and inclusive settings. The course provides students with a range of alternative teaching strategies for children with reading and writing delays. The course also examines software in reading and writing for its usefulness in assessment and instruction.
Prerequisites: EDC 215 or EDE 200; EDC 216 or EDE 260; EDC 218; EDC 350; and a GPA of 2.75 or above

EDC 332 Music in Early Childhood
3 hours; 3 credits
Learn to develop basic musical understanding and skills and music appreciation in young children through participation in singing, ear training, rhythmic movement, and playing musical instruments. Students learn to select materials and develop activities that are developmentally appropriate for the needs of young children with an emphasis on creativity and helping students to develop a culturally diverse musical repertoire. A variety of media and computer technologies are explored to determine how they can enhance musical experience. This course includes five hours of fieldwork.
Prerequisite: EDC 215 or EDE 200; EDC 216 or EDE 260, EDC 218; EDC 350; and a GPA of 2.75 or above

EDC 340 Workshop in Mathematics and Science for Early Childhood
3 hours; 3 credits
Techniques in building the child's knowledge of properties of objects in the environment, concepts of class inclusion, seriation, and numbering, and the structuring of space and time. Students learn a range of strategies used by children with special needs. Informal and formal assessment tools are presented as well as classroom management strategies for whole class and small group
EDC 218 Corequisite EDC 218
Prerequisites: EDC 215, EDC 216

The objective of this course is to enable students to apply principles of reading instruction to the actual field situation for individual children. Conferences and field supervision.
Prerequisites: EDC 215, EDC 216, EDC 310, and a GPA of 2.75 or above

EDC 219 Reading in Primary and Upper Elementary Classroom II
3 hours; 3 credits

The objective of this course is to enable students to apply principles of reading instruction to the actual field situation for individual children. Conferences and field supervision.
Prerequisites: EDC 215, EDC 216, EDC 310, and a GPA of 2.75 or above

EDC 350 Fieldwork in Preschool Classrooms
2 credits
This field-based course introduces students to preschool classrooms in diverse and inclusive settings. This course connects practice with prior education coursework and is especially related to the content of EDC 218 Language Development through an Integrated Curriculum. In addition, students are given opportunities both to observe and to practice long- and short-term curriculum planning that reflects specific provision for children with special needs and linguistically diverse children. Students also practice a variety of observational approaches and recording techniques in order to assess the development of individual children. Students are observed interacting with small and larger groupings of children. Alcohol, tobacco, and drug abuse, and other dangers to children are discussed within the context of pre-natal and infant development with specific attention paid to the teachers’ role and responsibilities. Students will be in attendance at the assigned school three mornings a week for a full semester, which accounts for 150 hours of fieldwork prior to student teaching. Grade Pass (P) or Fail (F).
Prerequisites: EDC 215, EDC 216
Corequisite EDC 218

EDC 360 Workshop in Social Studies
3 hours; 3 credits
An investigation of how multicultural imaginative historical narratives can be used as an ongoing structure within early primary grades to foster students’ intellectual development in diverse and inclusive educational settings. To create these instructional materials, students will use the Internet and other media for educational applications. Formal and informal assessment tools as well as classroom management strategies for whole class and small group interaction are presented. Particular attention is paid to fostering community relations. The course will offer students opportunities to develop the skills of history storytelling and facilitating discussions that provoke children’s imaginative and problem solving responses. Opportunities will also be given to develop history storytelling units that offer young children multiple media to represent thought. Workshops in creative dramatics and the plastic arts are explored to promote young children’s expressiveness and creativity. This course includes five hours of fieldwork.
Prerequisites: EDC 215 or EDE 200; EDC 216 or EDE 260; EDC 218; EDC 350; and a GPA of 2.75 or above

EDC 440 Student Teaching in Kindergarten and Early Primary Classrooms
4 credits
Practice and problem solving in kindergarten and early primary classrooms. Designed for public schools. Students will be in attendance at the assigned school 25 hours a week for a complete semester for a minimum of 350 hours (175 hours in a kindergarten classroom and 175 hours in an early primary grade classroom). Students will be observed provisioning and interacting with small and larger groupings of children. 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: EDC 310, EDC 240, and EDC 340; SLS 218 and SLS 261. In addition, students must meet each of the following criteria:
1. An overall grade point average of 2.75.
2. A grade point average of 2.75 in all education courses.
3. A minimal grade of C in all education courses.

EDC 441 Student Teaching in Preschool and Kindergarten Classrooms
6 credits
Practice and problem solving in preschool and kindergarten classrooms. Designed for preschool and daycare. Students will be in attendance at the assigned school three days a week for a full semester. 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: EDC 320, EDC 330, and EDC 440; SLS 218 and SLS 261. In addition, students must meet each of the following criteria:
1. An overall grade point average of 2.75.
2. A grade point average of 2.75 in all education courses.
3. A minimal grade of C in all education courses.

EDD - General Education

EDD 252 History of Education in the United States
(Also HST 252)
4 hours; 4 credits
The history and social foundation of American education. Topics include: the historical development of American public schools, the schools and race, the social function of compulsory schooling, the expansion of higher education in the post-World War II period, and the conceptual differentiation between schooling as socialization and education for personal growth. (social science) (pqsd)
Prerequisites: ENG 111, COR 100, or college-level history course

EDE - Elementary Education

EDE 200 Social Foundations of Education
4 hours; 4 credits
The social, political, and economic forces that influence the work of educators and the lives of children and their families and a historic overview of the philosophies and goals of elementary education. Students analyze the legal and judicial landmarks, social policies, and technological advances that affect the schools and address the needs of our diverse population. Students spend ten (10) hours in varied education environments examining the relationship between theory and practice. (LA&S)
Prerequisites: Sophomore standing or six credits in the social sciences and/or philosophy, ENG 111, ENG 151, and a GPA of 2.75
EDE 260  Psychological Foundations of Education
4 hours; 4 credits
An examination of the developing child from preschool through early adolescence. Major theories of development and the interaction between cognitive, social, emotional, and physical development are emphasized. Children with different abilities and with special needs are discussed, as are cultural, gender, and socioeconomic factors. Ten (10) hours of fieldwork in varied educational settings will increase students' awareness of individual differences and their implications for classroom learning. (LA&S)
Prerequisites: Sophomore standing including three credits in psychology, ENG 111, ENG 151, and a GPA of 2.75

EDE 301  Literacy Development and Language Acquisition in Elementary Education
4 hours; 4 credits
An examination of major theories in literacy and language acquisition from early to later childhood and of various strategies for creating literature-based reading/writing programs to encourage literacy at all levels and to provide for differences in motivation, learning needs, cultural heritage, and background experience. Students evaluate published materials and technological aids designed to facilitate literacy and language acquisition. The course provides students with a variety of methods to assist children with diverse language, reading, and writing competencies. Ten (10) hours of field experience provide an opportunity to observe in varied and inclusive settings to evaluate diagnostic assessment techniques and interventions. Cannot be taken concurrently with EDE 302.
Pre- or corequisites: Junior standing and either EDE 200 and EDE 260, or EDC 215 and EDC 216, or EDS 200, and a GPA of 2.75 or above.

EDE 302  Social Studies, Art, and Reading and Language Arts in Elementary Education
3 lecture hours, 6 field hours; 6 credits
An examination of the structures and concepts of social studies, art, and reading and language arts for the elementary school. Appropriate connections among the disciplines are noted, relevant research on child development and learning is incorporated, and strategies to provide for students’ special needs are explored. Issues addressed include curriculum development, resources and materials, management, standards, assessment, and the educational application of technology. A fieldwork component of thirty-six (36) hours provides opportunities to plan instruction, enhance communication skills in the disciplines, and connect theory to practice. Cannot be taken with EDE 303.
Prerequisite: EDE 301 and a GPA of 2.75 or above

EDE 303  Mathematics, Science, and Music in Elementary Education
3 lecture hours, 6 field hours; 6 credits
An examination of the structures and concepts of mathematics, science, and music for the elementary school. Appropriate connections among the disciplines are noted, relevant research on child development and learning is incorporated, and strategies to provide for differing student needs are explored. Issues addressed include curriculum development, resources and materials, management, standards, assessment, and the educational application of technology. A fieldwork component of thirty-six (36) hours provides opportunities to plan instruction, enhance communication skills in the disciplines, and connect theory to practice. Cannot be taken with EDE 302.
Pre- or corequisites: MTH 217/SLS 217, EDE 200, EDE 260, junior standing, and a GPA of 2.75 or above

EDE 400  Student Teaching in Elementary Education
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. 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. To be taken concurrently with EDE 402. Graded Pass (P) or Fail (F).
Prerequisites: EDE 302 and EDE 303, SLS 218 and SLS 261. In addition, students must meet each of the following criteria:
1. An overall grade point average of 2.75.
2. A grade point average of 2.75 in all education courses.
3. A minimal grade of C in all education courses.

EDE 402  Reflection and Analysis in Student Teaching in Elementary Education
2 hours; 2 credits
Student teachers reflect upon the educational philosophies they have studied and the methodologies they are implementing as they develop their own philosophical 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. Hazards to children, including child abuse and substance abuse, will be discussed. To be taken concurrently with EDE 400.
Prerequisite: a GPA of 2.75 or above

EDP - Special Education

EDP 220  Special Educational Needs of the Developmentally Disabled
4 hours; 4 credits
(This course is not a part of the teacher education sequence.)
This course examines current trends in providing special education services to individuals (preschool, school-age, adult) with developmental disabilities. The approach of the course will be to follow the process of assessment, instructional planning, instruction, and evaluation of instruction in each of four areas of developmental disabilities: sensory disabilities, physical disabilities, communication disabilities, and behavioral disabilities. While the emphasis of the course will be on understanding instructional techniques, stress will be placed on thorough record keeping to evaluate and validate instructional approaches.

EDP 310  Survey of Exceptional Children I
4 hours; 4 credits

EDP 311  Survey of Exceptional Children II
4 hours; 4 credits
The first half of this course provides an orientation to the physical, social, and psychological aspects and educational needs of students with physical handicaps and emotional disturbances, while the second half considers these aspects as they apply to students with learning disabilities and mental retardation. Survey includes philosophy, history, classification, characteristics, etiology, and special educational provisions as well as psychological and educational assessment procedures in special education. Active fieldwork experiences are required.